



AVID Writing for Disciplinary Literacy:

A Schoolwide Approach

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How to Use This Book

AVID Writing for Disciplinary Literacy: A Schoolwide Approach was developed to address both writing to learn and writing for academic purposes from a schoolwide perspective. The objective of this book is to provide educators with the foundational knowledge and strategies to increase their skills and confidence in using writing as a powerful tool for learning. This resource—along with the supplemental resources online and professional learning opportunities—focuses on a balanced approach to disciplinary writing and incorporates instructional practices that can be used within every content area and grade level.

Chapter Structure

Chapter 1 of this book is an introduction and rationale for writing as an essential skill for students to master in all academic areas. The remaining chapters include chapter objectives, pre-reading reflection questions, and guiding principles for the concepts within the chapter. The chapters also include instructional practices that educators can implement in their classrooms to support all students, and an AVID Site Team Connection that can be used to promote chapter concepts within a campus Site Team and across a school.

Chapter and Section Introductions: These introductory pages provide background information about the instructional practices and strategies developed within the chapter or section, the research that supports their efficacy, and how they connect to the mission of preparing all students for college readiness.

Instructional Practices: Each instructional practice includes an overview of the practice, instructional goals for students, overviews of the strategies within the practice, required materials and preparation steps, and instructional steps. Extension and variation options for increasing scaffolding or increasing rigor are available for some instructional practices. Where applicable, directions to supplemental resources available on the MyAVID website are provided within the instructional practices or strategies. Many of the instructional practices correspond with educator resources and/or student resources.

AVID Site Team Connections: The Site Team instructional practice at the end of each chapter offers an opportunity for campus Site Teams or schoolwide groups to collaborate and incorporate concepts from the chapter in their classrooms in a robust way. This practice can be a key element in circulating across a campus the high-leverage strategies and core beliefs that improve students' writing schoolwide.

Digital Resources

A digital version of this book is available via the *AVID Writing for Disciplinary Literacy* webpage on MyAVID. In the digital version, related instructional practices and educator resources are linked. The webpage offers additional supporting materials and resources. A *Focused Note-Taking* module and an *Interactive Notebook* module are available in the Core Strategies library on MyAVID to support instruction in these strategies.

AVID History and Philosophy

HISTORY

What started with just one dedicated teacher and 32 students is today the largest college-readiness system in the nation, impacting nearly 2 million students annually in 45 states and across the U.S., plus schools in DoDEA, Canada, and Australia. With more than three decades of research, AVID proves that students from low-income families with limited educational backgrounds in their homes, communities, and schools can succeed at the highest levels when given support. The first AVID class assembled in 1980—led by English teacher Mary Catherine Swanson—is a testament to the efficacy of teachers everywhere. In the fall term of 2016–2017, 71% of the 2016 AVID high school graduates enrolled in either a two- or four-year college immediately after high school, compared to a national rate of 69%. This is exceptional considering that AVID students come from low-socioeconomic-status households at a rate almost two times higher than the nation overall. Because AVID is a system of “best teaching,” its practices resonate with all students and teachers, creating impressive schoolwide results.

Beginnings/Origin

The impetus for the creation of Advancement Via Individual Determination (AVID) was federal court-ordered integration of the San Diego Unified School District after the courts ruled that 23 San Diego area schools were “racially isolated.” When the mandate took place, Swanson was the English Department Chair at Clairemont High School, which had a highly academic, upper-middle income, mostly Anglo student body. In 1980, a largely ethnically diverse group of 500 students from low-income families were bused to the campus, creating the illusion of disruption for many teachers at this suburban, middle-class school. Not wanting to deal with the problems they foresaw with the incoming students, many students and teachers fled to a brand new high school, leaving Clairemont in upheaval. Teacher expectations were low for these new students. Many assumed that they lacked parental support, motivation, and study habits to qualify for college, and most assumed that they would need watered-down curriculum to graduate. Swanson thought differently. She believed that with individual determination, hard work, and support, capable—but underachieving—students could succeed in rigorous curriculum and in college. From that belief, and despite resistance and doubt from her colleagues, AVID was born.

Swanson started her teaching career in 1966, teaching both remedial and advanced English classes. Her experience taught her that there was “less a difference between students’ abilities, than differences in their experiences at home and at school.” In her 1977 master’s thesis, she outlined what she believed were the practices that would support student acceleration and would later become the foundation of AVID: “a non-traditional classroom setting meeting the academic and emotional needs of individual students; the teacher as advisor/counselor/student advocate; emphasis on objective data; students

at the center of decision making regarding educational goals; student contracts outlining a willingness to work and setting learning goals; student support from teachers and skilled, trained tutors; a rigorous curriculum emphasizing academic reading and writing; and reliance on the Socratic process.”

With the help of her colleague and mentor, Jim Grove, Swanson created a program where underachieving students in the academic middle could succeed. In the fall of 1980, Swanson recruited a diverse group of 32 low-income students in the academic middle and enrolled them in college preparatory courses and the first AVID Elective class. They agreed to work hard and enroll in the most rigorous curriculum that the school offered. The AVID Elective included development of study skills, a curriculum focused on reading and writing for learning, and tutoring in collaborative study groups. The AVID signature tutorial groups incorporated writing for learning, inquiry, collaborative learning, organizational skills, and academic reading—later dubbed WICOR. In a letter to the superintendent of schools, the original AVID students wrote, “We have almost every minority group represented within our program, and we all [have] become really close, because we are all striving for the same goal—academic excellence. This is the key to AVID; we are like a supportive family where there is concern for us both academically and as people. We are proud to be AVID students and wish that students everywhere could have a program such as ours.” In 1984, 30 of Swanson’s original AVID students graduated, with 28 enrolling in four-year universities and two in community colleges.

The AVID strategies were so successful that one teacher accused the original AVID students of cheating, assuming “those kids” were capable of only D’s and F’s. Angry, the teacher demanded that the students retake the test, and Swanson and her students readily acquiesced. To the teacher’s surprise, the students passed again with flying colors. She not only apologized to the students, but she went on to become one of the most vociferous champions of AVID at Clairemont High School, telling other teachers, “You can’t believe what these kids can do!”

Early Vision of Schoolwide and AVID Curriculum

Following the cheating accusation, Swanson realized that she needed to educate teachers about AVID so they would know that it wasn’t an elaborate cheating scheme, but a sound educational strategy. This realization led to the formation of the first AVID Site Team. Swanson knew that once teachers saw the strategies in practice and heard the testimonies of the students, they would support it. With help from Swanson, students led the Site Team meetings, explaining to teachers what worked to help them learn and what hindered their learning.

Teachers began to share methods and lessons based on the Site Team discussions. College professors of freshman courses were invited to join the Site Team, and together, the educators developed a compendium of materials based on the AVID tutorial practices. These content-specific materials were used for the first California statewide direct assessment of writing exams and became the basis for AVID’s curriculum.

Building off of the elective core curriculum, the curriculum expanded and focused on academic reading and writing for language arts–based classes and writing about science and mathematics through explanations of mathematical and science processes, clarifying that students understood the underlying tenets of the courses. Since teachers schoolwide used AVID strategies and curriculum with all of their students, in 1986, the San Diego Unified School District’s Testing and Evaluation Department found that Clairemont High’s schoolwide standardized test scores had improved 46% in language arts and 35% in mathematics—an increase higher than any of the other 16 high schools in the district. AVID was on its way to changing the face of education in America.

Growth

Since AVID was so successful at Clairemont High School, the California Department of Education gave Swanson money to disseminate AVID throughout San Diego County in 1986. By 1987, 30 sites were implementing AVID, serving over 14,000 students. It wasn’t until 1991—when AVID was thrust onto the national stage—that the program would expand beyond California’s borders. News of AVID’s success had traveled to the Charles A. Dana Foundation in New York, and in 1991, Swanson was awarded the \$50,000 Dana Award for Pioneering Achievement in Education, making her the only public school teacher ever so recognized. The award received publicity in *The New York Times*, as well as many other publications, and states across the nation began clamoring for AVID in their schools. AVID soon spread throughout the nation and to the Department of Defense Dependents Schools overseas. This rapid growth led to the establishment of the associated nonprofit organization, AVID Center, in 1992.

Focus on Quality and Fidelity

As AVID expanded, Swanson realized the importance of maintaining program quality and fidelity to ensure that wherever AVID was in place, the teaching methods and outcomes were the same. The first way that she accomplished this was through professional development to ensure that all teachers were properly trained in AVID strategies and given the support that they needed. Starting in 1986, AVID coordinators would gather monthly, delve into research that supported AVID, and share practical classroom issues that were then solved collaboratively. Site Teams met to work on WICOR strategies specific to their curriculum. When California state monies for professional development—which paid for substitutes—dried up in 1989, Swanson began AVID’s first Summer Institute, which would allow teachers to attend professional development without having to miss school. The first Institute lasted six days and was attended by approximately 260 educators. Today, AVID trains more than 40,000 educators each summer and countless more throughout the year, while continuing to provide world-class professional development opportunities to teachers across the nation.

The second way that Swanson assured fidelity to the AVID model was through the development of a certification process—which was called “Validation” in 1987. Ten “Essentials” for implementing the program were in the study (an

eleventh, active Site Teams, was added later). The two most important points of data were increasing the percentage of all students enrolling in college preparatory curriculum, and increasing the number of students enrolling in college. In both categories, schools involved in AVID increased their success by more than 100%. At present, the certification process continues to provide schools with an annual opportunity to assess the effectiveness of their AVID Elective classes and monitor progress toward schoolwide implementation. It allows AVID schools to achieve student results, measure those results, and institutionalize successful methodologies throughout the school community.

Today, through decades of quality professional development and fidelity of implementation, AVID has grown into the largest, most comprehensive college-readiness system used by schools to improve the academic preparation and performance of all students, especially those who are underrepresented in higher education institutions. What began in one high school classroom now spans elementary through higher education and impacts nearly one million students all over the globe. AVID is not just another program; at its heart, AVID is a philosophy. Hold students accountable to the highest standards, provide academic and social support, and they will rise to the challenge.

Focus on All Students

At the core of AVID's mission is the belief that all students can successfully achieve when they are held to high expectations and properly supported. Woven throughout AVID's curriculum and philosophy are the Culturally Relevant Teaching (CRT) practices that help educators build authentic relationships, hold high expectations, empower student voices, engender self-advocacy, respect experiences, and build on assets. Together, these practices help foster a learning environment that is safe and empowers students to grow intellectually. In addition, all of AVID's curriculum incorporates a wide variety of English Language Learner (ELL) strategies to purposefully support English language acquisition and promote the utilization of academic language in order to develop literacy and ensure college readiness.

THOUGHT LEADERS

Although AVID was developed through the teaching experiences of founder Mary Catherine Swanson, an early and ongoing research base for AVID testifies to the excellence of its practices.

Early Influences

An early influence for Swanson was William Glasser. In *Control Theory in the Classroom*, Glasser (1986) advocated for learning teams that allow students to work together to achieve a goal, rather than working in isolation. According to Glasser, learning groups satisfy the four basic psychological needs for students: belonging, power, freedom, and fun. Learning groups are successful because students know that they are no longer alone in their struggles, and they often perform better for their peers than for their teachers. Glasser's work supported the collaborative work that was, and still is, the heart of the AVID classroom.

Another early influence was Dr. Philip Uri Treisman, a mathematics professor at University of California, Berkeley. Swanson met Treisman in 1986 and learned that he, too, experimented with collaborative study groups. Treisman was struck by the high rate at which African American students failed his calculus classes and the high rate at which Chinese students excelled at the same coursework, so he set out to determine why. What Treisman (1986) discovered was that while Chinese students worked collaboratively—studying together and critiquing each other's work—the African American students worked in isolation for fear of being thought of as unintelligent. They also maintained a sharp distinction between their academic and social lives. As a solution, Treisman developed a pilot math workshop, through which students worked in collaborative groups where they struggled with difficult calculus problems.

His results paralleled Swanson's: When students work together to clarify understandings, they conquer coursework. Treisman became a founding board member of AVID Center in 1992.

As AVID grew, it continued to evolve its practices based on research.

Growth Thought Leaders

Learning to think and thinking to learn are both key concepts in the AVID classroom. Arguably the biggest influencer of the inquiry method at AVID is Dr. Arthur Costa, professor of education emeritus at California State University, Sacramento. Costa's Levels of Thinking range from lower order thinking skills (Level 1: gathering information) to higher order thinking skills (Level 2: processing information and Level 3: applying information). According to Costa (2001), "Meaning making is not a spectator sport. It is an engagement of the mind that transforms the mind. Knowledge is a constructive process rather than a finding" (p. 12). To better understand the content being presented in their core subject areas, it is essential for students to learn to think critically and to ask questions with higher levels of inquiry. By asking higher levels of questions, students deepen their knowledge and create connections to the material being presented. Higher-level questions are at the heart of the AVID tutorial because they prompt inquiry—a process that enables students to

become independent thinkers who master their own learning. With the help of Costa's Levels of Thinking, AVID is able to develop students who are fluent in the thinking process—students who know not just *what* to think, but *how* to think.

In *What Works in Classroom Instruction*, Marzano, Gaddy, and Dean (2000) offer nine categories of effective instructional strategies that produce “the highest probability of enhancing student achievement for all students in all subject areas at all grade levels” (p. 10):

- Identifying similarities and differences
- Summarizing and note-taking
- Reinforcing effort and providing recognition
- Homework and practice
- Nonlinguistic representations
- Cooperative learning
- Setting goals and providing feedback
- Generating and testing hypotheses
- Activating prior knowledge

These best teaching practices are embedded and incorporated throughout the curriculum and across the AVID System.

Current Thought Leaders

Today, AVID is highly influenced by the work of Carol Dweck, one of the world's leading researchers in the field of motivation and professor of psychology at Stanford University. Her research focuses on why people succeed and how to foster success. In *Mindset: The New Psychology of Success*, Dweck (2006) posits that we look at the world with either a “fixed mindset” or a “growth mindset.” The former is characterized by the belief that talents and abilities are fixed, and no amount of work can change them. The latter is characterized by the belief that talents and abilities can be developed through hard work and education. She argues that students can, and should, be taught that effort can lead to positive changes and success; students will rise to the challenge if they know that success is not the province of the naturally gifted, but is available to all through hard work and individual determination. Dweck's work supports AVID's central philosophy that *all* students—no matter their backgrounds—have not only the right, but the ability to succeed.

AVID began with a strong research base and continues today to strengthen and validate its practices with research-based strategies and theories from today's best and brightest minds in the arena of education and brain research.

For a more complete list of AVID's thought leaders, visit www.avid.org.

AVID SCHOOLWIDE

What began decades ago with one teacher in one classroom preparing students for the rigors of postsecondary education quickly outgrew the confines of just one class. The successes of that teacher drove the expansion of the AVID Elective into a model of systemic reform that empowers schools to prepare more college-ready students on their campuses.

How It Works

AVID Schoolwide works through transforming four key domains of operations: Instruction, Systems, Leadership, and Culture. By focusing on these domains, AVID's philosophy and methodologies become deeply ingrained, and the benefits of AVID are widely experienced.

Instruction

It is instruction that incorporates the cornerstones of AVID's foundational tools—Writing, Inquiry, Collaboration, Organization, and Reading. When teachers participate in professional learning opportunities, implement WICOR strategies in their classrooms, and commit to success, they produce a learning environment where all students are equipped to tackle complex issues, problems, and texts.

Systems

AVID Schoolwide works to implement or reform systems that open access to the most rigorous courses in order to support college readiness beyond the AVID Elective. Data collection and analysis, opportunities for teachers to learn and refine their instructional practice, master schedule development, and student and parent outreach are examples of systems touched by AVID Schoolwide.

Leadership

Leadership sets the vision and tone that promotes college readiness and high expectations for all students in the school. The principal and a calibrated leadership team—including representatives from the AVID Site Team—work together to ensure that the school's mission and vision statements align with AVID's philosophy of open and equal access to rigorous courses and that resources are allocated to promote college readiness and high expectations for all students.

Culture

It is evident that AVID Schoolwide transforms a school when the AVID philosophy progressively shifts beliefs and behaviors, resulting in an increase of students meeting college-readiness requirements. A site builds this intentional culture by engaging parents, students, and teachers; focusing on community support; and establishing a mindset that all students can benefit from rigorous and challenging coursework.

Outcomes

When implemented with intentionality and fidelity, the AVID Schoolwide approach results in a number of favorable outcomes. Short-term outcomes include an increase in: the number of students completing rigorous courses, student attendance, and the educational aspirations of students. Long-term outcomes include an increase in: high school graduation rates, the completion of college entrance requirements, the number of seniors applying to college, the number of students enrolling in college, and the number of rigorous courses. AVID Schoolwide provides a high-quality, equitable education for all.

WICOR

Throughout the decades since AVID’s founding, through a continual cycle of improvement, the curriculum framework has been expanded and enhanced to ensure success for all students. One of the products of these decades of research is AVID’s foundational strategies for helping students succeed: writing to learn, inquiry, collaboration, organization, and reading to learn—WICOR. Based on what we know through brain research, learning has to be organized in such a way that students can build on existing schema to create new neural pathways. Pathways are only built if the brain has an opportunity to “wrestle” with new information—to figure out how the new fits with the old. This “wrestling” is best accomplished when we ask students to work actively with new information—they have to think, talk, write, read, and ask questions. When students are passive recipients of information, there is very little cognitive wrestling and critical thinking, and therefore, very little long-term learning—new pathways are unlikely to be formed. The AVID Center curriculum and learning team continues to review, improve, and refine the WICOR framework to support educators in reaching all students.

W: Writing to Learn

As an English teacher, Swanson firmly believed that writing was essential to help students process and retain their learning and that if students couldn’t explain something in writing, they didn’t know it well enough. Today, AVID is still a proponent of “writing to learn,” which allows students the opportunity to use writing—be it Cornell notes, learning logs, or quickwrites—to make sense of information.

I: Inquiry

The process of inquiry is also at the heart of the AVID class. Inquiry is “the question” that moves the learner to action, whether that be an explicit question or implicit questions that drive the process of working through ideas to a solution. Students uncover their understanding by asking critical questions. The goal is for students to analyze and synthesize materials or ideas to clarify their own thinking, probe others’ thinking and work through ambiguity. The key is for teachers to establish an environment where it is safe for students to engage in authentic inquiry—where wondering, questioning, and hypothesizing are fostered, and students recognize how to push each other’s thinking to higher levels.

C: Collaboration

Collaboration was central to AVID from the beginning, when Swanson replaced all of the rows of desks with wide cafeteria tables to allow students to work in groups. Collaboration in AVID is about developing positive interdependence, working with others toward a common goal or goals, and tapping into the social, mammalian side of the brain in efforts to increase motivation and attention to rigor.

O: Organization

The very first AVID students were required to carry binders to keep their class work organized. Today, the AVID binder is one of the cornerstones of the AVID class. However, organization is not just about the ability to organize and manage “stuff”; it is also the ability to organize and manage learning and self. Teachers can teach organizational skills by helping students find systems for recording homework and organizing their materials in a binder, in their backpack, and online. AVID’s primary focus, however, is teaching the more implicit organizational skills that help students see how their brains work, how they make sense of and organize information, how they apply specific strategies and monitor their outcomes, and how they take control of their learning.

R: Reading to Learn

To develop the necessary college-readiness skills, students have to practice close and critical reading. The goal is to help students read for meaning, versus reading for identification, and to strategically gain meaning, understanding, and knowledge from print and other media.

“ Technology tools must encourage meaningful learning, where the technology is extending the learning from students’ preexisting knowledge and helping them create new knowledge. ”

Ellen Wartella

AVID DIGITAL LEARNING FRAMEWORK:

The 4 A's™

Adopt, Adapt, Accelerate, Advocate™

Using digital tools for writing instruction supports students to deepen their understanding and skill with the writing process by allowing practice within authentic experiences that engage the students. Creating authentic digital writing experiences for students acknowledges the integral part technology plays in their lives. These experiences offer students an opportunity to collaborate, process their thinking, and gain new perspectives from a diverse audience beyond their classroom.

To support teachers to use digital tools with their students, AVID has developed a digital learning framework referred to as **The 4 A's**. AVID's **Adopt, Adapt, Accelerate, Advocate** framework provides educators with a pathway toward meaningfully integrating digital tools and WICOR instructional practices to differentiate instruction and increase students' ownership of their learning.

Adopt The adopt level focuses on **instructor modeling** of digital tools.

Adapt The adapt level focuses on **student collaboration** using digital tools.

Accelerate The accelerate level focuses on **student choice** of digital tools from a menu of options defined by the instructor.

Advocate The advocate level focuses on **student selection** of digital tools and strategies to best accomplish the task at hand.

The 4 A's allow for flexibility in the application of technology. An educator may embrace the Adopt level for one activity and the Accelerate level for another. As you consider ways to implement the instructional practices in this book, use **The 4 A's** as a lens to evaluate how the use of digital tools affects students' learning and to provide a vision of where you might go next in your use of technology in the classroom.

<https://my.avid.org/curriculum>



CHAPTER ONE

Introduction and Research



Visit the *AVID Writing for Disciplinary Literacy* webpage on MyAVID for additional materials and resources.



The Power of Writing

“ *The scariest moment is always just before you start.* ”

Stephen King, *On Writing*

The ability to write with clarity and precision gives power to the person who holds the pen or sits at the keyboard. Good writers can wow a college admissions committee with a personal essay, land a job with a brilliant cover letter, communicate a complex idea in a professional journal article, draft a concise and effective memo to employees, persuade newspaper readers to change their opinions about an issue, write and defend a groundbreaking doctoral dissertation, inspire an audience to action with a well-worded speech, and woo the object of their affection with a heartfelt love letter. Writing can open doors for success and advancement.

AVID’s mission is to close the achievement gap by preparing all students for college readiness and success in a global society. Ensuring that students are able to harness the power of the written word is one significant way to make sure they are ready for the demands of college and the workplace and can succeed on whatever path they take after high school. Writing isn’t just for English majors. Every field of academia publishes journals of scholarly writing, and college students submit papers to professors in most content areas. In elementary and secondary classrooms, state standards’ emphasis on writing across the curriculum requires students to draft written texts in math, science, and social studies. Producing a writing sample on demand is a common requirement for state assessments, admission tests (such as the SAT®, GRE®, or LSAT®), and application processes for internships and jobs. Educators are doing a disservice to their students if they do not prepare them to write fluently, analytically, and skillfully.

The Moves Writers Make

In the same way great basketball players make moves on the court to score, assist, and defend, or a chess champion makes moves during a game that lead to victory, writers make moves—mostly deliberate but some instinctual—that contribute to the effectiveness of a composition. In this text, when we speak of “moves” writers make, we refer to the things the writer does that make the writing work. By examining and reflecting on the strategic decisions and actions taken that lead to success in others’ writing or in our own, we grow to be stronger writers.

Every Educator Is a Writing Teacher

..... Writing is an essential skill for all students to master. It’s too important to leave as the sole responsibility of the English language arts teachers. Educators in all subject areas must come to view themselves as teachers of writing.

The idea that every educator is a writing teacher raises concerns and perhaps panic for many educators who feel ill-equipped to instruct students in a skill area they have not been trained to teach. Others argue that lack of time and too much academic content leave no room for teaching writing to their students. And then there are those who believe that writing can’t be taught—that people either are naturally skilled at writing or they are not.

The truth is that writing *can* and *must* be taught, or at least practiced. Students don’t improve as writers unless they write often—more than their instructors can read, comment on, or grade. When educators shift writing from being a special occasion to an everyday event, they witness dramatic improvement in students’ writing. And when educators use writing as a vehicle for student learning, they see students make connections and deepen their understanding of course content.

Teaching students to write doesn’t require special expertise or training. Gone are the days when the job of a writing instructor was to mark every grammatical, spelling, or syntax error with a red pen. Writing has shifted from being viewed as an opportunity to make moves that are “right” or “wrong” to being thought of as a conversation with a reader. To teach writing is to initiate



and engage in that conversation. To teach writing is to guide, to motivate, to question, to prompt, to encourage, to wonder, and to provide honest, actionable, just-in-time feedback a student can use to continue improving. To teach writing is to provide students with the essential practice they need to become more proficient. As an added bonus, working with student writers makes instructors better writers because it urges them to consider more deliberately the moves they make in their own writing.

What makes a piece of writing “good” varies from situation to situation and from content area to content area. The flowery introduction that dazzles an English professor would be completely out of place at the beginning of a lab report in physics. The educator is the person in the classroom who knows the most about how to write in their particular subject area. That alone is qualification for teaching writing. Just as it is the educator’s job in a content-area classroom to teach the students how to read like historians, mathematicians, or scientists, it is also the job of the content-area educator to teach students to write like experts in the field.

Writing in school doesn’t have to be a big production or take up immense chunks of time. In fact, some of the best writing is woven in seamlessly within instructional routines to enhance learning. As part of AVID’s Writing, Inquiry, Collaboration, Organization, and Reading (**WICOR**) framework, writing accompanies inquiry, collaboration, organization, and reading to ensure success for all students.

Learning to Write and Learning Through Writing

Writing in an academic setting takes two major forms.

The first form, disciplinary or academic writing, is probably the type of writing most people think of when they consider the idea of writing in school: essays, stories, papers, reports, articles, and other texts that are written to be read by the instructor or a real-world audience. For many of us, our experience with this type of writing in school involved receiving assignments from our instructors that we completed independently and then handed in for grading. We later received our grade and perhaps a few comments, and that was the end of it. In that situation, educators view themselves as assigners of writing. In most cases, they set themselves up for disappointment because they have not put in place the procedures and supports to help their students succeed. When educators move from being assigners to being instructors and facilitators of writing, however, their students become more capable and confident writers. Disciplinary or academic writing—whether it is narrative, expository, or argumentative—typically goes through several stages, from idea incubation to publishable product. These stages are collectively known as the **writing process**. Students whose instructors understand and coach them through the writing experience grow as writers and become increasingly self-sufficient. They *learn* to write.

The second form, learning through writing, involves all the ways students use writing as a vehicle to access complex content or to deepen their understanding about what they are learning. This includes focused quickwrites, learning logs, summaries, questioning, and other strategies students engage in prior to, during, and after classroom instruction. Since the purpose of this type of writing is individual learning, not display of mastery, most of this writing is ungraded, and much of it is never read by the instructor. One useful byproduct

WICOR (Writing, Inquiry, Collaboration, Organization, and Reading) is the set of key methodologies used in AVID Elective classrooms and AVID Schoolwide sites.

The **writing process** is a complex task consisting of stages: pre-writing, drafting, revising, polishing, and publishing.

Disciplinary writing, or academic writing, includes narrative, expository, descriptive, or argumentative writing commonly used throughout academic content areas.

AVID Schoolwide occurs when a strong AVID system transforms the instruction, systems, leadership, and culture of a school, ensuring college readiness for all AVID Elective students and improved academic performance for all students based on increased opportunities.

An **instructional practice** is a teacher resource that includes an overview of the practice, instructional goals, notes on preparation for instruction, and instructional strategies to support implementation of the practice with students in the classroom.

of using writing to enhance learning is that it provides routine practice with writing, which leads to increased fluency and ease of writing for learners. Focused note-taking is another way students learn through writing as they process their learning from a variety of sources—print, video, lectures, observations, and classroom experiences—and utilize it for specific academic purposes. Note-taking is perhaps the quintessential way students learn through writing, yet, unfortunately, it is widely undertaught. Providing students with tools and strategies to hone their skills as note-takers gives them a gift that will pay off throughout their academic careers and beyond.

This book addresses both major forms of writing and provides all educators with the foundational knowledge and strategies to increase their skills and confidence as teachers of writing.

Who is this resource designed for?

Writing is an enormous topic to cover. In compiling this resource, we have focused on the essential components of a balanced approach to writing, one that is grounded in process and product for academic or **disciplinary writing** and that incorporates writing strategically into instruction to improve learning for all students.

The best writing instruction occurs schoolwide when educators provide writing experiences in all content areas, building on the work of one another and tailoring writing lessons and experiences to each discipline. When students encounter writing throughout their academic day—and, even better, when all educators concentrate their efforts to instruct with a common vocabulary, approach, and philosophy—they benefit from the essential practice they receive. This orchestrated approach is an essential component of **AVID Schoolwide**.

Readers of this book who are unfamiliar with writing pedagogy will develop a basic understanding of the core beliefs and research undergirding writing instruction and learning through writing. The book and the accompanying online resources provide practical applications and **instructional practices** educators can incorporate into their classrooms regardless of the level of learners or the content area. Our goal in developing this resource was to provide best practices in writing to improve the efficacy of any instructor who wants to be more adept and confident in providing students with writing experiences, helping those students succeed in their writing efforts, and incorporating writing in coursework to improve students' learning.

Educators who have more experience and comfort with writing instruction will find new approaches to practices that they may already employ in their classrooms. Examining the guiding principles in each chapter will allow experienced writing instructors to evaluate and strengthen their current practices and beliefs. These educators will become valuable resources as writing instruction spreads throughout the campus and can support the writing component of AVID Schoolwide.



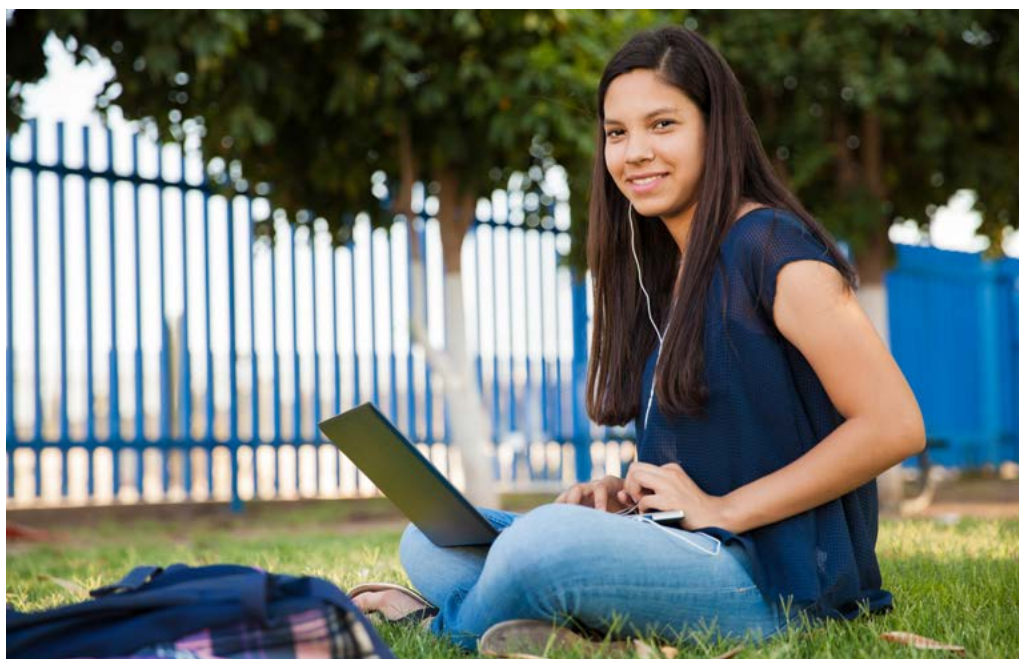
All educators benefit from examining a writing approach that is firmly grounded in AVID’s WICOR framework. All students grow as writers and as learners when writing instruction involves students’ active engagement in inquiry and questioning, provides numerous opportunities for students to learn from one another in collaborative structures, offers and promotes time to reflect on organizational patterns and techniques that enhance writing and learning through writing, and capitalizes on the essential link between reading and writing for balanced student literacy.

Because this text is not grounded in a specific grade level or subject, effort has been made to develop instructional practices that are adaptable and useful for a wide range of students and curriculum areas from elementary through higher education. Educators who are reflective practitioners will be able to adapt the strategies in this book to whatever level and content they teach. The online resources on the *AVID Writing for Disciplinary Literacy* webpage (accessible in MyAVID) contain more specific examples for targeted subject areas and educational levels.

Objectives of This Resource

This resource will prepare educators to:

- Teach and use the writing process to coach students as writers for academic purposes.
- Incorporate writing intentionally into instruction to ignite and deepen students’ thinking and processing as they learn through writing.
- View themselves as writers and teachers of writing and evaluate their own role in increasing schoolwide literacy.
- Understand the roles inquiry, collaboration, organization, and reading play in robust writing instruction.
- Employ the WICOR framework to enhance critical thinking and learning through writing and to improve students as writers.



An Overview of the Chapters

This resource was developed with the goal of providing enough information to help any educator, regardless of familiarity with the pedagogy of writing instruction, understand and implement best practices, use strategies for learning through writing, and help students improve their writing within any academic discipline. The organization of the book reflects a progression of ideas and can be studied sequentially or by topic as needed.

- **Chapter 2: Learning Through Writing** is a starting point for practical, easy-to-implement strategies that support students' learning and guide educators to capitalize on the power of writing to deepen students' critical thinking. There are five essential instructional practices that are simple to incorporate into any content area at any stage of the teaching and learning cycle:
 1. Quickwrites
 2. Interactive Notebooks
 3. Learning Logs
 4. Annotation
 5. Questioning

These five essential instructional practices and the additional strategies outlined in this chapter focus on using learning through writing to:

- Explore content and students' learning about content.
 - Process new information and learning.
 - Reinforce and clarify thinking about content.
 - Connect thinking and combine ideas to develop new understanding.
 - Summarize content.
- **Chapter 3: Focused Note-Taking** centers on the belief that note-taking must be explicitly taught and practiced in school if students are going to become autonomous and proficient at it. The chapter introduces a five-phase process that can be utilized and adapted for every note-taking purpose and embraces a variety of note-taking formats.
 - **Chapter 4: Using Modes of Writing to Build Disciplinary Literacy** examines the four modes of writing found in all disciplines: descriptive, narrative, expository, and argumentative. This chapter provides readers with an understanding of each mode and prepares educators to create their own writing assignments with a clear writing purpose, a targeted audience, and a focus on using the modes of writing to help students extend their thinking.
 - **Chapter 5: Understanding and Using the Writing Process** explains the recursive stages of the writing process—pre-writing, drafting, revising, polishing, and publishing—and how to implement them. With a strong emphasis on collaboration and feedback, AVID's approach to the writing process puts the WICOR framework into practice to positively impact student success. This chapter helps educators advance from being assigners of writing to being instructors and facilitators of writing.



- **Chapter 6: Deepening Inquiry Through Research** provides tools and strategies to assist students in locating and evaluating sources while using inquiry to fine-tune the research process. Research goes hand-in-hand with every stage of the writing process, with focused note-taking, and with AVID’s WICOR framework. Ultimately, research is an integral component of learning, and effective research builds 21st century skills to access deeper understanding of content.
- **Chapter 7: Mentor Texts and Teacher Modeling** focuses on two high-impact approaches that provide students with an opportunity to observe how writing is done. Mentor texts are real-world exemplars used as models of writing; student writers use these to deduce everything from grammatical rules to effective organization to appropriate voice and word choice in writing created for specific purposes or audiences. In addition to using mentor texts, educators will witness powerful growth when they write along with their students and make the thinking behind their writing visible. Together, the strategies in this chapter have the potential to transform tentative writers and empower students to write with confidence and expertise.
- **Chapter 8: Metacognition and Writing** takes on the topic of metacognition, or “thinking about our thinking.” Improvement seldom occurs without reflection. When students spend time processing and reflecting on the work they are doing, the resulting epiphanies change the way they view themselves as learners and writers. Students who engage in metacognition develop a growth mindset and continually improve rather than stagnate. This chapter helps instructors incorporate metacognitive reflection into all stages of the writing process to allow students to provide worthwhile feedback for themselves and one another.

The end of this book contains a glossary of important terms as well as an extensive reference list, which includes many resources worth exploring. The content of this book also draws from a variety of resources from the AVID curriculum libraries for elementary, secondary, schoolwide, and higher education.

A Word About Scaffolding

Scaffolding involves a variety of instructional techniques used to move students progressively toward stronger understanding and, ultimately, greater independence in the learning process.

..... the same way, educators use **scaffolding** to assist students as they learn. At times, scaffolding can support an entire class of learners who are at a foundational level or are developing language skills; in other instances, scaffolding may be an appropriate way to differentiate within a class for a subgroup of students who require support to be successful. In every case, before the scaffolds are removed it is important that educators increase the difficulty and sophistication of the scaffolds provided to students to increase the level of rigor, differentiation, and enrichment students experience. Increasing the sophistication of the scaffolds results in students being able to perform at increasingly sophisticated levels. English language learners are one population who can benefit from scaffolds as they develop proficiency with using written language.

Scaffolding can take many forms. The following are strategies that pair well with writing instruction and can be used with instructional practices found throughout this book:

- **Sentence Frames and Templates:** The use of sentence frames and templates provides scaffolding that can build students' confidence in writing and speaking, improve vocabulary, and provide effective models of structures that shape ideas. Frames are partially complete sentences, open-ended structures that are created for specific content or a particular strategy. One type of frame is a sentence stem, which provides the beginning of a sentence that a student can complete. Other frames are sentences with blank lines that students can use to fill in or complete thoughts. Sentence frames provide students with chunks of language they can use for the task at hand and can draw upon in the future. Templates are typically used for larger units of language, such as entire paragraphs. A template may contain a number of sentence frames or stems that work together to create a cohesive whole, providing students with support in organization and understanding how sentences work together or flow in a text.
- **Word Banks:** Writing within different disciplines often incorporates the use of academic or content-specific vocabulary related to the topic or concept. Students need a clear understanding of this vocabulary, so instruction of targeted terminology is essential. Providing word banks of high-leverage, content-specific or academic vocabulary to student writers assists them with utilizing the language of the discipline or content area in the context of their writing.
- **Communal Word Banks:** Taking the concept of word banks one step further and passing ownership to the students, communal word banks are lists of academic words generated by students in groups or as a class. As students are interacting with content, it is crucial that teachers identify opportunities to have them revisit their notes and the text, or to reflect on the conversation with a partner or small group to identify words that will "live" in the communal word bank for access in future oral and written language opportunities.



- **Shared Writing:** Educators can compose collaboratively with students by serving as the scribe for students. Shared writing is another beneficial way to model oral and written language and should focus on creating meaningful text while giving the instructor the opportunity to guide students in the craft of composing within their discipline. This can be done on chart paper, a digital whiteboard, or through word processing that can be viewed by all members of the group.
- **Gradual Release of Responsibility:** This instructional model, which can occur over short or long periods of time and should be recursive as needed, begins with demonstration or modeling by the instructor and moves to autonomous practice by students.

- “I do” – In this phase, the educator is doing approximately 100% of the work while students pay close attention to the *modeling* being done by the teacher. This is where an educator will “think aloud” as they are processing information or modeling writing.
- “We do” – In this phase, the educator is doing approximately 70% of the work as they write with students, and students are doing approximately 30% of the work as they engage and collaborate with the educator and the instructional routine. Students are writing with the educator guiding their thinking and capturing the writing moves. This is best done in the form of whole-class instruction, with an anchor chart or document created that students contribute to and can refer to as needed.
- “We do” – Students work within **collaborative structures** (smaller groups or partnerships). The teacher *guides* and monitors large or small groups, while continuously *checking for understanding* to determine whether students are ready for release to work independently. The teacher is doing approximately 30% of the work as they are checking in with small groups, while students are now doing 70% of the work as they work within collaborative group structures.
- “You do” – Students *independently practice* and apply what they have learned. The students are doing 100% of the work or learning in this phase.

Collaborative structures are effective methods for working together in a way that brings collaboration to life and through which students come to own most of the talking and interactions.

Disciplinary literacy is the ability to think critically in ways that are meaningful within the content area. Disciplinary literacy integrates content knowledge, thinking, questioning, reading, writing, speaking, and experiences and skills.

- **Think-Alouds and Write-Alouds:** As students are developing cognitive skills to handle complex writing tasks, they benefit from watching and listening to the cognition that accompanies writing. Rather than hiding the thinking from students, instructors can make their thought processes tangible by talking through the processes in front of the class. In a Write-Aloud, instructors say what is going on in their heads as they write in front of their students. All students benefit from this modeling of oral and written language within specific content areas. It is crucial for **disciplinary literacy** development and provides needed support for English language learners and emerging writers. This strategy is explained in more detail in Chapter 7 (page 396) in the section on teacher modeling and is best used during the “I do” phase of gradual release of responsibility.

- **Use of Technology:** Using digital tools for writing instruction supports students to achieve complex levels of understanding and skill with writing. The use of digital writing tools makes it easier for students to write a draft, gather feedback, revise, and polish their work. Technology allows students to publish their work to a wider audience and gain additional perspectives. Technology also addresses accessibility needs using dictation and text-to-speech tools, giving students who struggle to read and write the opportunity to share their thinking with others.
- **Visual Aids and Graphic Organizers:** Many students, especially English language learners, benefit from visuals they can associate with the language they are learning. Instructors can use visuals to model structures, to provide inspiration for writing, to clarify ideas, and to remind students of procedures. Similarly, graphic organizers give students tangible models to use to generate ideas or structure their writing. Concept maps and graphic organizers can be provided by the teacher for students, and as students become more adept at using them, they can generate their own organizers suited to particular writing tasks, purposes, or content.
- **Practice in Miniature:** Asking a student who is struggling with writing one paragraph to compose a multi-paragraph paper is setting that student up for failure. Sometimes the most powerful writing lessons involve practice in miniature, focusing on smaller chunks of text or zeroing in on specific concepts until students can master them with ease. As students grow in their abilities and confidence, they can string together chunks of writing to make longer texts.



WICOR Connections

Inquiry is the process of revealing thinking through questioning, analyzing, and constructing knowledge and understanding.

Costa's Levels of Thinking is a framework for three levels of intellectual functioning, or thinking. This framework is similar to Bloom's taxonomy.

Visit the Core Strategies: Collaborative Structures webpage on MyAVID for additional resources.

Writing and Inquiry

- Writing itself is an act of **inquiry**. As we write, we pose questions, answer them, unearth new questions, and continue to explore and refine our thoughts. Whether we are using writing as a learning tool or writing for an audience, we are tapping into our own curiosity and sense of wonder. Taxonomies such as **Costa's Levels of Thinking** allow students to name and categorize the types of thinking they are doing, which often gives rise to deeper inquiry.

Writing and Collaboration

- The vision of the writer as a lonely soul hunkered over a typewriter in a quiet room is a common stereotype. In reality, though, most writing is not a solitary act. Novelists meet in workshop groups to share their drafts with one another and offer feedback. Journalists team up to contribute to a big news story. Television comedy writers bounce jokes off one another as they pen scripts for weekly or daily filmings. Board committees, coworkers in business, and curriculum writing teams combine their brainpower to produce documents. AVID has long known the power of the collaborative study group, and it is essential for educators to acknowledge and understand the power of collaboration in writing, whether the purpose is acquisition and deepening of content knowledge or producing writing for academic or disciplinary audiences.

Educators who want to tap into the power of collaboration in the writing-focused classroom can employ structures, big and small, to let students think and write together. Several high-impact, structured collaborative strategies are especially suited for the work described throughout this book:

- **Think–Ink–Pair–Share:** This structure allows for quick processing of ideas as students think about their writing, pair up with a partner, and share their thinking. It is important that students have time to rehearse and revise within this structure, placing their page or screen next to their partner and finding stronger vocabulary or a clearer way to say something they have written. The “ink” step can occur after students have had time to think individually, or after they have shared their thinking with their partner.
- **Carousel Brainstorm:** Students rotate in small groups to different charts or screens to brainstorm and record ideas related to the topic or question on each chart. As groups rotate, they build on and add to the information recorded by previous groups. This strategy is outlined in more detail in Chapter 2: Learning Through Writing (pages 60–61).

- **Talking Chips:** Students create “talking chips” with their name written on a number of small pieces of paper or sticky notes. Within a small group discussion, they place one of their talking chips in the center of the table when they want to contribute to the conversation. A student who has used up all of their talking chips must wait for others to use theirs up, too, before they can contribute to the discussion again. Provide time for students to capture important ideas or the gist of the discussion in their notes so the ideas are not lost. This structure ensures accountable and equitable discussion about the topic. The addition of sentence frames, word banks, and the expectation that students use the formal register increases the level of academic discourse and strengthens students’ writing, as we tend to write the way we speak.
- **Online Collaboration:** The use of online tools that allow students to write and share their work within an online community creates powerful opportunities for collaboration. Students can share documents directly with each other if they have access to school-approved email accounts or cloud-based collaboration tools. They can also utilize comment features and draft documents together.

Writing and Organization

Writing requires organization and brings every aspect of authentic disciplinary literacy together; there is nothing we have students do in our classrooms that requires students to navigate content, negotiate their thinking, and communicate their learning like writing.

Writing is the visible organization of thought. Every chapter of this book provides instructional practices that support intentional and explicit instruction in organizing a writer’s thinking, from graphic organizers to focused note-taking to Interactive Notebooks to the successful completion of a writing project.

Writing and Reading

In every academic setting, from kindergarten to post-graduate classes, students rarely write without first spending time reading. Even a creative writing course is built upon the idea that students have read many books and stories in preparation for becoming writers. Students who read widely and regularly not only expand their vocabulary and awareness of conventions and characteristics of genres, but also subconsciously collect nuggets of language they can use in their own writing. In other words, reading makes us better at writing. Authentic disciplinary literacy—the ability to speak, read, and write about content, ideas, thinking, and learning—requires that reading and writing be connected. AVID’s goal in writing this book is to provide educators with a variety of strategies and instructional practices for embedding writing into the daily teaching and learning cycle, and our hope is that when students are asked to read and discuss content, they are also allowed the opportunity to write. Education author Mike Schmoker (2006) said it best when he observed, “Writing, linked to close reading, is the workshop of thought—with an almost miraculous effect on students’ critical capacities.”

“ A word after a word after
a word is power. ”

Margaret Atwood



CHAPTER TWO

Learning Through Writing



Visit the *AVID Writing for Disciplinary Literacy* webpage on MyAVID for additional materials and resources.

Learning through writing

is using writing as a vehicle to access complex content or to deepen understanding about what is being learned. This is closely related to the concept of **writing to learn**, a term commonly used to describe short, informal writing tasks that help students think through key concepts or ideas central to course content. Writing-to-learn tasks are low-stakes in the sense that they do not involve significant weight in terms of grading.

CHAPTER Introduction

When the topic of writing comes up in education, the first thing that likely comes to mind for educators and students is writing to apply learning, and the many essays, papers, and research projects that are assigned so students can use writing to show what they know after they have learned it. Writing of this nature is often a lengthy process that goes through multiple revisions and edits with the final product being a polished piece ready to share with readers or submit for a grade.

Learning through writing is a completely different kind of writing with a vastly different purpose. Think of this type of writing as “low-stakes writing.” Low-stakes writing is a powerful learning tool in that it allows learners the ability to build, explore, and process content knowledge free from the burden of worrying about their writing being evaluated based on conventions or formatting. Learning-through-writing instructional practices allow opportunities for examining assumptions, connecting to prior knowledge or experiences, posing questions, making inferences, establishing hypotheses, and exploring different perspectives, and these practices can be used in any content area or developmental stage of learning. In short, learning through writing is one of the most powerful instructional tools available to educators.

Learning through writing presents students with the chance to make invisible thinking tangible, to record their thinking so there is a record of their learning to go back into, reflect on, build on, and connect to new learning. The learning-through-writing instructional practices and strategies included in this chapter are designed to increase students’ comfort with expressing ideas and empower their voice through repeated interaction around a subject, content, or theme. Although these writing tasks are not used to assess students’ mastery of writing skills and conventions for grading purposes, they should not be left unevaluated. The writing produced through these learning structures provides a wealth of information regarding mastery or progress toward a learning objective, and can create a powerful feedback dialogue between educator and student.

It is essential that we embed opportunities for writing into our courses and use results of the writing as an opportunity to be diagnostic in the proficiency with which students are able to use the language of the discipline or content, as that clearly shows their level of proficiency with the content. Having students write often to process their understanding of content develops their ability to organize information. As outlined in *Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools*, “Helping these young people to write clearly, logically, and coherently about ideas, knowledge, and views will expand their access to higher education, give them an edge for advancement in the workforce, and increase the likelihood they will actively participate as citizens of a literate society” (Graham & Perin, 2007, p. 36).

“*If students are to make knowledge their own, they must struggle with the details, wrestle with the facts, and rework raw information and dimly understood concepts into language they can communicate to someone else. In short, if students are to learn, they must write.*”

National Commission on Writing, 2003





Chapter 2 Objectives

As a result of interacting with this chapter, educators will be able to:

- Distinguish between learning through writing and other types of academic writing.
- Use learning through writing as a vehicle for the practice and application of critical thinking skills in any subject area.
- Use learning through writing as a formative assessment tool to make informed decisions about students' content knowledge and understanding.
- Intentionally and strategically include learning-through-writing instructional practices within lesson design and delivery across all content areas to deepen understanding and increase rigor of practice.
- Understand how digital tools can enhance learning-through-writing structures.

Pre-Reading Reflection Questions

- What is my current understanding of learning through writing within my discipline, grade level, or content area?
- What learning-through-writing structures do I already use?
- How is learning through writing different from the writing process?
- How can learning through writing be used as a formative assessment tool to better inform instruction?
- How will a variety of learning-through-writing instructional practices enhance students' learning in the classroom?
- Where do learning-through-writing instructional practices best fit into my current content and classroom practices?
- How do I currently use digital tools with low-stakes writing tasks in the classroom?

K-2 Pre-Reading Reflection Questions

There is a significant mindset shift as students move from the early elementary years to intermediate grades. In their earliest years, they are learning how to write. When they approach their intermediate elementary years, they can use their understanding of writing to express their knowledge about a topic. For primary grade teachers, writing instruction is still in its most basic form. A first grade teacher, for example, will continue to teach students how to construct a complete sentence and use syllable patterns and parts of speech. Nevertheless, many of these instructional strategies can be utilized, albeit modified, for our youngest students to express their knowledge. While reading and learning about these strategies, take time to think about the following:

- What scaffolds might need to be in place for my students to express their knowledge through writing?
- How might I modify these strategies, while maintaining the gist of the practice, for the developmental needs of my students?
- How can backward mapping the skills necessary to successfully use these writing strategies support schoolwide implementation and progression of AVID best practices?
- How might assessing students' writing change through the use of these strategies?



Guiding Principles

- Writing turns invisible thinking into visible learning that can be explored, revised, and reflected upon.
- Writing is a powerful tool that develops disciplinary literacy through building and deepening students' understanding in content areas.
- Writing *should not* be confined to the English language arts classroom.
- Writing about a subject helps students clarify their thinking and is a valuable precursor to classroom conversation or performance tasks.
- Learning through writing should be “low-stakes,” usually grade-free, and frequently occurring.
- Learning through writing is not about “correct” writing; since the goal is to improve subject-specific learning; students should not be graded on grammar, spelling, or other conventions.
- Learning through writing is an excellent form of formative assessment, providing educators with the opportunity to identify students' learning needs, misconceptions, and comprehension.
- Learning-through-writing structures can be used at any point in the teaching and learning cycle—to build anticipation or draw on prior knowledge, to reinforce or develop understanding, to practice learning, or to apply learning to new situations.
- Using digital tools offers students the ability to remix, create, and share work in ways beyond what is possible with paper.

Core Strategies: Five Essential Instructional Practices

Within learning through writing, there are powerful instructional practices that can be used for many purposes, across grade levels and content areas, and at any point during the teaching and learning process. The following instructional practices provide students with the opportunity to practice turning invisible thinking into visible learning. Students develop writing stamina and become more confident in their ability to transfer thinking to a written format when educators incorporate frequent opportunities for students to learn through writing.

1. Quickwrites
2. Interactive Notebooks
3. Learning Logs
4. Annotation
5. Questioning

ESSENTIAL INSTRUCTIONAL PRACTICE 1: Quickwrites

Quickwrites are a powerful instructional practice to embed into every grade level and content area, as they allow students to write about content at any point in time during the teaching and learning cycle in a low-stakes way. Combining quickwrites with collaborative learning structures deepens students' understanding of the topic or content while providing rich opportunities for the use of academic language. Intentionally scaffolding the quickwrite process so every student can achieve the highest level of academic rigor makes this essential instructional practice appropriate for learning content in every discipline, grade level, and classroom.

The quickwrite process allows educators the opportunity to increase students' understanding about a topic through writing while becoming more aware of students' gaps in comprehension or misconceptions about content.

Instructional Goals

Students will:

- Reflect on their current understanding or new learning about a topic.
- Respond to a teacher-created stem, prompt, or question using a phrase, sentence, or short paragraph.

Resource

- *Quickwrites* (Educator Resource)

Preparation for Instruction

Create a consistent structure that will become a frequently occurring instructional routine within the classroom. Elements to consider in creating a structure that works for both educator and students include:

- **Time:**
 - **Think Time:** Introduce the prompt and allow a minute of silent reflection, or think time, prior to starting the writing exercise. Students may need an opportunity to ask for clarification about the prompt, or any challenging vocabulary within the prompt. If the prompt is rigorous, adding a minute of partner discussion time increases the likelihood of students' success. Incorporating scaffolds like thinking prompts, teacher-created or communal word banks, and response frames are essential for academic language learners. For more information about scaffolding, see Chapter 1, pages 8–10.
 - **Writing:** Have students write anywhere from 2–3 minutes, without editing. The goal is for students to use the maximum amount of time to express their thinking, without getting caught up in style or editing conventions. A quickwrite really should be quick.
 - **Collaboration:** Once students have completed their quickwrite, provide a couple of minutes for students to share their writing with a partner or small group. This collaboration time allows an excellent opportunity for rehearsal and revision, as students



present their thinking in a less intimidating setting versus immediately sharing with the entire group. Partners or small groups can help students add content-specific or academic vocabulary to enrich the writing.

- **Polishing:** Provide students with an additional minute to integrate any suggestions or feedback from their partner, or allow them small-group collaboration time before they are asked to share with the whole class or turn in the quickwrite.
- **Format:** Depending upon the prompt or question, students' writing may take various forms. Being clear about expectations prior to the start of the quickwrite will save time and frustration for both educator and students. Is the expectation that they write in complete sentences or is a bulleted list acceptable? Will students complete their quickwrite in a journal, notebook, a single sheet of paper, or sticky note, or will they use a digital template or format?
- **Mode:** Determine what mode of writing will be used. Is this expository? Descriptive? Argumentative? A narrative? For more information on modes of writing, and sentence frames that align with each mode, see Chapter 4.
- **Information Gathering:** Consider how you will collect the data you need to inform instructional decisions related to the content or topic, based on the visible learning embedded in the quickwrite. Will you ask a few students to share out to the whole class, or have students turn this in on their way out of class? Will students revisit this quickwrite as a tool for reflection as they add new information to their learning? Also, consider how you might use technology to efficiently collect the quickwrites and keep them organized to examine later.

Instructional Strategies

Quickwrites and Collaboration

- Using completed quickwrites with collaborative structures promotes students' access to content and new understanding through peer support. It is important to let students know ahead of time that their writing may be shared with peers through a variety of collaborative structures. This sharing of ideas and knowledge allows students to better understand key concepts or learning outcomes through peer-friendly language, or from a different perspective.
 - Collaborative structures to consider utilizing for sharing quickwrites include:
 - Pair–Share
 - Four Corners
 - Team Huddle
 - Sole Mates
 - Stand–Share–Sit

See Chapter 1 for more information on pairing writing and collaboration. Also refer to the Core Strategies: Collaborative Structures webpage on MyAVID for details about some of the collaborative structures listed here.

Variations

- **Student-Directed Quickwrites:** Have students lead the quickwrite session by asking them to prepare a question in advance regarding the topic of study. This strategy provides an excellent opportunity for them to go back into their notes, and it reinforces the “Connecting Thinking” stage of the focused note-taking process as outlined in Chapter 3.
- **Quote Analysis:** Use quotes from literature or informational texts for students to agree or disagree with, analyze for validity, or connect to content being learned. Because quotes are often rich in abstract thinking, scaffolding this option with a thinking prompt, word bank, and response frame is essential. For example, when asking students to analyze a quote, the instructor might start with a thinking prompt like “Other people’s words help us to understand the world better,” and then provide a response frame that scaffolds the quote analysis.
- **Text Analysis:** Use a text excerpt, graph, chart, image, or other type of text for students to respond to in the form of a quickwrite.



Quickwrites

Integrating quickwrites into a unit of study or lesson series requires that the following decisions be made depending on the learning objectives, modes of writing, thinking skills, and where the quickwrite is placed in the teaching and learning cycle.

When used...	Students are...	Sample Questions, Prompts, Frames, or Stems
<p>At the start of the lesson or exercise</p>	<ul style="list-style-type: none"> • Building anticipation or interest about the topic • Focusing attention on a new topic or concept • Drawing on prior knowledge or experiences • Reviewing and processing content from a previous class • Preparing for reading a new text • Considering their current opinion about a topic 	<ul style="list-style-type: none"> • Write everything you know about _____. • Have you ever noticed/experienced _____? What did you notice/experience? • What was the main concept learned in our last lesson? • Read the quotation to yourself and once to your partner. Explain and analyze the quote using this sentence frame: “_____ is saying that _____.”
<p>During a lesson</p>	<ul style="list-style-type: none"> • Clarifying understanding • Explaining a process or procedure • Identifying points of confusion • Summarizing their current level of understanding or learning • Creating a plan or charting a course about next steps in learning 	<ul style="list-style-type: none"> • What is something you understand clearly about this lesson or concept? • What is an area of need for you? • What are the steps for _____? • How does _____ work? • What is your next step?
<p>At the conclusion of the lesson or class</p>	<ul style="list-style-type: none"> • Reinforcing learning through summarization or synthesis • Applying learning to new situations • Explaining learning • Generating questions based on new understandings 	<ul style="list-style-type: none"> • What have you learned? • What is the most important thing you learned today? Why? • How might you apply the skills of _____ in the next lesson? In life?

ESSENTIAL INSTRUCTIONAL PRACTICE 2: Interactive Notebooks

Interactive Notebooks

are a learning structure that helps students organize and archive their learning, and serves as evidence of learning and a reference tool.

.....**Interactive Notebooks** were introduced to the educational world through the *History Alive! Interactive Student Notebook* publication in 1999. This valuable learning tool is now being used across academic disciplines and in multiple grade levels, including college courses. For students, Interactive Notebooks become a collection of evidence of learning, as well as a reference tool. For educators, Interactive Notebooks can be an efficient learning structure that helps students organize and archive their learning. There are many variations and formatting structures that can be included in an Interactive Notebook, allowing educators an opportunity to tailor their notebooks to relevant content and students' ability.

With Interactive Notebooks (INBs), students take greater responsibility for their learning as they more clearly connect the information from classroom notes, reading assignments, or laboratory work with the products from and application of the information. Providing students with a variety of options for processing their learning also accommodates different learning styles and creativity levels, and aids in retention of academic information. Interactive Notebooks also are a means of ongoing communication between students and teacher, and between the teacher and parents or guardians.

Instructional Goal

- Students will create “living” notebooks to be used as personal organizational tools, archives of learning, and reference tools.

Resources

- *Interactive Notebook: Left Side (Output)* (Student Resource)
- *Interactive Notebook: Right Side (Input)* (Student Resource)
- *Interactive Notebook Table of Contents* (Student Resource)
- *Interactive Notebook Score Sheet* (Student Resource)
- *Interactive Notebook 5-Point Scoring Rubric* (Student Resource)
- *Adult Input Page (Multiple Response)* (Student Resource)
- *Interactive Notebook Reflection Questions* (Educator Resource)
- *Interactive Notebook Reflection* (Student Resource)

Preparation for Instruction

- Evaluate the purpose of each lesson, strategy, chunk of instruction, or investigation and how the INB note-taking and processing will lead to an application of the learning in students' continued content work.
- Formulate and communicate the types of information that can be used as *input* (right-side information) and the types of processing strategies that can be used as *output* (left-side processing opportunities).



- Define notebook expectations while considering scaffolding support or increasing rigor based on grade level or developmental level of student population groups.
- Determine how collaboration can occur while students develop the sections of the Interactive Notebook (notes, questions, summary, reflection, charts/tables, processing strategies).
- Create a consistent plan and schedule to allow for assessment of notebooks, including students' self-reflection and peer evaluation.

Instructional Strategies

Teachers have many options to consider when using Interactive Notebooks as tools for learning. The grade level and developmental level of the students and the content area being taught will inform how the notebooks can be used. The strategies presented in this section can be modified to fit either print or digital Interactive Notebooks as well as to fit your needs and those of your students. In other words, “make it work for you.”

Paper or Digital Interactive Notebooks?

There are benefits to both paper and digital Interactive Notebooks. The chart on the next page will help you compare and evaluate the general structure of both systems and determine which system is most appropriate for your classroom. Regardless of the system being used, the teacher should set clear expectations and model for students how to organize information within the Interactive Notebooks. Specific information on setting up and using Interactive Notebooks is provided after the comparison chart.



	Paper	Digital
Type of Notebook	The most commonly used notebooks are spiral-bound or composition books. In determining the type and size to use, consider your students' developmental needs, the timeframe over which the notebook will be used (e.g., unit, grading period), and the wear-and-tear of the notebooks over the timeframe.	Students set up notebooks using cloud-based tools that allow for note-taking, word processing, or quick creative tasks.
Access	It is important to determine where students will keep their notebooks. Will they leave them in the classroom or take them home after class? For classroom storage, there must be adequate space for keeping sets of notebooks.	Set clear expectations and model for students how to organize information within the digital INBs. Also designate the location where students will save digital notebooks, so they are backed up to the Cloud. Will students have or need internet access to use the notebook inside and outside of the classroom? Will cloud software be available to students?
Input Pages	The <i>right page</i> of the notebook is the <i>input page</i> , where students will take notes (two- or three-column notes, Cornell notes) according to the purpose or the content of the lesson. The notes can be tailored to the purpose by using graphic organizers, charts, diagrams, or other structures to enhance note-taking and students' learning. For investigative learning, the procedures, materials, and set-up can be placed on the right page. To learn more, refer to <i>Student Resource: Interactive Notebook: Right Side (Input)</i> on page 31.	<i>Input pages</i> in a digital INB contain the same types of information as right-side pages in a paper notebook (e.g., notes, graphic organizers, and charts). In addition, the input pages in a digital INB can include real images, audio, video, and links to outside resources.
Output Pages	The <i>left page</i> is the <i>output page</i> , which is used by students to respond to or process the content by providing commentary, narratives, data, or other evidence of thinking and learning regarding the topic. This is the location where students can utilize the writing-to-learn options found in this chapter or the variety of processing strategies located on the <i>AVID Writing for Disciplinary Literacy</i> webpage on MyAVID. Students might paste or glue in loose pages, such as One-Pagers, articles, or flip pages. To learn more, refer to <i>Student Resource: Interactive Notebook: Left Side (Output)</i> on page 30.	<i>Output pages</i> in a digital INB allow students to process information using a wide variety of digital tools (e.g., creating multimedia such as screenshots, photos, or videos, and posting links). Some output strategies are more appropriate to complete using paper and pencil, posters, or sticky notes. These valuable learning opportunities can be easily captured with a camera or smartphone and saved in the digital INB.
Logistics	Maintaining the left and right side of the notebook for <i>output/input</i> is simple to set up and allows students to visually observe the connection between the <i>input</i> and <i>output</i> on the page. The kinesthetic nature of a paper INB makes it an excellent tool for kinesthetic learners.	Developing the <i>output</i> and <i>input</i> pages is dependent on the system used by students; screen size might make it difficult for students to see the connection between both pages. The <i>input</i> and <i>output</i> correlation may become reversed in sequence with a digital notebook (output pages following input pages) Interaction with the pages on a computer or tablet is excellent for students who are successful in working with digital learning.

Visit the *AVID Writing for Disciplinary Literacy* webpage on MyAVID to access Interactive Notebook student samples, processing activities, and rubrics.

••••• **Setting Up the Interactive Notebook**

The basic elements of Interactive Notebooks, presented below, can be tailored to fit either print or digital notebooks. Each element serves a useful purpose in a notebook as it helps students organize and deepen their learning.

- **Page Numbering:** If using paper Interactive Notebooks, have students number the front and back of each page of the notebook in a consistent location, typically at the bottom outer corners of each page.
- **Table of Contents:** In its most basic form, a table-of-contents page includes the topic of study and the page number of the notes and student processing. However, the table-of-contents page can be customized to serve multiple purposes, as well as become the location for evidence of student reflection and metacognition. Some table-of-contents options to consider include:
 - **Columns and Page Numbers:** Create a four-column chart like the one shown in *Student Resource: Interactive Notebook Table of Contents* on page 32. Label the left side “Output Contents” and the right side “Input Contents.” This separation of sides will allow students to precisely name the notes and thinking processes used on each page and record the corresponding page numbers.
 - **Dialectical Journal Format:** By having students set up a format within the table of contents (or on a separate page) that allows for two-sided conversation, the educator is creating a system of communication and record keeping of skills the student needs to improve upon to advance toward mastery. This also communicates to students that mastery of a skill or understanding of a topic is a progression that takes time.
 - **Classroom Table of Contents:** Maintaining an updated weekly display (chart paper, whiteboard, or shared digital workspace) of the topics covered each day will help students keep their tables of contents current and will aid students who have been absent.
- **Reference Pages:** You may want to have students leave a few pages blank at the beginning and end of the notebooks as common reference pages for your class.
 - **Classroom Information:** This information may include such items as class objectives or expectations, laboratory safety protocols, or formula charts.
 - **INB Grading Rubric:** A rubric within the INB makes students aware of the expectations for their grades. (Refer to *Student Resource: Interactive Notebook 5-Point Scoring Rubric* on page 34.)
 - **Score Sheet:** Having a specific location for recording scores on the lessons, units, or chapters will provide students and families with current assessment information. At the end of the grading period, this strategy should eliminate confusion about earned notebook scores. *Student Resource: Interactive Notebook Score Sheet* (page 33) illustrates the type of information that might be included on a score sheet.

- **Vocabulary List or Glossary:** Many teachers like to have students use blank pages in the back of the notebook to create class or personal vocabulary lists and definitions.
- **Adult Input Page:** A multiple-response adult input page can be inserted onto the inside back cover of the notebook. (Refer to *Student Resource: Adult Input Page {Multiple Response}* on page 35.)
- **Digital INB Links:** Digital INBs allow for content to be easily organized, searched, and linked. The table of contents can link to input and output pages. The vocabulary lists can be created and shared online, and linked to the table of contents or to specific lessons.

Communicating Expectations

- **Students:** Be prepared with a rubric or other evaluation measurement tool to clearly and fairly communicate to students the expectations regarding content, formatting, style, and organization.
- **Parents and Family:** An adult input page provides a place for the parent/guardian or other adult to review and comment on a student's work. The adult will be able to see the progression of learning happening in the classroom, and the level of participation or completion of the task, by their child. In addition to the multiple-response adult input page referenced above, a single-response form that allows for more in-depth responses can be found on the *AVID Writing for Disciplinary Literacy* webpage on MyAVID. Either type of adult input page can be accessed and completed digitally for students who are using digital INBs.

Personalizing

When students personalize their Interactive Notebooks, they are more likely to value them and less likely to misplace them—this instills a pride of ownership. There are many ways students can personalize their notebooks to reflect their unique personalities and learning styles. Consider having students include one or more of the following:

- **Goal Setting:** Designate an area of the notebooks where students can develop short- and long-term goals, both academic and personal, and indicate plans to achieve them. These goals should be revisited regularly so students can track their progress.
- **Destination College:** Have students design a page about the college or university of their dreams. Design elements to consider could include school colors, mascot, motto, and/or majors offered. Students might also add print information or digital links related to entrance requirements to inform their short-term and long-term goals as they map their personal path to college.
- **Cover Page or Title Page:** Allow students to design their individualized covers or title pages in a nonlinguistic way to show course topics in a graffiti-style approach. The instructor can define any common elements to be included.
- **Other Options:** The notebooks can be further personalized with options such as personality phrases, learning style, drawing of a successful student, class mission statement, and growth mindset statements.



Note-Taking

Students' notes are typically recorded on the right page, or the input page, of an Interactive Notebook. Chapter 3: Focused Note-Taking provides thorough information about note-taking structures and strategies.

Essential Questions are objective-based, student-generated or teacher-generated questions appropriate to a particular lesson, unit, or concept, used by students to guide thinking and frame note-taking and summarization in order to accomplish an assigned task.

- **Essential Question:** Each lesson included in the Interactive Notebook should have an overarching question to provide context for the learning represented through the lesson. The question is also an accountability measure to help educators ensure that they are covering their grade-level or course standards. The Essential Question can be rewritten from educational standards into student-friendly language, depending on the grade level or course, as long as crucial academic language and content-specific language are maintained in the rewriting of the standard.
- **Structure of Notes:** The note-taking format may take the form of two- or three-column notes, Cornell notes, or more structured formats such as graphic organizers, flowcharts, or tables. The type and length of content (e.g., discussion, video, laboratory investigation, mathematical problem analysis, or vocabulary study) should determine the most appropriate note-taking format.
- **Inserted Notes or Articles:** Assignment pages, guided notes, or text articles may sometimes be used instead of having students write their notes. In a digital notebook, these types of resources can be linked, inserted, or copy-pasted directly into the notebook. For paper notebooks, these pages can be folded as a flip page and glued or taped into the notebooks. (Tape or glue prevents the snags that staples may cause for inserted pages.) Be judicious about which materials students add to their notebooks, as too many items will make the notebooks bulky and hard to handle.

Interacting With the Notes

- **Thinking About the Notes:**
 - Encourage students to color-code different aspects of their notes as visual memory aids (Stencel, 1998). You may also want to create a consistent system that students can follow. For example, use one color of highlighter for important vocabulary, and another color for main ideas.
 - Suggest that students create diagrams or nonlinguistic representations within the notes as visual reminders or connections to the content.
- **Writing Questions:**
 - Review Costa's Levels of Thinking with students as a reminder to create higher-level questions (Levels 2 and 3) that require thinking at the processing or application levels, as well as Level 1 questions that require identification of main ideas or concepts.
 - Direct students to write questions in the left-most column of their notes about the content. The questions may be study questions they can use later to direct them to specific content, or they may be authentic questions they have about the content ("I wonder..." questions).

- **Collaboration:**

- Collaboration with peers is a valuable learning tool for students and provides a safe environment for them to discuss their learning and to revise and extend the learning. It can be used effectively on any section of note-taking for the Interactive Notebook, whether paper or digital.
- Allow students to review, revise, and refine their notes in a partner Pair–Share to determine completeness of the information. During the collaboration, they can add to their notes (perhaps in a different color), correct or delete incorrect information, identify main ideas and details, or connect ideas with arrows or lines.
- Students can also collaborate on the question writing, processing opportunities, and summaries, as well as on laboratory analysis and conclusions for scientific investigations.

Summarizing Content and Writing Reflections

- **Summary:**

- The summary for notes, which is typically recorded on the right page of the Interactive Notebook, should capture the meaning and importance of the content. It should also answer the Essential Question or focusing question that guides the note-taking.
- For research and investigations, the summary is in the form of data analysis and conclusions from the investigation. These summaries should include identification of the Claim, Evidence, and Reasoning (CER). For more information on CER, refer to the *Essential Instructional Practice 5: Questioning* (pages 48–50) in this chapter.

Reflection involves purposeful processing that is reliant upon thinking, reasoning, and examining one’s own thoughts, feelings, and experiences.

..... **Reflection:**

- A reflection is a personal statement that focuses on critical thinking and mental processing of learning. It connects to prior learning and future application of the content.
- The type of information requested in a reflection should be tailored to the subject area or age/grade level of the students. After a lesson, unit, or grading period, students can reflect on their learning based on the questions or prompts established by the instructor. See *Educator Resource: Interactive Notebook Reflection Questions* on page 36 and *Student Resource: Interactive Notebook Reflection* on page 37.

Processing Content

- Using the Interactive Notebook, the learning from a lesson or strategy is integrated and processed on the left page as *output*. The various processing options typically require a nonlinguistic representation of the content and an explanation of how the image explains and describes the content. These opportunities help students recall and think critically about the content information. Refer to *Instructional Practice: Nonlinguistic Representations* (pages 66–67) in this chapter for additional information on graphic summaries of content.



- The processing strategies can be modified for use with any student population, as needed. The level of the products will depend on the skills and education backgrounds of the students.
- Encourage students to use multiple colors for processing information as prompts to memory.

Assessment of Interactive Notebooks

Student Interactive Notebooks provide educators with opportunities for informal and formal assessments of students' engagement in their learning. Because all work is maintained in the Interactive Notebooks, the instructor can see how students are improving, and can provide targeted feedback to help students strengthen their skill sets.

- **Informal Assessment:** “Walk-by” checks for completion can be done by commenting on, initialing, or stamping specific pages on a daily or weekly basis. During these informal reviews, you can note positive comments or ask questions on the pages. Allowing students to use their notebooks for open-note quizzes is another method of informal assessment.
- **Formal Assessment:** It is most appropriate for formal assessments to be based on rubrics with which students are familiar. The rubric may specify categories and scores for specific content, the format of the notebook, or holistically evaluate the notebook based on completion and the degree to which expectations have been met.
 - Sample assessment rubrics are available on the *AVID Writing for Disciplinary Literacy* webpage on MyAVID.
 - A benefit of having students use digital notebooks is that instructors have access to students' work at all times. This allows for greater frequency and quality of feedback.
- **Self-Assessment:** Students can self-assess through a reflection response on the critical thinking and mental processing of their learning in a unit or chapter or on selected elements of the notebook. Students can choose several of the lessons or processing strategies that represent their best work or deepest learning, and a lesson or concept that was problematic for them, and then respond to provided reflection questions. *Educator Resource: Interactive Notebook Reflection Questions* (page 36) provides example questions.

Educator Master Notebook

- A master Interactive Notebook, print or digital, kept by the instructor (or tutor or responsible student) can provide increased access and support for students. The purposes of keeping a master notebook include record keeping of daily learning strategies, a tool to give students who were absent an opportunity to catch up on missed learning or assignments, and a visual model to demonstrate expectations for all students.
- Consider keeping a notebook for each subject, or each class, to aid with organization. You may also choose to color-code notebooks based on the subject or class (e.g., all science notebooks are green, or different colors for different classes).

Interactive Notebook: Left Side (*Output*)

The left page demonstrates your understanding of the information on the right page. On the left page, you will interact with the information in creative, unique, and individual ways. The left side incorporates and reflects how you learn as well as what you learn.

What goes on the left side?

Output goes on the left side. These are products that demonstrate understanding of the topic or content. Some examples of output include:

- Brainstorming
- Concept maps
- Riddles
- Illustrations
- Cartoons
- Poetry or songs
- Metaphors and analogies
- Compare-and-contrast diagrams
- Data and graphs you generate
- Analysis writing
- Reflection writing
- Quickwrites
- Four-square analogies
- Mnemonics
- Flowcharts
- Graphic organizers
- Writing prompts
- Other creative avenues for processing information

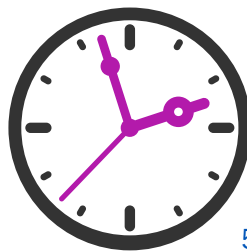
Things to Know About the Left Side



- Left sides have *even-numbered* pages. Every left page gets used for processing information from the corresponding right page.
- Always use multiple colors for the diagrams and nonlinguistic representations. This helps the brain organize, learn, and remember information.
- Nonlinguistic representations of the right-side learning should include an explanation of the representation.
- Homework problems can be left-side items (but they do not take the place of processing your notes!).

Clock Choices for Left-Side Processing

11. Create a graph about the topic.
10. Create a Venn diagram to compare/contrast information.
9. Write and solve problems using the information.
8. Create an analogy and an illustration.
7. Write a letter about the topic to your grandmother.
6. Write a haiku poem about the topic.
12. Make an illustration depicting and explaining the topic.
1. Paraphrase information in one sentence.
2. Create a bookmark for this topic.
3. Write original lyrics for a song related to the topic.
4. Write four “What if...?” questions about the topic.
5. Create vocabulary cards for the five most essential terms.



Interactive Notebook: Right Side (*Input*)

Interactive Notebooks will be used in class daily to help you learn and remember important concepts. The right-side notebook page contains the information you put into the notebook and the information you need to learn—the *input*.

What goes on the right side?

Input goes on the right side. Input is the information you are supposed to learn. Some examples of input include the following:

- Notes from a lecture or guest speaker
- Text of other source
- Vocabulary words
- Video and film notes
- Procedures
- Questions and answers
- Sample problems
- Graphic organizers
- Diagrams
- Observations

Things to Know About the Right Side



- Right sides have *odd-numbered* pages. Always start the page with the date, title, and Essential Question at the top of the page.
- The right page is for recording information from classwork or an assignment. Choose the note-taking format that works best for the type of content you will record.
- Use highlighting and color to make important information stand out.
- Study questions and “I wonder...” questions are written in the left column when using Cornell notes.
- Using common abbreviations and symbols makes note-taking easier.
- Summaries of the information should be written at the bottom of each page of notes.

Costa's Levels of Thinking

Level 3	Apply Judge	Evaluate Predict	Hypothesize Speculate	Imagine
Level 2	Analyze Infer	Compare Sequence	Contrast Synthesize	Group
Level 1	Define Name	Describe Observe	Identify Recite	List Scan

Interactive Notebook 5-Point Scoring Rubric

5	<ul style="list-style-type: none"> • All requirements exceed expectations. • Notebook contents are complete, dated, labeled, and organized (page numbers, table of contents, use of color). • All information on left and right pages is correct. • Notes (two- or three-column and Cornell notes) have Essential Questions, summaries, and student-created questions. • Contents demonstrate superior understanding of content and topics. • Processing strategies are well developed, have effective diagrams, and are colorful. • Notebook shows consistent effort and insightful reflection on the work done.
4	<ul style="list-style-type: none"> • All requirements meet expectations. • Notebook contents are almost complete, dated, labeled, and organized. • Information on left and right pages is correct. • Nearly all notes have Essential Questions, summaries, and student-created questions. • Contents demonstrate good understanding of content and topics. • Processing strategies are satisfactorily developed, have effective diagrams, and are colorful. • Notebook shows consistent effort and thorough reflection on the work done.
3	<ul style="list-style-type: none"> • Most requirements meet expectations (one or two may be missing). • Notebook contents are almost complete, dated, labeled, and organized. • Information on left and right pages is mostly correct. • Nearly all notes have Essential Questions, summaries, and student-created questions. • Contents demonstrate limited understanding of content and topics. • Processing strategies are incomplete or lack effective diagrams or use of color. • Notebook shows moderate effort and reflection on the work done.
2	<ul style="list-style-type: none"> • Some requirements have been met. • Notebook contents are incomplete and not completely dated, labeled, and organized. • Information on left and right pages is partially correct. • Notes have incomplete or missing Essential Questions, summaries, and student-created questions. • Contents demonstrate superficial understanding of content and topics. • Processing strategies show minimal processing of information. • Notebook shows little reflection on the work done.
1	<ul style="list-style-type: none"> • Many requirements are not present. • Notebook has weak content development and is poorly organized. • Many notes are incomplete or missing. • Few or no processing strategies are included. • Notebook lacks evidence of effort or reflection.

Adult Input Page (Multiple Response)

To the adult: Completing this page will help your student to have a better understanding of the material learned in class. When a person teaches another, both learn, but the “teacher” often learns much more than the “student.” Your student should discuss and teach you a concept covered in class. Please write down one or two sentences explaining what *you learned* from the discussion and tutoring.

Date	What I Learned	Adult Signature

Interactive Notebook Reflection Questions

Sample questions and sentence stems for students' self-reflection are given below. The questions can readily be converted to sentence stems for younger students.

General

1. What were you most proud of in your Interactive Notebook? Explain.
2. What were you least happy with? Explain.
3. How did collaboration with other students increase your understanding of the content?
4. How does your work in the lessons from early in the [unit/semester/grading period] compare with your later work?
5. How well were your "I wonder..." questions answered through interaction and collaboration with the notes?
6. What might you want the teacher/instructor to know about your work in the notebook?
7. Sketch a drawing that represents your learning from using the notebook.
8. What did you learn about yourself by keeping an Interactive Notebook?
9. If you were the teacher/instructor, what comments would you make about your notebook?

Content and Skills

1. How did your Interactive Notebook work help you gain a better understanding of the content?
2. What was most helpful to you in using the Interactive Notebook to organize your thinking and learning?
3. How has your Interactive Notebook improved from past notebooks? Explain.
4. In what way(s) have you improved at using the Interactive Notebook for learning content?
5. What is one thing you will do differently with your notebook work in the next unit/semester/grading period?
6. What grade would you give yourself on your notebook? Why did you give yourself this grade?

Reflection Stems

- My Interactive Notebook shows that...
- The most difficult part of keeping my work in an Interactive Notebook is...
- The best part of keeping an Interactive Notebook is...
- One of the things that surprised me about using an Interactive Notebook was...
- I felt frustrated about using the Interactive Notebook when...
- I know I need to change the way I...
- I learn best when...
- I can do better with my notebook by...

Secondary and Higher Education

1. Review the Interactive Notebook rubric in detail. Evaluate your Interactive Notebook against the rubric, and propose a score of 1–5.
2. In two well-developed and articulate paragraphs, justify the rating you have chosen. In the first paragraph, provide an assessment of the notebook's strengths, and in the second, an assessment of its weaknesses. Be very specific and detailed, including examples from the notebook from the beginning of the unit to its end.

Interactive Notebook Reflection

Select three lessons or strategies (left and right page combinations) that represent the quality of your work. Two lessons or strategies should demonstrate your best work—where you had the greatest success—and one should represent an area of moderate success.

Name of Lesson/Strategy	Page Numbers	Explain why this is your best work or moderate work.
1.		
2.		
3.		

Assessment of Skill Set *(one paragraph, written in complete sentences)*

- Which organizational strategies used in the Interactive Notebook helped you learn the most? Explain.
- How did using the Interactive Notebook increase your academic skills (e.g., analysis, logic, creativity, synthesis of information, understanding new concepts)?

Assessment of Unit Work *(one paragraph, written in complete sentences)*

- Indicate the overall rating of your notebook based on the scoring rubric. Justify your rating with specific examples.
- How has your Interactive Notebook improved from past notebooks? Explain.

Looking to the Future *(one paragraph, written in complete sentences)*

- Write at least one goal for improving your learning in this class.
- How will you use your Interactive Notebook differently in future units to increase your learning in this class?

ESSENTIAL INSTRUCTIONAL PRACTICE 3: Learning Logs

Learning logs are a powerful tool for reflection. Their purpose is to aid students in processing information, thinking, and understanding content. Learning logs work well when the objective is for students to reflect on learning over time in a specific content area, while also reflecting on metacognition and the success of strategies used to attain new learning. This informal writing strategy is effective in all subject areas to help students become more self-aware of progress toward goals and to provide a platform for communicating about concepts that may be confusing.

Instructional Goal

- Students will reflect and write to express or deepen their understanding about a topic, subject, idea, or learning strategy.

Resources

- *Characteristics of Learning Logs* (Educator Resource)
- *Learning Log Variations* (Student Resource)
- *Learning Log Sentence Stems and Prompts for Reflection* (Student Resource)

Preparation for Instruction

- Decide where students will be completing their learning logs, either digitally or on paper. Writing can be kept in notebooks, folders, or binders.
- Prepare to share student exemplars or models of the format and responses (with students' permission).
- Be intentional when selecting the style of learning log to meet the desired instructional goal.
- Develop a system for review and grading of students' work.
- Determine when and where journaling or learning logs might fit into current academic routines and schedules.

Instructional Strategies

- Utilize teacher modeling and Think-Alouds during initial instruction. Ease students' anxiety or frustration by creating the format for journals and learning logs together with students and leaving visual examples up for reference.
- Establish the purpose of learning logs for students: open-ended, non-threatening writing tasks that provide a space for students to grapple with ideas and new learning.
- Explain how learning logs will be graded. Students need to feel free to record their thoughts in a quick, fluent manner; learning logs should receive points for participation or completion, but should not be graded for grammar, spelling, or other language conventions.
- Share exemplars of learning logs to set clear expectations for student work.
- Incorporate learning logs into the teaching and learning cycle at regular and frequent intervals by integrating time in the instructional plan for students to write in their learning logs.
- Use collaboration strategies with learning logs, having students share with a partner or small group so they can see the same topic expressed in different ways.
- If students revisit previous learning log entries to correct misconceptions, ask that they not erase or delete previous work, but cross out incorrect or inaccurate information, or layer new understanding in a different color. This strategy shows progression toward mastery and evidence of growth.

See Chapter 7 for more information regarding teacher modeling and Think-Alouds.



Characteristics of Learning Logs

Characteristic	Explanation
Regular and Frequent	Allow 2–4 minutes at the beginning, in the middle, or at the end of a lesson. Learning logs are effective at the beginning of the class as students are settling in or as exit slips to wrap up the learning that took place during class.
Short	Short, timed writing sessions work best. It is better to leave a few students wanting to express more than to have most of the class struggling with nothing more to say. Build confidence by beginning with short increments of time that can be increased as students become more proficient and comfortable with the reflective process.
Minimally Structured	Encourage students to write what they really think, not what they think the instructor wants them to say.
Academic	Students should focus on an academic challenge or issue.
Uncorrected	To encourage honest responses and reduce apprehension, do not “correct” the writing in a learning log. Instead write comments and genuine questions in a conversational manner.
Credited	Students receive credit for each completed learning log. Set the standard at the start that a certain amount of writing and thought is expected as a minimum. The general expectations, the class environment, and the reinforcement of the importance of the time spent on learning logs should help reduce the tendency for some students to waste the time.
Shared and Responded	To learn the most from their writing, students need both an audience and appropriate models. Sharing learning logs provide both, allowing students to see and discuss a variety of responses as well as reinforcing the lesson’s concepts. Responses to entries may involve oral sharing in pairs, small groups, or a large group, as well as direct comments from the teacher. It is important that teachers inform students prior to writing whether the learning logs will be shared and how that sharing will occur. Spending time in class on learning logs emphasizes the importance of writing, validates the students’ reaction to the lessons, and provides an opportunity for students to reflect on their own learning and thinking.
Managing the Paper Load	<p>Learning logs take time: time to think, time to write, and time to share. Another concern for teachers is the time it takes to read and respond to the writing. Do not read everything students write.</p> <ul style="list-style-type: none"> • Ask students to star entries for the teacher to read. • Skim entries until there is something to respond to, and then comment or question briefly. • Have students share logs in pairs or small groups and then lead the class in a discussion of the ideas expressed. The time spent sharing and responding becomes even more valuable than a written response because the dialogue helps to clarify ideas. • Have students keep their learning logs in the classroom for easy review. This allows for learning logs to be used as a measure of student progress and growth.

Learning Log Variations

A learning log is connected to what you are learning in class. In a learning log, you are asked to write about what you are learning, reflect on your learning, or make connections to your learning in other classes.

<p>Learning Log Prompt Starters</p>	<ul style="list-style-type: none"> • Today in class... • I <u>learned/wondered/explored</u>... • It was interesting to <u>see/learn/discuss</u>... • A question I have about _____ is ...
<p>Analyzing a New Idea</p>	<ul style="list-style-type: none"> • A big idea from what I learned today is... • I have a better understanding <u>about/of</u> _____ because... • A question I still have is... • I need to find out more information about... • _____ <u>connects to / relates to / helps me better understand</u>...
<p>“Showing” Vocabulary or a New Concept</p>	<p>Words or concepts learned in class and never used again are meaningless. Making new words or concepts part of your vocabulary builds your academic language skills and allows you to make connections between concepts.</p> <ul style="list-style-type: none"> • Write an unfamiliar word or concept and the sentence you found it in. • What does the word or definition mean? Add an authentic definition. • Represent the word in a nonlinguistic representation (without using words, numbers, or letters).
<p>Connecting to the World</p>	<p>Choose an event occurring in the world and connect it to what is being studied or learned in class.</p> <ol style="list-style-type: none"> 1. Describe the current event in detail. 2. What topic/theme/content does the event relate to and why? 3. Where do you stand in relation to the event? Which side are you on? 4. Why is this event interesting to you? 5. What do you think the outcome of the event will be? Why?
<p>Connecting to Self</p>	<p>How do the concepts/ideas/themes you have learned connect to your life? Why does this topic matter to you? (Example topics might be: gravity, democracy, a written language, multiplication, mitosis, etc.)</p>
<p>Creative Solutions</p>	<p>Take a real-world problem that connects to what is being studied in class (air pollution, global warming, racism) and come up with a creative solution for this problem. Let your solution be outlandish and imaginative, as that is often how real solutions are found.</p>

Learning Log Sentence Stems and Prompts for Reflection

- My new learning is...
- Powerful words and a phrase that I learned are...
- I will use this information to...
- Today, I worked on...
- Questions that I have on this topic are...
- I want to learn more about...
- I was surprised when...
- I predicted...
- The most important idea that I picked up from the video/discussion/experiment/field trip/etc. was _____, and I can use it to _____.
- This lesson reminds me of _____ because _____.
- I think that I know why we are studying _____ because _____.
- My teacher wants me to understand that _____.
- If my friend missed class today, I would tell him/her that _____.
- What advice would you give next year's class about...?
_____.
- Write three sentences describing what you learned, making sure to cite evidence.

_____.
- Write two sentences explaining how and why you used a specific strategy.

_____.

ESSENTIAL INSTRUCTIONAL PRACTICE 4: Annotation

Annotation involves interaction with a text or diagram by isolating key information and recording notes of explanation, comments, or questions. Annotation is powerful because when students read with a pen or pencil in hand, they transform from passive to active readers.

Too often in education, instructors become walking, talking, breathing CliffsNotes. Curriculum is abbreviated and chunked into bite-sized portions intended to be mentally digestible for students. Educators do everything possible to help students learn, and this often involves delivering the most valuable or important pieces of content on a platter to students. Unfortunately, this approach deprives students of learning skills for determining what content is of value and the ability to explain and justify their choices. An essential learning-through-writing practice that helps students develop these skills is annotation. **Annotation** requires that students learn how to identify important information within their notes, textbooks, articles, or anything else they are reading. This skill requires students to isolate key information in texts and think metacognitively about texts as they interact with them.

Is annotation really a learning-through-writing instructional practice since it relies heavily on reading? The answer is yes. When students can determine the purpose for reading a piece of text, identify important information through circling and underlining, record connections in the margins, and take note of comprehension gaps and confusing concepts, they are engaging with the text. Engagement occurs through capturing learning in writing. Annotation is powerful because when students read with a pen or pencil in hand, they transform from passive to active readers.

Instructional Goal

- Students will learn systematic approaches for identifying important information in a text, media source, or online publication to deepen understanding and make connections within and across content areas.

Resources

- *Marking the Text* (Educator Resource)
- *Academic Thinking Skills* (Educator Resource)
- *Text-Dependent Questions* (Educator Resource)
- *Pausing to Connect* (Educator Resource)

Preparation for Instruction

- Set the purpose for annotating a text, media source, or online publication.
- Determine whether the text should be annotated digitally or on paper.
- Identify the learning objective(s) to be addressed in this lesson.
 - What will students *know* as a result of learning?
 - What will students be able to *do* as a result of learning?
- Gather resources (texts, media, online publications, etc.) for students to analyze and annotate.
- Identify appropriate chunks of text.
- Ensure that students have access to writing tools, preferably with varying ink colors, that will enable them to annotate effectively.

“*Close, strategic reading is one of the most powerful and enjoyable ways to develop the ability to think critically and evaluate information—to literally become smart. Students should have abundant daily opportunities to carefully read and reread texts for intellectual purposes—and with a pen in hand.*”

Mike Schmoker, education author

- Select the *academic thinking skill* that best supports the instructional goal. Students will use this skill to respond to information sources. Consider how students will be using resources and annotating their findings. Academic thinking skills include:
 - **Apply** or contextualize the broader ideas, themes, or significance of the text(s).
 - **Analyze** the use of evidence in text(s), or critique reasoning.
 - **Evaluate** cause-and-effect relationships.
 - **Synthesize** an argument using relevant evidence from the text(s).
- Decide how learning will be demonstrated as a result of the lesson. Some outcome options include:
 - Focused note-taking: Using notes taken in class, have students practice the processing notes and connecting thinking phases of the focused note-taking process as outlined in Chapter 3, pages 127–142.
 - Marking the text
 - Writing in the margins
 - Charting the text
 - Pausing to connect
 - Small-group or whole-class discussion
 - Developing text-dependent questions
 - Engaging in collaborative structures

Instructional Strategies

- Define what it means to annotate and develop a working definition with the class. *Dictionary.com* defines “annotate” as adding notes to a text or diagram that provide an explanation or comment.
- Identify the purpose for annotation based on the learning objective and how students are expected to apply the information. Connect the purpose to the appropriate academic thinking skill.
- Determine how the text will be annotated. What will be underlined? What will be circled or marked? How will color be used? What will be highlighted? What will notes recorded in the margins include or connect to?
- Model annotation for students using a document camera or projector. Annotate a section of the text and verbally explain aloud what you are doing and why. Your decisions should be transparent and your explanations clear.
- Ask students questions and have student volunteers offer their thoughts about what should be annotated.
- Use the **gradual release of responsibility** model and move to annotating a section of text with the class, continuing to think aloud for what is being circled or marked, underlined, or noted in margins. Ask students to share what they have done and how it connects to the academic thinking skill they are practicing.
- Have students work on annotation together in groups in the next phase of the gradual release of responsibility model before having them collaborate with a partner or smaller group.

Gradual release of responsibility is an instructional model that begins with demonstration or modeling by the instructor and moves to autonomous practice by students.

Marking the Text

Marking the text is an active reading strategy that requires critical thinking about the ideas and essential information in a text.

Use this template to think about how you might want students to approach **marking the text** as a [historian/mathematician/scientist/sociologist/writer/etc.].

Ultimately, what you expect students to mark in the text will depend on the reading purpose, prompt, or academic task.

It makes sense to chunk texts by **microstructure** when the text consists of traditional sections and it is important for each section to be analyzed carefully. In traditional texts, these “micro” sections might be paragraphs. In nonlinguistic texts, these “micro” sections might be specific text features, such as footnotes for an image, multiple representations, data or labels on a diagram.

In a nontraditional text (technical manual, poem, political speech) chunking the text in the traditional way would create more chunks than are manageable. Chunking the **macrostructure** broadens the range of text that can be grouped together in one “chunk” because it makes sense for that particular text.

Distinct Marks	Explanation
<p>1. Number the paragraphs/ sections (Decide whether microstructure chunking or macrostructure chunking is more appropriate for the text.)</p>	
<p>2. Circle (Decide what students will circle within the text.)</p>	
<p>3. Underline (Decide what students will underline within the text.)</p>	
<p>4. Additional marks (Add additional marks such as selective highlighting, bracketing, boxing, labeling in the margins, etc.)</p>	
<p>5. Write in the margins (Decide if writing in the margins is appropriate for this text. If so, which writing-in-the-margins strategies will students use?)</p>	

Designed for teacher assistants (TAs) and lecturers in the San Diego State University Lower Division Writing Program, the Marking the Text strategy is modeled and practiced in a series of weekly meetings called “Issues in Teaching Composition” during the first semester of teaching.

Academic Thinking Skills

Academic Thinking Skills	Annotation
If my students need to:	Then, these are annotations to use:
<p>Apply (utilize)</p> <ul style="list-style-type: none"> Contextualize the broader ideas, themes, historical, or geographic significance of text(s). Apply concepts from a text to implement an action. 	
<p>Analyze (examine)</p> <ul style="list-style-type: none"> Analyze the use of evidence in text(s), or critique reasoning. Analyze the structure of text(s) and/or how an author's choices create a central theme, idea, or other meaning. Identify patterns of continuity of changes by region, groups, or time in text(s). 	
<p>Evaluate (assess)</p> <ul style="list-style-type: none"> Assess cause-and-effect relationships within text(s). Compare ideas or perspectives found in text(s). Assess the validity of an argument in text(s). Justify reasoning in text(s). Make a judgement based on information in text(s). Categorize ideas, events, themes, and data by relevant characteristics. 	
<p>Synthesize (combine/condense across multiple texts)</p> <ul style="list-style-type: none"> Create new insights. Predict future outcomes. Draw informed conclusions. Analyze errors in text(s) or process(es). Generalize from facts. Argue new ideas. 	

Text-Dependent Questions

Word

- Why does the author say/use (word choice) to illustrate their opinion/proposition/main idea/assertion?
- How does the author's word choice affect the mood or tone of the reading? What are some examples?



Sentence

- Which sentence supports the author's position/main idea the best?
- Why does the author choose the first/last sentence to open or close the reading?
- What does the author mean by...?



Paragraph

- Why does (the author) use statistics/quotes/anecdotes/data to support their proposition/main idea?
- Which paragraph has the most impact or strongest impression? Why?



Segments

- How does this segment connect to the author's purpose or the overall meaning of the text?
- Which segment of the text is the most important, and why? Justify your answer.



Entire Text

- What is the position/main idea/proposition of the author? What evidence is given?
- How does the title connect to the main idea or author's proposition?
- Why does the author use this organizational pattern to communicate their position/main idea/assertion?



Across Texts

- How does this text relate to other ideas or concepts that we are learning/have learned in this class or another?
- How does this text build or add to our knowledge of...?

Pausing to Connect

“Pausing to connect” is a strategy that helps a reader gain deeper understanding of a text. Use the following questions to pause, connect, and annotate the text in order to make sense of what is being read. Think aloud, model, and then have students practice using a specific way of annotating the text for any of the following reasons:

- What do I understand so far? What don't I understand?
- What information does the author need to clarify?
- Why has the author repeated this word?
- How does this term or phrase connect to what the author is arguing?
- How does what I just read connect to the above paragraph or section?
- What is the author trying to get me to think about here, and here?
- What is the author doing in this paragraph?
- What is the author's purpose?
- How has this section or paragraph helped my understanding of the text as a whole?

Readers pause to connect ideas within different types of texts for different reasons.

Textbooks

Readers pause to connect ideas within textbooks to:

- Clarify information.
- Connect the visual aids to the words on the page.
- Summarize ideas that have been presented.
- Investigate how titles and subtitles relate to the surrounding text.
- Make various other connections while reading.

Nonfiction

Readers pause to connect ideas within nonfiction to:

- Clarify information.
- Explore how words or terms are being used.
- Investigate relationships between language and meaning.
- Analyze how one paragraph is related to another.
- Read images, charts, graphs, and other visual aids.
- Synthesize an author's claims.
- Investigate the types of evidence being used to advance the argument.
- Make various other connections while reading.

Fiction

Readers pause to connect ideas within fiction to:

- Clarify plot points, character motivation, relationships, and/or setting.
- Explore literary devices and features.
- Trace the actions of one character or review the actions of many characters.
- Analyze the author's use of diction and its effect on tone and mood.
- Identify repetitions, metrical feet, or rhyme schemes in poetry.
- Make various other connections while reading.

“ *Disciplinary literacy is about doing the work of the disciplines instead of merely reading about it.* ”

ReLeah Lent, *Disciplinary Literacy: A Shift That Makes Sense*

ESSENTIAL INSTRUCTIONAL PRACTICE 5: Questioning

Questions serve many purposes in the classroom, such as prompting students to think, acquire content, and engage in the learning process. Questions help students find relationships between ideas and concepts, and organize and clarify their thoughts. As educators model questioning processes, they are teaching students how to use inquiry to deepen their understanding of content.

Students engage in content-area courses through discipline-specific ways of thinking, questioning, and writing. For them to fully construct meaning from the content, they must develop discipline-specific skills.

Enabling students to think like historians, scientists, mathematicians, or professionals in another discipline is a valuable skill for their college and career readiness. It requires recognition of the different types of thinking, questioning, and writing typically used in the various disciplines. This is the essence of disciplinary literacy.

Instructional Goal

- Students will engage in discipline-specific questioning and writing to create greater ownership of their learning and deepen their comprehension of academic content.

Resources

- *Literacies Within the Disciplines* (Educator Resource)
- *Claim, Evidence, and Reasoning Discipline Examples* (Educator Resource)
- *Crafting Questions* (Student Resource)
- *Sentence Stems for Claim, Evidence, and Reasoning Writing* (Student Resource)

Preparation for Instruction

- Identify what students need to learn and do (knowledge and skills) in a specific assignment.
- Understand and guide students' integration of Costa's Levels of Thinking into their discipline-specific work.
- Review pages 136–137 in Chapter 3: Focused Note-Taking for additional resource information on writing questions.

Instructional Strategies

Literacies Within the Disciplines

- *Educator Resource: Literacies Within the Disciplines* lists types of discipline-specific knowledge and skills in reading, thinking, questioning, and writing. It represents a way for educators to think in terms of disciplinary literacy, as it respects the different ways students engage and write in specific content areas. Refer to this chart as you use the strategies in this instructional practice, plan lessons, and think about the skills you want students to learn in your content area.



For additional information on educator-driven questioning, refer to Section 4.4, *Teacher-Driven Inquiry*, in the book *AVID Critical Thinking and Engagement: A Schoolwide Approach*.

••••• Educator-Driven Questioning

- The teacher plays a key role in students' learning to practice inquiry in the classroom. Educators consistently model the questioning process by posing open-ended questions to draw students into the content material, and follow up with probing questions (*how, why, what if*) to guide them into deeper levels of thought. "Higher-level" questions produce deeper learning than "lower-level" questions (Marzano et al., 2001).
- As students become proficient at interacting with this type of questioning, they will learn how to apply the inquiry process in self-directed learning.

For more information on Costa's Levels of Thinking, visit the Core Strategies: Higher-Level Thinking webpage on MyAVID.

••••• Costa's Levels of Thinking

- At the core of deep thinking is the creation of questions that drive students to learn content in a more meaningful way. The framework of Costa's Levels of Thinking helps students think about and ask probing questions to make connections among concepts and deepen understanding of the course content.
- Discuss Costa's Levels of Thinking with students and emphasize how the progression from "gathering" to "processing" to "applying" information shapes the depth of learning.
- Practices for deeper learning include:
 - Display several discipline-specific questions at Levels 1, 2, and 3, and ask students to identify the levels.
 - In a classroom discussion, guide students to modify a Level 1 question so that it becomes a Level 2 or 3 question that would require an answer with greater depth and quality.
 - Discuss with students how the phrasing of a question affects the depth and quality of the response, thus leading to greater understanding of the content.
 - Have students form groups of two or three, and instruct them to modify other Level 1 questions to Levels 2 or 3 (and vice versa). Conduct a whole-class discussion on the modifications.

Crafting Questions for Discipline-Specific Writing

- Refer to *Educator Resource: Literacies within the Disciplines* for discipline-specific skills and examples of learning experiences for various disciplines. Scaffold preparation for short or long writing assignments within each discipline by having students give focused attention to thinking about the target concept and asking questions that result in clarification of their thoughts and synthesizing of the information.
- The collaborative process used in crafting questions can be a slow process the first few times it is used, but it should soon become second nature to students. Remember the adage: "Go slow to go fast."
- The following steps are guides to helping students craft questions that lead to a culminating written product such as an essay, analysis of word problems, interpretations of graphs or charts, or explanations of scientific phenomena. During this process, the teacher is a facilitator rather than developer of the questions.
 - Introduce a content-specific task (e.g., demonstration, text, graph, art object) that requires student engagement on a non-superficial level for understanding the task.

- Ask students to write as many wonderment (or “I wonder...”) questions as they can about the task, without stopping to think about the level of the question, answers, or if the questions are “good ones.”
- Have students form groups of two or three and share their questions. The student groups should choose their top two questions and modify them to be open-ended (Costa’s Levels 2 or 3) and appropriate for soliciting deep learning on the task.
- As a whole class, review the groups’ questions and choose the main questions they want to address in their written response to the task.
- Also as a whole class, decide how the main questions can be used for further exploration (e.g., science investigation, research project, literature review).
- *Student Resource: Crafting Questions* (page 53) lists the above steps for students as they work independently on tasks.

Claim, Evidence, and Reasoning (CER) is a systematic approach that uses questioning, claims, evidence, and justifications to construct an explanation.

.....**Claim, Evidence, and Reasoning (CER)**

(Moje et al., 2004)

- Teaching students to construct explanations is challenging. CER is a systematic approach developed to help students become scientific thinkers and writers, though the approach is entirely applicable for other disciplines as well. The process begins with a question (generated by educator or student) that requires students to think deeply about what they have read, observed, or experienced.
- Using evidence and reasoning to construct explanations has applications in all academic disciplines and beyond as students learn to think clearly and logically.
 - **Claim:** An answer to a question, an idea, conclusion, or thesis
 - **Evidence:** Observations, data, facts, or information
 - **Reasoning:** Justification, principle behind the evidence, steps in thinking
 - **Explanation:** Includes the claim, statement of the evidence, and the reasoning
- For elementary grades, CER can be the basis of opinion writing. The explanation may include only one piece of evidence and one reasoning statement.
- For secondary grades, CER can be used for argumentative, expository, or narrative writing and in any discipline. (See Chapter 4: Using Modes of Writing to Build Disciplinary Literacy.)
- With whole-class input, model development of a CER writing response using one of the examples in *Educator Resource: Claim, Evidence, and Reasoning Discipline Examples* (page 52) or an example from your content-area.
- A multitude of resources for CER tasks are available on the internet. You may want to have students critique examples of explanations from your content area to help them become familiar with the process before requiring them to write explanations.

“ Using evidence and reasoning to construct explanations is one of the most important practices students can learn, with application beyond science class to high school, college, career, and citizenship readiness in all areas! ”

Dr. LeeAnn (Sutherland) Adams,
Chief Academic Officer at
Activate Learning



Literacies Within the Disciplines

What are literacies within the disciplines? The following lists for each of the major content areas, while not comprehensive, can act as starting points through which communities of teachers can begin to think in terms of disciplinary literacy.

	Read	Write	Think
Science	<p><i>When scientists read, they...</i></p> <ul style="list-style-type: none"> • Ask “Why?” more than “What?” • Interpret data, charts, and illustrations. • Seek to understand concepts and words. • Determine validity of sources and quality of evidence. • Pay attention to details. 	<p><i>When scientists write, they...</i></p> <ul style="list-style-type: none"> • Use precise vocabulary. • Compose in phrases, bullets, graphs, or sketches. • Use passive voice. • Favor exactness over craft or elaboration. • Communicate in a systematic form. 	<p><i>When scientists think, they...</i></p> <ul style="list-style-type: none"> • Tap into curiosity to create questions. • Rely on prior knowledge or research. • Consider new hypotheses or evidence. • Propose explanations. • Create solutions.
History	<p><i>When historians read, they...</i></p> <ul style="list-style-type: none"> • Interpret primary and secondary sources. • Identify bias. • Think sequentially. • Compare and contrast events, accounts, documents, and visuals. • Determine meaning of words within context. 	<p><i>When historians write, they...</i></p> <ul style="list-style-type: none"> • Create timelines with accompanying narratives. • Synthesize information/evidence from multiple sources. • Emphasize coherent organization of ideas. • Grapple with multiple ideas and large quantities of information. • Create essays based on argumentative principles 	<p><i>When historians think, they...</i></p> <ul style="list-style-type: none"> • Create narratives. • Rely on valid primary and secondary sources to guide their thinking. • Compare and contrast or ponder causes and effects. • Consider big ideas or inquiries across long periods of time. • Recognize bias.
Math	<p><i>When mathematicians read, they...</i></p> <ul style="list-style-type: none"> • Use information to piece together a solution. • Look for patterns and relationships. • Decipher symbols and abstract ideas. • Ask questions. • Apply mathematical reasoning. 	<p><i>When mathematicians write, they...</i></p> <ul style="list-style-type: none"> • Explain, justify, describe, estimate, or analyze. • Favor calculations over words. • Use precise vocabulary. • Include reasons and examples. • Utilize real-world situations. 	<p><i>When mathematicians think, they...</i></p> <ul style="list-style-type: none"> • Consider patterns. • Utilize previous understandings. • Find connections. • Estimate, generalize, and find exceptions. • Employ mathematical principles.
English Language Arts	<p><i>When students of English read, they...</i></p> <ul style="list-style-type: none"> • Understand how figurative language works. • Find underlying messages that evolve as a theme. • Assume a skeptical stance. • Pay attention to new vocabulary or words used in new ways. • Summarize and synthesize. 	<p><i>When students of English write, they...</i></p> <ul style="list-style-type: none"> • Engage in a process that includes drafting, revising, and editing. • Use mentor texts to aid their writing craft. • Pay attention to organization, details, elaboration, and voice. • Rely on the feedback of others. • Avoid formulaic writing. 	<p><i>When students of English think, they...</i></p> <ul style="list-style-type: none"> • Reflect on multiple texts. • Ask questions of the author. • Consider research or others’ ideas. • Discuss ideas and themes. • Argue both sides of a point.

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Claim, Evidence, and Reasoning Discipline Examples

Discipline and Sample CER Tasks	Academic Level	Example
Science <ul style="list-style-type: none"> Explaining demonstrations or graphs Using CER to replace part of a lab report 	Elementary	The liquid on the outside of a glass of ice water comes from the air outside the glass.
	Secondary/ Higher Education	Air is matter.
Mathematics <ul style="list-style-type: none"> Explaining processes or patterns Showing and explaining steps in a solution 	Elementary	A positive number multiplied by a negative number equals a negative number.
	Secondary/ Higher Education	The slope of the line on the graph is 2.5.
History <ul style="list-style-type: none"> Explaining a historical political cartoon Providing evidence for a historical decision 	Elementary	When horses were brought to America, they made life easier for the Native Americans.
	Secondary/ Higher Education	In the political cartoon, the woman represents the conscience of a nation.
English Language Arts <ul style="list-style-type: none"> Writing commentaries on quotations, anecdotes, or observations Explaining authors' intent 	Elementary	In the story, Carter isn't really a bully.
	Secondary/ Higher Education	In <i>To Kill a Mockingbird</i> , the mockingbird represents innocence.
Art <ul style="list-style-type: none"> Hypothesizing the idea and effect conveyed by an art object or music Explaining the skills used in the creation of an art object or piece of music 	Elementary	The mother in the photograph is happy.
	Secondary/ Higher Education	The upward lines in the painting are an expression of hope.

Crafting Questions

When you are given a content task that requires a significant writing component as the product, the first step is to ask questions—lots of questions—about the assigned topic to direct and refine your thinking.

1. Carefully consider your content-specific task: reading text, interpreting data/charts/graphs, or observing demonstrations/objects/visuals.
2. Write as many questions as you can about the task, without stopping to think about the level of the question or if it is a “good question.” Include wonderment or “I wonder...” questions.
3. Identify each of your questions as a Costa’s Level 1, 2, or 3 question.
4. Individually or with a partner, modify your Level 1 questions to be Level 2 or 3 questions so the information you will gain in response to the questions will result in significant learning rather than simple recall or statement.
5. Identify two or three main questions that you will respond to in your summary.
6. Individually write a summary response about the task that will answer the questions you posed.

Sentence Stems for Claim, Evidence, and Reasoning Writing

The sentence stems below are guides for how to develop and write your Claim, Evidence, and Reasoning for the question you are exploring. In your Claim, Evidence, and Reasoning (CER) writing, use discipline-specific vocabulary and write in complete sentences.

- **Claim:** A statement of understanding of the answer to a question, an idea, conclusion, or thesis.
 - *In the text it said...*
 - *I noticed that...*
 - *My claim is...*
 - *It is my opinion that...*
 - *I believe that...*
 - *The author writes...*
 - *The character shows that...*

- **Evidence:** Observations, data, facts, or information supporting the claim.
 - *My evidence is...*
 - *I found that...*
 - *The text states that...*
 - *According to the text...*
 - *Another piece of evidence is...*

- **Reasoning:** Justification, principle behind the evidence, connecting evidence to claim; steps in thinking.
 - *The reason for this is...*
 - *I know this is true because...*
 - *This happened because...*
 - *This supports my claim because...*
 - *If... then... because...*

- **Explanation:** Includes the claim, statement of the evidence, and the reasoning.
(This section may be optional for your assignment.)

Strategies and Skills for Learning Through Writing in All Content Areas

“ *Writing is a conversation with reading; a dialogue with thinking.* ”

Nikki Giovanni, American poet, writer, commentator, activist, and educator

During a recent visit to a neighboring elementary school, educators new to the implementation of AVID strategies in their own classrooms were asked to observe how an experienced AVID classroom teacher and students approached their learning. While looking through the teacher’s master planner, one of the observing teachers noticed that the experienced AVID educator didn’t teach a writing process skill daily and asked, “When do you get to writing?” Before the host teacher could respond, the other teacher observing stated, “Look in their notebooks. They are writing every day, in math, in science, in reading, in social studies.”

Writing can, and should, happen in every content-area classroom. It is not a skill reserved for English teachers alone. It doesn’t happen solely in grammar and writing instruction time in the elementary classroom. It should not live only in language arts classrooms at middle and high schools. Writing has to become part of learning, a tool for navigating and learning content across an entire campus. The strategies presented in this section can be used by elementary teachers and single-subject teachers in middle and high schools, as well as higher education instructors. The steps in these instructional practices should remain consistent, yet be implemented with flexibility based on classroom need. Differentiation and rigor will develop and increase as students move through grade levels. This section features learning-through-writing instructional practices focusing on the following:

- Exploring
- Processing
- Reinforcing and Clarifying
- Connecting
- Summarizing

The skills being developed through use of these writing practices include:

- Supporting students’ acquisition of content-specific or academic vocabulary through low-stakes writing practice.
- Clarifying and organizing students’ thinking to develop deeper understanding around a topic, concept, or skill.
- Growing students’ inquiry skills as learners collaborate and revise their own thinking.
- Fostering healthy attitudes about writing in general and helping students recognize the specific strategies that make them more successful learners.

Learning Through Writing: Instructional Practices for Exploring

Why?

The question is asked by three-year-old children everywhere. This recurring question reveals a powerful sentiment that spans humanity: the desire to make sense of the world around us. Curiosity is born in the heart of every human. Unfortunately, circumstances like poverty, stress, trauma, and the frenetic pace of life can cause students not to carry curiosity to school. Learning-through-writing instructional practices focusing on exploring are designed to reignite the spark of curiosity within every student. Making space for curiosity, for wonder, for exploring content and the ideas behind the content in lesson design and delivery provides an avenue for students to practice learning through writing while practicing inquiry.

“ Millions saw the apple fall, but Newton asked why. ”

Bernard Baruch, 20th century financier and presidential adviser

The exploratory writing-to-learn instructional practices in this section are:

- KWLA
- Carousel Brainstorm

The *academic thinking skills* developed and internalized by students through these structures include:

- Identification of patterns
- Contextualization of broader significance of ideas or content
- Evaluation of cause and effect
- Comparison of ideas and perspectives
- Synthesis of information across multiple texts or ideas



INSTRUCTIONAL PRACTICE: KWLA

A KWLA chart is a tool for recording the exploration of ideas and learning through the duration of a lesson or unit. What makes this instructional practice powerful is that it automatically differentiates instruction based on students' prior knowledge and experiences, while guiding the educator's next steps through students' natural curiosity. This instructional practice is meant to be revisited often throughout the course of a unit, to build in repeated review of notes and ongoing learning. With the addition of the "A" to the traditional KWL chart, students are asked to develop critical thinking skills about the *application* of what they learn.

Instructional Goals

Students will:

- Access their existing or prior knowledge about a topic, an idea, or content.
- Strengthen their inquiry skills as they determine what they want to know about a topic or content.
- Identify what they learn.
- Practice metacognition as they capture the relevance of what they learned and how it applies to what they already know or need to learn more about.

Preparation for Instruction

- Based on the resources available, and the developmental needs of the class, the instructor should predetermine how the KWLA chart will be created and where it will live. Options include:
 - An anchor chart used for group or whole-class discussion.
 - Individual charts housed in students' notebooks or organizational tools.
 - Digital charts, created by the teacher or students, allowing for collaboration.
- When making the decision about how and where to create the KWLA chart, consider how often students will need to access it to generate inquiry and record learnings over the course of a lesson or unit.

Instructional Strategies

- Create a document with four columns. Label the columns of the KWLA chart: *What I Know*, *What I Want or Need to Know*, *What I Learned*, and *How I Will Apply What I Learned*.

- **First Column: *What I Know*:** Following a brief introduction of the topic of study, ask students to brainstorm any information or experiences regarding the topic and record their current knowledge and understanding in the first column. Depending upon students' expertise or experience with the topic, an instructional decision should be made regarding *how* students will brainstorm. Brainstorming options educators can use include the following:

- **Independent to Group/Whole Class:** In this version of brainstorming, individual students first list any current knowledge of the topic *without group discussion*. Similar to a quickwrite, students might quietly think about the topic and record their thoughts independently, followed by group or whole-class sharing of knowledge. This type of brainstorming is best used when the teacher is confident that most, if not all, students in the class have some understanding of the topic. The teacher can use the first column to assess individual students' current understanding. To allow for whole-class inclusion, the teacher may choose to allow
 - students to layer knowledge from a partner, or use the Give One, Get One strategy to jump-start the brainstorming process.
- **Group to Whole Class:** This allows for partner or small-group discussion about the topic of study prior to recording any information in the first column. This strategy best supports a class where many students are unfamiliar with the topic, or have little prior experience in the area of study. If creating the first column collaboratively, students should record all contributions (and may choose to cite the contributor). Throughout the unit of study, the group will need to revisit this column to validate or strike through recordings based on accuracy.
- **Intentional Groupings:** The teacher may decide to provide extra scaffolding for students by intentionally partnering them with others for peer support and guidance.
 - If unsure about the students' current level of experience or understanding of a topic, one quick method of checking is a version of Fist to Five, in which students raise their hands and show their teacher if they know zero (fist), one, two, three, four, or five facts or details about the topic. The teacher can then quickly gauge students' level of knowledge and make appropriate instructional decisions.

For detailed information on the Give One, Get One strategy, refer to page 174 in the book *AVID Critical Thinking and Engagement: A Schoolwide Approach*.

- **Second Column: *What I Want or Need to Know*:** Depending upon the topic of study, the questions or inquiries recorded in the second column might vary based on the purpose, or need, of the question. (For more information on writing questions, see pages 48–50 in this chapter.)
 - **Skill-Based Questions:** Students might record questions they have regarding a point of confusion around a skill (e.g., finding an equivalent fraction). This type of inquiry is an indication of students' self-reflection.
 - **Exploring Questions:** These questions allow for students to express their curiosity about the topic without constraint. These “wonderings” from students will provide insight to educators about students' strengths and areas of interest, and, by fostering curiosity, will also increase students' engagement levels.



- **Third Column: What I Learned:** The purpose of this column is to provide a place for students to record their learning following the lesson or unit of study. Since this column is used for students to express their learning, it becomes a great source of information for the teacher regarding students’ growth, understanding, or misconceptions. Instructors may choose to have students record their learning at multiple points throughout a series of lessons, and then use this tool as an ongoing formative assessment piece; or they may choose to use the learning expressed as a more summative assessment of students’ knowledge at the end of the learning series. Either way, the act of capturing their learning in writing allows students to clarify their understanding, internalize their learning, and communicate with their teachers.
- **Fourth Column: How Will I Apply What I Learned:** The addition of this column to the traditional KWL allows for students to connect their affective and cognitive domains through assigning value to their learning and its potential impact on future learning. The types of recording in this column vary from recognizing specific content skills to the successful use of learning strategies. Examples of learning applications are provided below.
 - *“I learned the difference between idioms, similes, and metaphors. I will use more figurative language in my narratives to make them more interesting.”*
 - *“I now know four different strategies to solve a long division problem. I will use the _____ strategy because I understand that strategy best.”*
 - *“Throughout this unit we used many different reading strategies. Marking the text helped me become a more focused reader, and I will use that strategy again in the future.”*

K What I <u>Know</u>	W What I <u>Want</u> or Need to Know	L What I <u>Learned</u>	A How I Will <u>Apply</u> What I Learned

INSTRUCTIONAL PRACTICE: Carousel Brainstorm

Carousel Brainstorm is a learning-through-writing instructional practice that requires academic interaction between students through strategic selection of prompts, questions, images, or other materials for consideration. In addition, this instructional practice builds content knowledge through student interaction and collaboration. This structure can be used to help students explore content by building background knowledge, reviewing material, or generating opinions. During this strategy, students build upon shared knowledge within the group, identify common themes, and pinpoint common misconceptions.

Instructional Goals

Students will:

- Collaborate with classmates around teacher-selected prompts, questions, images, or other materials.
- Build and strengthen content understanding through structured academic interaction, specifically speaking, listening, and written communication.

Preparation for Instruction

- Determine how many students should be in each group to maximize participation during this learning experience. Create the same number of posters as there are groups.
- Gather necessary materials and prepare headings, questions, or images for each poster.
 - If you are using physical paper for the carousel posters, use large sheets of chart paper or butcher paper, have markers or other writing utensils near each poster, and have tape available for sticking the posters on the walls.
 - If you are facilitating the carousel digitally, consider using a discussion board platform, collaborative documents, or a collaborative “whiteboard” space.

Instructional Strategies

- Frontload the expectations for interaction with each topic. Ensure that students are aware of the procedure for rotating from topic to topic, as well as how much time they will be spending at each rotation.
- Assign a group to each topic. Depending on students’ level of experience with this type of collaborative practice, choosing a group to model what the interaction should look and sound like may reduce whole-class confusion and produce deeper levels of engagement with the content. The integration of academic language scripts or response frames and word banks will raise the level of students’ discussion and writing.



- Structure the interaction time in this way:
 - Provide a short amount of time for the group to read and think about the prompt (30 seconds to one minute).
 - Allow 2–3 minutes for every group member to add their thoughts to the poster.
 - Have students stop writing and take a moment to read what the other members of the group added. Prompt them to have a discussion about what was written.
 - Provide an additional minute for them to scribe anything new from the discussion.
 - Direct all groups to rotate to the next topic. During this round, and each additional round, give students time to review the ideas already recorded before allowing them to brainstorm, add their own ideas, or build upon the ideas of others.
- Repeat this process until all groups have had time with each of the questions or prompts.
- To conclude the Carousel Brainstorm, have students do a “Gallery Walk” to view the ideas generated on all of the posters.



Learning Through Writing: Instructional Practices for Processing

Thinking about information in a variety of ways is an integral part of learning. Academic success requires that students develop their abilities to think creatively, reason effectively, and evaluate evidence. The ability to collaborate with others to solve problems, organize understandings, and articulate findings is essential. For students to thrive in content areas, classrooms, and schools, educators must provide them with tools for processing information in a meaningful way.

Learning-through-writing processing instructional practices included in this section are:

- Graphic Organizers
- Nonlinguistic Representations

The *academic thinking skills* developed through these instructional practices include:

- Contextualization
- Analysis of evidence used in text
- Identification of patterns
- Evaluation of cause and effect
- Comparison of ideas and perspectives
- Synthesis of learning across multiple texts and ideas



INSTRUCTIONAL PRACTICE: Graphic Organizers

Graphic organizers empower students to facilitate their understanding of key concepts by allowing them to identify main points, classify ideas, and analyze information in a visual format. Graphic organizers may be used to structure note-taking or writing tasks, to help in problem solving and decision making, or to aid studying, planning, researching, or brainstorming. As the name suggests, graphic organizers support students in organizing material logically and help them present ideas coherently and with focus. Graphic organizers should always be accompanied by a short summary to convey the concept presented through the organizer.

The development of graphic organizers as visual displays allows teachers and students to configure information in a manner that makes complex concepts and data easier to understand (Meyen, Vergason, & Whelan, 1996). Graphic organizers engage students because they assist those who have difficulty organizing information (Fisher & Schumaker, 1995).

Instructional Goal

- Students will apply a visual framework to develop concepts, organize language, and comprehend key concepts across content areas.

Resource

- *Types of Graphic Organizers* (Educator Resource)

Preparation for Instruction

- Preview the types of graphic organizers and the thinking skills targeted by each one (see *Educator Resource: Types of Graphic Organizers*). Digital templates and examples of the organizers are accessible on the *AVID Writing for Disciplinary Literacy* webpage on MyAVID.
 - Descriptive
 - Compare and Contrast
 - Cause and Effect
 - Sequence
 - Claim and Evidence
- Select the appropriate graphic organizer template (or templates) for students to use by examining the task or required thinking skill. Older or more advanced students may be given the option of selecting the graphic organizer they want to use.

Instructional Strategies

- Model the use of the chosen graphic organizer during a whole-group demonstration lesson using a document camera or projected image, directing students to focus on the relationships between elements of the template, and examine the meanings and desired outcomes attached to them. When creating an organizer, students must prioritize the information by determining which parts of the material are most important and where each item should be placed in the visual representation.

- Show how the process of converting a collection of data/information/ ideas into a graphic organizer can lead to increased understanding and insight into the topic at hand. The possibilities associated with the topic become clearer as a student's ideas are classified visually.
- Remind students that a graphic organizer must always be accompanied by a short summary or explanation of the concept represented in the organizer.
- Allow students time to share graphic organizers with partners first, and then with small groups, in order to help develop new perspectives and clarify any misunderstandings in relation to the material being covered.
- Support students as they learn to incorporate the information produced graphically into their writing and final products.
- Use future lessons and tasks for students as opportunities to frequently model and use appropriate graphic organizers. Remind students of the importance of using graphic organizers any time the tools fit the required thinking skills for a task.

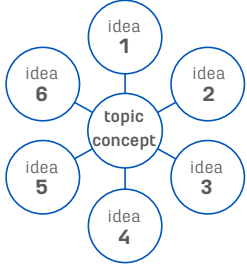
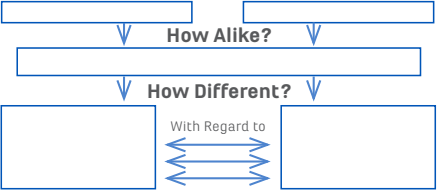
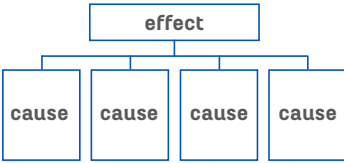
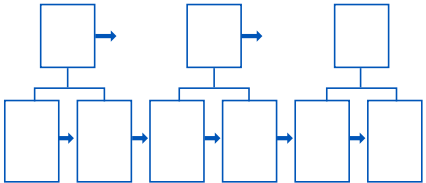
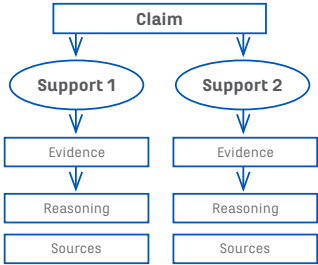
Extensions

- To increase scaffolding:
 - Provide completed examples of graphic organizers for students to examine and reference.
 - Provide graphic organizers that are partially completed, allowing students to fill in the missing information.
- To increase rigor:
 - Allow older or advanced students to create their own templates to fit the concepts being analyzed and presented, or have them develop their own creative ways to depict graphic representations of their thinking.



Types of Graphic Organizers

Graphic organizers help students organize information in a meaningful visual representation of a topic. Visual aids assist students in evaluating and retaining information, and provide a scaffold for the writing process. The decision of which organizer to use depends on the purpose of the learning task. Each graphic organizer should be accompanied by a descriptive paragraph that explains the big ideas represented on the organizer. The organizers can also include symbols, pictures, or quotes to help clarify the topic.

Graphic Organizer Type	Synopsis	Structure
Graphic organizers presented in Chapter 4		
<p>Descriptive</p>	<ul style="list-style-type: none"> Describes a topic, process, attributes, event, or theme. 	
<p>Compare and Contrast</p>	<ul style="list-style-type: none"> Describes similarities and differences between concepts, places, people, things, ideas, or events. 	
<p>Cause and Effect</p>	<ul style="list-style-type: none"> Describes the connection of events or actions with their effects or outcomes; expresses why something occurred. 	
<p>Sequence</p>	<ul style="list-style-type: none"> Describes procedural steps, phases, or processes. 	
<p>Claim and Evidence</p>	<ul style="list-style-type: none"> Describes a claim and the evidence supporting the particular stance or viewpoint. 	

Additional graphic organizer templates and examples are available on the *AVID Writing for Disciplinary Literacy* webpage on MyAVID.

INSTRUCTIONAL PRACTICE: Nonlinguistic Representations

One of the best ways to process information, learning, or content is to develop nonlinguistic representations of the material. Too often students are presented with new information in the form of words, either by hearing new content from a teacher's lecture or by encountering new ideas through reading. We have moved from the definition of "text" being something that is always written to recognizing that text is "anything imbued with meaning" (Draper, 2015, as cited in Lent, 2017). Students are asked to analyze a variety of text types throughout the school day, but they are not asked to create nonlinguistic representations of their learning nearly often enough.

Incorporating the learning-through-writing instructional practice of nonlinguistic representations into any content area provides rich opportunities for students to process their learning in a meaningful way. The representations should always be accompanied by a summary of the concept presented and how the graphic relates to the concept.

Nonlinguistic representations can be combined with collaborative structures, so as students discuss the concept or topic, they are urged to process what it means, how it connects to what they have already learned, and implications for the larger unit of study.

Instructional Goal

- Students will process new information or content through the development of a nonlinguistic representation and explain and justify the decisions made in developing the nonlinguistic representation.

Preparation for Instruction

- Identify content that is appropriate for the development of a nonlinguistic representation as it aligns to the instructional goal or unit outcome.
- Determine the appropriate place and format for the development of nonlinguistic representations created by students. Will students create their representations in their notes or in an Interactive Notebook? On a sticky note that is turned in? On a piece of chart paper as part of a collaborative structure? In a digital format that can be shared and commented on?
- Strategies connecting to nonlinguistic representations can be accessed on the *AVID Writing for Disciplinary Literacy* webpage on MyAVID. The *Interactive Notebook: Left Side (Output)* ideas on page 30 also contain several nonlinguistic processing activities.



Instructional Strategies

- Connect the content students will be representing to the learning objective or outcome so they understand the purpose behind the nonlinguistic representation.
- Introduce the concept of nonlinguistic representation as a visual representation of an idea or concept. While each student will write a summary of his or her nonlinguistic representation, the representation itself should only contain images. Numbers, letters, and words are all linguistic representations and cannot be used in the development of the nonlinguistic representation.
- Use a teacher-created or communal word bank to facilitate partner, small-group, or whole-class discussion of the content or concept.
- In students' notes, on a piece of paper, or in a digital format, provide a short amount of time for students to develop their nonlinguistic representations. This does not require a large amount of time as students can draw arrows, circles, and other basic graphics to capture the meaning of the concept. Encourage students to use multiple colors in their graphics. Colors serve as visual cues for remembering content.
- Provide time for students to share their nonlinguistic representations with other students, explaining or justifying why they chose to represent the concept in the way they did.
- Have students capture the key words, ideas, or concepts they conveyed in their nonlinguistic representation in a written summary on the same page as the graphic. The representations and summaries may be used as Exit Tickets at the end of class.

Learning Through Writing: Instructional Practices for Reinforcing and Clarifying

To engage in reinforcing and clarifying writing-to-learn strategies, students must follow the path of self-inquiry. As students think more deeply about content, they are moving past a superficial understanding and more fully developing their critical thinking skills by analyzing how information fits together. Learning-through-writing instructional practices for reinforcing and clarifying provide students with structures to reason effectively, evaluate evidence, and justify their understanding of concepts.

Additionally, these strategies provide powerful formative assessment tools by making it quickly apparent how well students understand a concept or topic. These instructional practices not only help students identify their own thought processes, but are also useful for instructors to diagnose strengths and weaknesses in whole-class or individual students' understanding.

The instructional practices in this section are:

- Listicles
- Key Word Outline

The *academic thinking skills* developed through these instructional practices include:

- Contextualization
- Analysis of text structure
- Analysis of evidence used in text
- Identification of patterns
- Evaluation of cause and effect
- Comparison of ideas and perspectives
- Synthesis of learning across multiple texts and ideas



INSTRUCTIONAL PRACTICE: Listicles

A “listicle” is a hybrid of a list and an article. Even before they had a name, these list-articles were used in magazines and online publications as a way to grab readers’ attention and share content in a quick, easy-to-read format. Using listicles with content in our classrooms allows students to practice reinforcing and clarifying knowledge as they create a short article connected to the content they are learning and then turn it into a list format. This instructional practice is an excellent formative assessment opportunity that gives students practice in thinking creatively.

Typically, listicles are numbered or bulleted. Each item in the list is followed by a paragraph or two that elaborates on the topic. For instance, a listicle called “Best New Mysteries for Middle Grade Readers” would list each book by title and author, provide some summary and commentary from the listicle-maker about each book that made the list, and perhaps include a photograph of each book’s cover.

Instructional Goals

Students will:

- Identify important pieces of information in the lesson or unit of study and work collaboratively to put a “listicle” together.
- Reinforce content learning or clarify misconceptions about an idea or topic through the development of their “listicle” as they engage with sources.

Preparation for Instruction

- Determine content appropriate for the development of a listicle by students. Conveying themes, ranking ideas, connecting content, or making claims are all good starting points for a listicle. Consider whether the listicle should be something like “Top Ten Causes of the Cold War,” with number one on the list being most important, or a listicle like “How does a virus feel about sugar?” in which the theme matters, rather than the ranking.
- Decide how students will develop the listicle. Will they work with a partner? Will the title of the listicle be provided for students, or will they determine that themselves? Will the listicles be posted around the room and students asked to add to them?
- Pull together a few listicle examples so students will have a model. Listicles are everywhere; finding examples is easy, as they are one of the most common forms of expository writing.
- Identify the time allotted for instruction, the location where students will develop their listicles, and the audience for the listicles. Additional considerations should include whether images or other necessary components will be incorporated into the listicle.

Instructional Strategies

- Poll students on their familiarity with listicles. Display an example of a recent listicle from a website, newspaper, or magazine.
- Analyze the format and components of the listicle:
 - Did it bring up any initial wonderings or questions?
 - How was it structured?
 - How are images used?
 - How is the text broken up?
 - What is numbered?
 - How does the content of the non-bolded text differ from the bolded text?
 - What did you learn?
- As a whole class, brainstorm topics that would make great listicles.
- Take one of the topics and model how to create a listicle for the class, thinking aloud through the decisions being made.
- Have students work with a partner or small group to develop a listicle connected to the course content.

Examples of Possible Listicles on Academic Topics

- Sights You Didn't Know You Could See on a Road Trip Through Texas
- Oxygen—It's Not Just for Breathing (8 Other Awesome Things About Oxygen)
- Six Reasons Genghis Khan Would Be a Terrible Prom Date
- The Top Five Reasons to Own a Standard Poodle
- Best Books for Sixth Grade Girls Who Like Math
- Ten Sure-Fire Survival Strategies for Student Success in School
- Great Jobs for English Majors
- Seven Ways Knowing How to Calculate Area Will Help You in Life
- Seven Historical Examples That Prove the Electoral College System No Longer Works
- Eight Innovators to Watch in Artificial Intelligence
- The Most Underrated Composers of the Past 100 Years
- Ten Ways Our State is Wasting Money That Could Be Used to Fund Public Education
- The Top Nine Most Annoying Characters We Have Read About in English This Semester



INSTRUCTIONAL PRACTICE: Key Word Outline

A successful student is one who can process information in texts by identifying key words and attaching meaning to those words that connects to the learning objective, course content, or unit of study. Students who are competent with this form of processing feel confident actively participating in classroom discussions around new content and how it connects to previous learning. An instructional process that builds this skill requires students to identify key words in a piece of text and take ownership of the content through processing the meaning of the words and replacing them with new words to form a key word outline that can be used for summarizing, class discussion, development of questions, and collaboration.

Instructional Goal

- Students will identify key vocabulary or content-specific words in a piece of text and use those terms to develop a key word outline that aligns with the purpose for reading the text or the learning outcome connected to the text.

Preparation for Instruction

- Identify an appropriate piece of text connected to the learning outcome or unit objective.
- Determine why students are reading this text and create a learning objective to be shared with the class.
- Chunk the text appropriately.
- Provide students with highlighters and sticky notes.

Instructional Strategies

- Preview the learning objective, academic thinking skill, or purpose for reading the text with students.
- Read and highlight key words:
 - For ease of later reference, number each sentence if the text is one paragraph long, or number each paragraph if the text includes multiple paragraphs.
 - Read the first chunk of the text and discuss the gist of the meaning, asking for student volunteers to help determine the gist.
 - Revisit each sentence in the paragraph and highlight three key words per sentence, or, if reading a multi-paragraph text, highlight eight to ten words in each paragraph.
 - Discuss the meaning of any words students are not familiar with.
- Develop the key word outline:
 - Number the margins of a sheet of paper with the number of sentences in the paragraph. For example, if there are six sentences in the paragraph, number down the margin 1, 2, 3, 4, 5, 6. If using a multi-paragraph text, number the margins of the paper with the number of *paragraphs* in the text selection. For example, if there are four paragraphs, number down the margins 1, 2, 3, 4.

- Write three key words per sentence beside each number in the margin for a single paragraph text. For example:
 1. *boy, pitcher, filberts*
 2. *grasped, prevented, neck*
- If using a text with multiple paragraphs write eight to ten words per paragraph. For example:
 1. *Stamp Act, tax, colonists, outraged, delegates, letter, British, boycotted*
 2. *Parliament, demands, repealed, Declaratory Act, right tax, British colonies*
- If creating the key word outline digitally, have students use an online highlighter tool to identify the appropriate number of key words in each paragraph, as described above. Then use the tool to export highlighted words to a new document, creating the list of key words to use in the next step.
- Develop sentences:
 - Ensure that students use only their key word outline for this step—their original text should be put away.
 - Model or practice as a class turning key words in each line into sentences so students hear some of the possibilities.
 - Use GRR (gradual release of responsibility) to release this strategy to small groups, partners, and eventually individual students as they show they are ready to progress to the next stage of independence.
 - Guidelines for a text containing a single paragraph:
 - Each sentence must use all the key words in the corresponding lines of the key word outline.
 - Key words can be used in any order and can be repeated in the sentence if needed.
 - The form or tense of the key words can change (e.g., *grasp* can become *grasped*).
 - Use as many other words as needed to form a complete sentence that paraphrases the original text.
 - Guidelines for a text containing multiple paragraphs:
 - Each group of two to five sentences must use all the key words from the target paragraph.
 - The key words can be used in any order, and they can also be repeated in the sentences.
 - The form or tense of the key words can change (e.g., *outrage* can become *outraged*).
 - Use as many other words as needed to form complete sentences with the eight to ten key words paraphrasing each of the original paragraphs.



Learning Through Writing: Instructional Practices for Connecting

When asking students to synthesize information, the expectation is that students will be able to combine ideas, new and old, to form new learning or understanding. These connections might be personal, span content areas, or relate to a text or another source of information. This is a seemingly straightforward, and proven, strategy to help students retain information. However, for students to be able to effectively and repeatedly make those connections, they need to be provided with habit-forming approaches to make invisible connections visible through writing. These brain-based instructional practices help students make connections between new and old learning using organized and systematic approaches that, over time, become automatic for learners and part of their personal and ingrained portfolio of success skills.

The connecting instructional practices included in this section are:

- Says, Means, Matters
- Synectics and Analogous Thinking

The *academic thinking skills* developed through these instructional practices include:

- Applying or utilizing what students learned about broader ideas, themes, historical or geographical significance of texts, and then applying concepts from a text to implement an action.
- Analyzing or examining the use of evidence in texts, text structure, patterns of continuity or change, errors in texts or process(es), and categorizing ideas, events, themes, and data by relevant characteristics.
- Synthesizing ideas across multiple texts to create new insights, predict future outcomes, draw informed conclusions, or argue new ideas.

INSTRUCTIONAL PRACTICE: Says, Means, Matters

Says, Means, Matters is an instructional practice that helps students cite texts, explore deeper meaning, and then apply or make real-world connections to the text or content. This is an instructional practice that works across every content area and grade level.

Instructional Goals

Students will:

- Identify important concepts, key ideas, phrases, or sentences in a text.
- Identify what the author is saying, what it means, and why it matters.

Preparation for Instruction

- Determine where students will capture their thinking: Will it be in their notes? On an anchor chart shared by the classroom? In a digital format?
- Identify important chunks of a text for students to utilize this skill.
- Decide whether this practice will be done with students working as a whole class, in small groups, or in partnerships.

Instructional Strategies

- Create a three-column chart that looks like the example below.

Says	Means	Matters
What does the text say? What happened? Cite text or paraphrase.	What does the author mean? How can this information be interpreted? What can be inferred?	Why does this information matter? Why is this important? What is significant about this? What are the implications of this information? How does this connect to other content we have learned?

- Identify key ideas in the text and write the exact words in the first column.
- In the second column, record your interpretation of what the author meant when they made the statement. When doing this with students for the first time, model the thinking behind this step and take volunteers to respond to questions like “What makes you think that?” or “How do you know that?”
- In the third column, make connections between the content and the larger ideas or concepts it connects to in the unit of study. This column is the most abstract and may be difficult for students at first. An excellent scaffold is a word bank with content-specific words or high-leverage academic words for students to pull from.



INSTRUCTIONAL PRACTICE: Synectics and Analogous Thinking

Synectics is the process of making unexpected connections; a form of analogous thinking often used in problem solving; a form of analogy.

The word “synectics” has its origins in ancient Greece, where it meant “holding together” or connecting things. In education today, **synectics** is the process of making unexpected connections, a form of analogous thinking often used in problem solving. Finding similarities and differences is one of the nine effective instructional strategies identified by Marzano, Pickering, and Pollock (2001), and educators have long used analogies in classroom instruction and assessment. One of the problems with the traditional use of analogies—as dreaded by SAT-takers in the not-so-distant past—is that most of the time students were asked to complete the analogies with the words pre-selected by the teacher or the test-maker. Someone other than the students did all the heavy lifting to make the original connections. The instructional practice of synectics puts the responsibility of making connections on the students, and the additional element of having to make unplanned or forced connections encourages students to examine their learning from many angles and often to come up with surprising results. The analogies developed by students provide educators with an excellent formative assessment, as the connections students make between dissimilar objects show what they have learned about the topic of study.

Instructional Goal

- Students will demonstrate understanding of content, a text, or a concept through analytical thinking and the creation and elaboration of an analogy.

Resource

- *Synectics Examples by Content Area* (Educator Resource)

Preparation for Instruction

- Provide examples of synectics or analogies (for students who require scaffolding or are unfamiliar with analogous thinking).
- Determine the content, text, or concepts to be compared.
- Decide how students will work together, how and where students will write their explanation, and how their work will be shared or submitted.

Instructional Strategies

- Synectics can take varied forms in a classroom setting where learning through writing is the focus. The key ingredients are a topic being studied, something to which the topic will be compared, the students’ comparison, and an explanation of the reasoning or support for that comparison. The process is more rigorous if students do not know ahead of time that they will be making connections or finding similarities. Because this type of thinking is challenging, synectics is best practiced in pairs or small groups of students.

Variation 1: Four-Square Synectics

- Put students into pairs or small groups.
- Ask each group to brainstorm everything they know about the topic, person, or text being studied. This may be done individually at first, but students need to share their responses with group members. Students or groups may create a list of what they know to reference later.
- Provide each group with a piece of chart paper or a sheet of blank paper. Ask students to divide their paper into four boxes, windowpane-style.
- Give students a category for each box, and ask groups to write an example of that category at the top of the corresponding box (for example, “In the top left box, write a type of sport. In the top right box, write the name of a famous person, living or dead. In the lower left box, write something you find in a kitchen. In the lower right box, write a form of transportation.”)

Soccer	Elvis Presley
Food Mixer	Motorcycle

- Inform students that they will now work with their groups to make connections between the topic being studied and the examples they wrote in each box using this stem: *[Topic] is like [category example] because...* (Example: *Mitosis is like soccer because...*)
- Referring back to their brainstormed list of knowledge about the topic being studied, groups should write their connections in the boxes.
- Instruct each student to write an elaboration of one of the connections their group made by providing an explanation with evidence from the text or their notes to clarify the link between the two unlike objects.
- Share students’ responses or collect them to use as a formative assessment of students’ learning. Sharing could be done through a Gallery Walk, having each group designate a spokesperson to share one of the responses orally with the class, or by having each student share his or her written explanation with a classmate.
- Use synectics to have discussions about the content, concepts, or text used for comparison. Ask questions such as:
 - *What do these unusual comparisons help us understand about the subject?*
 - *How do they deepen our interpretation?*
 - *If we were going to visualize the concept or content, how might one of these comparisons help us do that?*
- After students have experienced this practice a few times, they begin to catch on and sometimes select words that are easy or obvious comparisons to the topic being studied. To keep the challenge up, vary the procedure. Groups can select the words and trade with a neighboring group to make the comparison. The other variations in this section also provide some challenging options.

Variation 2: Synectics Cards

- Prior to beginning the practice, have students create index cards with one noun on each card: person, place, or thing. Give them categories to jump-start their thinking, if necessary.



- *Optional:* If the class is studying something with multiple terms, names, or concepts involved, prepare a second set of cards with those terms, names, or concepts written on them. Otherwise, use one topic for the entire class.
- Separate the class into pairs or small groups.
- Follow the procedure outlined in Variation 1, except instead of creating a four-square graphic organizer, each group can draw one or more cards from the student-generated list and use those to make connections. If two sets of cards are used, have each group draw two cards, one on the academic topic and the other with the random noun. Allow students to generate the comparison statement, and let each group member write the paragraph to explain or elaborate on the connection.

Variation 3: Synectics Category Blitz

- In this variation, the entire class gets one category, and groups try to think of as many comparisons as possible with examples from that category. For instance, if the category is “food,” groups generate different comparisons between the topic of study and various types of food. (Examples: *The U.S. Senate is like a peach pie because...* or *The U.S. Senate is like a hamburger because...*)

Variation 4: Extended Synectics

- This variation works best when students have studied a system, a process, or a topic with many dimensions or qualities.
- Ask students to create an extended metaphor by thinking of something that allows them to make multiple comparisons with the topic being studied.
 - Example: *Education is like a trip to the mall. There are many choices to be made, and it’s best to keep your goal in mind so you don’t get sidetracked. People can take many paths to get where they are going in the mall, just as you can choose many different routes to graduation. A trip to the mall is more fun and sometimes more successful if friends accompany you; similarly, having good friends with whom to study and collaborate can help you enjoy and be more successful in school. At the mall, there are salespeople available to help you if you have questions. All you have to do is ask. Teachers operate in a similar fashion; they are there to assist you but might not realize you need help if you don’t let them know.*

Variation 5: Guided Synectics (for students who need more scaffolding)

- If students need practice with the concept of making connections, guide them through this procedure prior to making comparisons with content topics.
- Have pairs of students brainstorm characteristics of a topic or subject—for example, a teacher.

Teacher: hard working, knowledgeable, purposeful, essential, necessary.
- Provide students with an analogy: *Being a teacher is like being a spatula because although we are not flashy, we are extremely necessary and important.*
- Have students work with a partner to explain what the analogy means.
- Instruct students to work with their partner to create their own analogy of content, using the teacher example as a model.

Synecotics Examples by Content Area

<p>History</p>	<p>The New Deal was like the Treaty of Versailles because...</p> <p>Getting countries to agree on a trade treaty is like “herding cats” because...</p>
<p>Mathematics</p>	<p>An algorithm is like a recipe because...</p> <p>A variable is like a closet of clothes because...</p>
<p>Science</p>	<p>A body’s immune system is like a police force because...</p> <p>A chemical compound is like light because...</p>
<p>English Language Arts</p>	<p>In <i>The Hunger Games</i>, Katniss is like a panther because...</p> <p>Life is like a bowl of fruit because...</p>
<p>Fine Arts</p>	<p>Dancing is like the life of a butterfly because...</p> <p>A painting is like a song because...</p>
<p>Physical Education</p>	<p>Football drills are like a box of crayons because...</p> <p>Running a marathon is like making a cake because...</p>

Learning Through Writing: Instructional Practices for Summarizing

Simply stated, summarizing information is showing the ability to identify and comprehend the main idea of a source by paraphrasing or using different words. This particular set of instructional practices is highly effective when the learning goal is for students to determine the main idea of an informational text or the theme of a work of literature, but summarizing should not be limited to use only with texts. Students can use their own notes flexibly and creatively to show how to complete a math algorithm or describe a concept in science, or to summarize the most important learning of a lesson or unit.

When the source of information is a text, critical reading strategies are important tools for expanding students' ability to create written summaries. Students must be equipped with reading strategies such as Marking the Text, Charting the Text, or Close Reading, which will help them draw out the most significant information from one, or multiple, sources. These strategies help students read for meaning and understanding so they can synthesize the information into their own words.

In this section, summarizing instructional practices are presented that can be used across grade levels and curricular areas. These strategies are:

- GIST – “Generating Interactions between Schemata and Text”
- One-Pager

The *academic thinking skills* developed through these instructional practices include:

- Analyzing or examining the use of evidence in texts, text structure, patterns of continuity or change, errors in texts or process(es), and categorizing ideas, events, themes, and data by relevant characteristics.
- Synthesizing ideas across multiple texts to create new insights, predict future outcomes, draw informed conclusions, or argue new ideas.

INSTRUCTIONAL PRACTICE: GIST Summary

The GIST strategy (Generating Interactions between Schemata and Text) was developed as a collaborative learning strategy to increase comprehension of expository texts (Cunningham, 1982). GIST is a summarizing or comprehension strategy used to convey “the essence” or gist of a text. The term “text” can also be applied to a graphic, scientific experiment, discipline-specific concept, or mathematical problem.

The GIST strategy requires students to focus on the main ideas or big picture by including key ideas, but not including all the details. Summarizing through the GIST strategy requires students to analyze and synthesize information—higher-order thinking skills that increase students’ comprehension and retention of material. The strategy is most appropriate for short texts, notes, or limited content. Support students in creating GIST summaries by first modeling the practice with the whole class, then allowing students to collaborate in small groups to create the summaries, and finally, having students work individually to craft the concise summaries.

Instructional Goal

- Students will be able to write an organized, concise summary of a text or concept.

Resources

- *GIST Summary: 20 Words* (Student Resource)
- *GIST Word Bank and Summary* (Student Resource)

Preparation for Instruction

- Identify a short paragraph of content-specific material or a textbook section for modeling the GIST strategy for students.

Instructional Strategies

- Model the GIST strategy with the whole class.
 - Display the text and read the sample aloud while students read silently.
 - Discuss the text with the class, and identify the key vocabulary as well as the *who*, *what*, *when*, *where*, and *why* of the text. Creating a word bank is helpful for students.
 - With class collaboration, identify the main idea(s) and vocabulary that should be in a GIST summary. The number of words required is at the discretion of the instructor.
 - Demonstrate how to craft the final summary.



- Instructors may choose to have students write GISTs for texts of more than one section.
 - Instruct students to follow the same steps as for a single paragraph and write a sentence of 20 words or fewer to summarize each section of the text. The size of the section will depend upon the students' grade level and the size of the complete text.
 - Ask students to combine the content of their individual summaries into a single GIST statement. Specify the total number of words allowed.

Variations

- Use a GIST template.
 - Templates are useful for students' independent summaries for any type of text. For two examples of GIST templates, see *Student Resource: GIST Summary: 20 Words* and *Student Resource: GIST Word Bank and Summary*.
 - Emphasize to students that a GIST summary should include academic vocabulary specific to the content being summarized.
- Use other "texts."
 - The GIST strategy can be applied to different types of texts, such as students' notes, graphics, scientific experiments, or mathematical problems.
 - Model for students how to "read" other texts such as charts, graphs, diagrams, or photographs prior to creating GIST summaries from them.

GIST Summary: 20 Words

A GIST summary captures the main ideas of a text without including all the details. To write a concise summary, you must first analyze the text and identify key terms and key points about the topic. Creating a word bank of the key terms from the text will be helpful as you write the summary.

Topic: _____

Main idea of concept or text (complete sentence):

Key Terms and Phrases:

GIST

Use the key terms and phrases to write a GIST summary of 20 words.

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

GIST Word Bank and Summary

“Gist” is a word that means “the essence.” A GIST summary conveys the main ideas of a text without including all the details. To write a concise summary, you must first analyze the text and identify key terms and key points about the topic.

Topic: _____

Main idea of concept or text (complete sentence):

Key Terms:

In your own words, write the key points that explain what the text is about:

1. _____
2. _____
3. _____
4. _____
5. _____

Write a paragraph of 3–4 sentences, using the key terms and points to summarize the “gist” of the text or concept.

INSTRUCTIONAL PRACTICE: One-Pagers

The One-Pager is a strategy for responding to a wide variety of learning experiences, such as reading a text, viewing a demonstration or presentation, or observing a problem-solving scenario. It can be described as a collage combining visual and textual elements that represent the student's processing and thoughtful response to a learning experience. One-Pagers can be used in a variety of ways, such as sharing perceptions among students, Socratic Seminar discussions, teacher assessment of student comprehension, and as a review resource prior to a quiz or exam.

Instructional Goal

- Students will synthesize their personal responses to a text or concept by creating a visual and textual interpretation of the learning experience.

Resources

- *One-Pager Guidelines* (Student Resource)
- *Creating a One-Pager* (Student Resource)

Preparation for Instruction

- Select the text, content assignment, or unit of study for students' analysis and synthesis.
- Provide materials for drawing (e.g., white paper, colored pencils, markers, graphics software).

Instructional Strategies

- Following a unit of study or other assignment, instruct students to identify the main idea, key vocabulary, and significant quotes or statements (if applicable to the assignment).
- Distribute (or display) *Student Resource: One-Pager Guidelines* and explain the guidelines. This student resource is an example of a generic set of guidelines for a One-Pager. The guidelines can be modified to meet the needs of different grade levels and types of academic content. A One-Pager should include a minimum of the following:
 - Title that reflects the content
 - Two quotations or excerpts from the text or activity
 - A personal response to the quotations or excerpts
 - At least two visual images symbolizing the subject matter
 - Essential vocabulary words/phrases related to the subject matter
 - Use of color to enhance the visual appeal
 - Costa's Level 2 or 3 questions, with responses supported by the text or activity



- If the One-Pager is an Interactive Notebook processing assignment, it should be placed on the left page corresponding to the article or notes on the right page.
- Display the One-Pagers around the room and have students complete a Gallery Walk as a learning experience and to see how others represented the text or assignment.

Extensions

- To scaffold the learning:
 - For early primary grades, ask for a word and illustration, then build up to complete sentences, with a short summary and more extensive visual interpretations of the assignment included as appropriate.
 - Allow students to work in pairs or in small groups.
- To increase rigor:
 - Have students complete a Gallery Walk of the products and use sticky notes or a comment sheet for each One-Pager to note questions or comments for the author.
 - Require graphic representations to be interpretive or metaphoric, as opposed to illustrative.
- To integrate technology:
 - As part of an online collaborative whiteboard or discussion board, photograph and post One-Pagers on the same topic or text for students in the same class or between separate classes. Request that students review and note questions or comments for the author.
 - Consider using a mix of digital and paper media. Have students place sticky notes on device screens displaying One-Pagers.

One-Pager Guidelines

A One-Pager is a creative response to your learning experience. It allows you to respond imaginatively to express your comprehension of, reactions to, and connections with a specific area of study. Use the instructions below to create a One-Pager on the specific learning experience.

Format for the One-Pager:

- Use standard (8½ x 11 inch) unlined white paper.
- Title the One-Pager appropriately to reflect the content. Include the name of the author, as appropriate.
- Use colored pens, pencils, or markers to create a visually appealing product.
- Fill the entire page.
- Write two quotations or excerpts from the text or activity.
- Write a response to the quotations or excerpts. This can be a personal response, summary, or interpretation, depending on your assignment.
- Include at least two visual images symbolizing the subject matter. These can be illustrations, magazine pictures, or computer-generated graphics.
- Place five essential vocabulary words or phrases around the images.
- Write the main idea of the text or activity.
- Write two Costa's Level 2 or 3 questions and answer them.
- Put a symbolic colored border around the edges of the paper.
- Write your name on a front corner or on the back, as directed by the instructor.

Creating a One-Pager

Utilize the instructions below to express your comprehension of, reactions to, and connections with a specific area of study.

Within the One-Pager:

- Include first and last name, clearly displayed.
- Include concept, unit of study, and/or title and author of the text.
- Create a border that reflects the theme, concept, or message of the unit of study.
- Using the text as a beginning point, display your reactions, interpretations, and connections to the unit of study.
- Include visual images that have strong relationships to the unit of study.
- Draw a word cluster around one of the visual images. The visual word cluster should artistically symbolize the subject matter.
- Write a poem about an important figure, character, or member of the unit of study.
- Support your selections from the text, your artwork, and your opinions with a personal statement.
- Begin your statement with, “I believe...”
- Create Level 1, 2, or 3 questions, and then answer them with solid support from your notes on the unit of study.
- Be colorful and neat. Nothing should be left in plain pencil.

AVID Site Team Connection: Applying *Learning Through Writing* Schoolwide

Educators need opportunities for collaboration and input from colleagues. The AVID Site Team is one of the key elements in circulating high-leverage strategies and core beliefs across a campus. When a Site Team unites around the importance of learning through writing, builds collaboration opportunities into scheduled meeting times, and supports one another in seeing the value of learning through writing within each discipline, there is no limit to the positive outcomes that can happen on a campus.



INSTRUCTIONAL PRACTICE: Getting Messy With Learning Through Writing

Learning through writing is meant to be done when interacting with content, and the instructional practices outlined in this chapter are an excellent addition to any AVID Site Team meeting, staff meeting, or grade-level or department meeting. What often holds educators back from integrating these powerful learning strategies into their classrooms is not knowing what an instructional practice actually looks or feels like in action. Identifying opportunities for learning through writing to happen while attending to the business of evacuation plans, state testing logistics, or Site Plan development allows staff members to experience the instructional practices firsthand.

Taking the integration a step further and having time to debrief and make connections to content—discussing how synectics could be used in math or why the development of listicles in history this week will make the content more engaging—almost guarantees that educators will give one of these powerful instructional practices a try.

Instructional Goal

- Educators will practice using an instructional practice from this chapter to identify how to incorporate learning through writing into their classrooms in a more robust way.

Preparation for Instruction

- Choose a topic or task that needs to be accomplished during an AVID Site Team meeting, in a staff meeting, or during teacher collaboration time.
- Identify one instructional practice from this chapter to model with the staff.
- Group participants into grade-level teams, content-area teams, or mixed groups depending on the intended outcome of the collaboration time.

Instructional Strategy

- Take participants through the identified instructional practice, leaving time at the end to debrief and make connections to using learning through writing as a way to increase students' writing proficiency within content areas.

Post-Reading Reflection Questions

- What new learning-through-writing structures will be incorporated into my classroom?
- How will learning through writing be used as a formative assessment tool to better inform instruction?
- How will a variety of learning-through-writing instructional practices enhance students' learning in the classroom?
- Where do learning-through-writing instructional practices best fit into my current content and classroom practices?
- How will digital tools with low-stakes writing tasks be incorporated in the classroom?

K-2 Post-Reading Reflection Questions

- What scaffolds will be used for students to express their knowledge through writing?
- How will I modify these strategies, while maintaining the gist of the practice, for the developmental needs of my classroom?
- How will backward mapping the skills necessary to complete these writing strategies support schoolwide implementation and progression of AVID best practices?
- How will assessing students' writing change through use of these strategies?



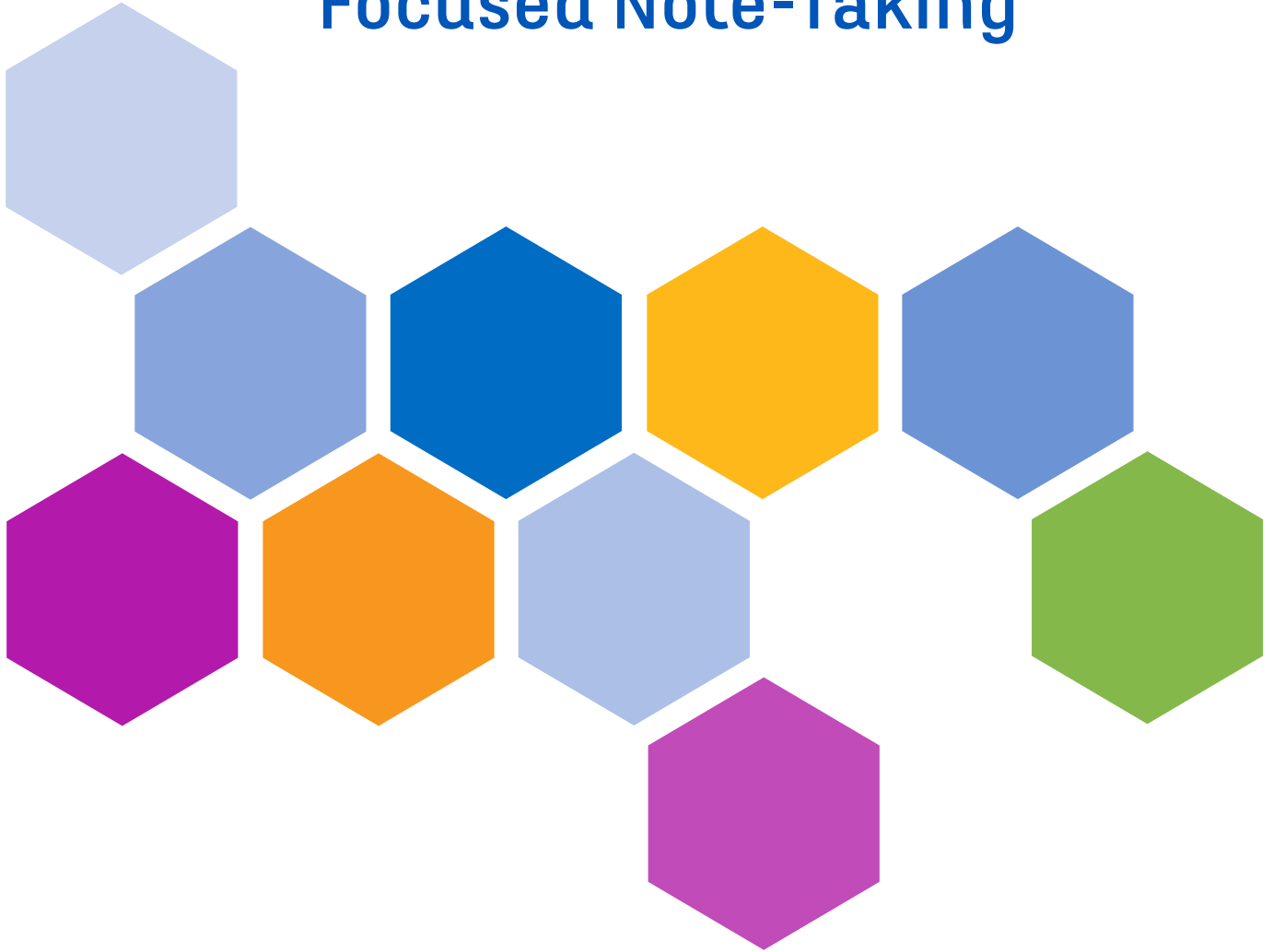
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CHAPTER THREE

Focused Note-Taking



Visit the *AVID Writing for Disciplinary Literacy* webpage on MyAVID for additional materials and resources.

CHAPTER Introduction

Focused note-taking is a five-phase process that can be used and adapted for various note-taking purposes and that embraces a variety of note-taking formats.

Taking notes is a life skill students must acquire to succeed in college and the world of work. Throughout their academic careers, students obtain information from a variety of sources, and they gather, process, wrestle with, think about, and ultimately solve problems and produce new knowledge using that information through the active process of **focused note-taking**.

Students are often asked and expected to take notes in and outside of class for a variety of reasons. In some instances, students take notes from a lecture, text, or video to stabilize the knowledge they will need during a test or other examination; at other times, students take notes to assist them in academic endeavors such as writing an essay, solving a mathematical equation, or comprehending a challenging text. Unfortunately, most schools provide learners little assistance in acquiring the expected note-taking skills (Boch & Piolat, 2005).

Note-taking does not lose its value after students exit the world of academia. In the “real world,” medical personnel take notes of patient interactions to maintain a record of treatment steps and to guide future patient care. Mechanics take notes to diagnose automobile problems and to record services completed. Employers take notes during job interviews to review when making hiring decisions while interviewees generate notes beforehand to help them prepare for the interview itself. Nutritionists keep logs of what their clients have consumed, theatre directors jot notes during rehearsals to provide feedback to actors, athletes view footage of their performance and take notes about areas for future improvement, and secretaries keep minutes of meetings to preserve a record of proceedings. David T. Conley (2012) listed note-taking among the Key Learning Skills and Techniques for college and career readiness. Note-taking is a vital skill students need to develop and use throughout their lives, and it is one that educators must explicitly teach.

Focused note-taking is not an easy skill to master; in fact, Scardamalia and Bereiter (1991) estimated that learning to take notes well takes as long as learning to write proficiently, at least 15 years (as cited in Boch & Piolat, 2005). The foundational layer of this process can be introduced as early as kindergarten through teacher modeling and progress with additional layers being built through students’ elementary experience. This lengthy process of learning to take notes should begin in the early elementary years to put students on track for college readiness by the end of high school.

Since its inception, AVID has acknowledged the importance of effective note-taking and has included it as a vital component of the AVID curriculum. AVID’s note-taking philosophy began with Cornell notes, which were developed by Walter Pauk at Cornell University in the 1950s. Pauk based some of the methodology on the work of German



researcher Hermann Ebbinghaus, who, in 1880, began a series of memory experiments that determined that retention of learned information occurs when the learner repeatedly rehearses the information. With consistent repetition over time, learners require less and less time to reactivate their memory (Murre & Dros, 2015). Pauk's two-column Cornell notes concept encourages repetition by providing space for students to revisit notes through questions, cues, and summary-writing (Pauk & Owens, 2014).

Over time, AVID's methodologies have expanded to encompass elementary and postsecondary learning, and AVID's approach to note-taking has evolved as well. Since note-taking has numerous purposes and exists in many forms, there is no single, correct method of taking notes that fits every situation. While Cornell notes are useful in some circumstances, varied learning purposes and learner preferences make other styles of note-taking equally useful. Good note-taking is not characterized by the type of device or paper the notes are written on; notes are effective when the learner uses them to accomplish an intended learning purpose. Educators and learners must broaden their repertoire of note-taking techniques. Students must learn the *why* behind note-taking and experience a variety of formats so they can eventually learn to self-select the best tool for any given task.

Students and educators sometimes mistakenly focus on the *what* of note-taking rather than the *how* and *why*, directing their attention to the result (the completed page of Cornell notes, for instance) rather than the usefulness of those notes in accomplishing a learning objective. They measure note-taking by the quantity of notes rather than the quality of learning or understanding students achieve. Focused note-taking is more than just transcribing information. It is an often nonlinear process in which students create notes, interact repeatedly with the notes in varied ways, and eventually use the notes to apply their learning to a specific purpose.

The focused note-taking process described in this chapter is heavily influenced by the work of Marzano, Pickering, and Pollock (2008) in which they spotlighted the top research-based strategies for improving student achievement. Among their strategies are summarizing and note-taking; nonlinguistic representations; setting objectives; and cues, questions, and advance organizers, all of which relate to aspects of AVID's focused note-taking system.

Focused note-taking empowers students to take charge of their learning. Instead of mindlessly copying notes from an instructor-prepared slide presentation or transcribing sentences verbatim from a text, students thoughtfully consider their purpose for note-taking and make deliberate decisions at every phase of the process based on that purpose. Educators in all subject areas can teach and facilitate the five phases of the note-taking process to maximize students' learning. Once students internalize the focused note-taking process, they can adapt it to situations in their academic lives and beyond.

Chapter 3 Objectives

As a result of interacting with this chapter, educators will be able to:

- Communicate the purpose behind AVID’s focused note-taking system to educators and students.
- Demonstrate and utilize focused note-taking as a process for deepening understanding of content using learning-through-writing strategies.
- Teach students to take charge of their learning by using brain-based note-taking and effective strategies for studying.

Pre-Reading Reflection Questions

- What do I wish someone had taught me about note-taking when I was in school?
- Why do I ask students to take notes?
- How do I currently plan for student note-taking?
- What do I ask my students to do with their notes after the initial notes are taken?
- Why is note-taking an important skill for my students to learn and practice? How might my students use digital tools and resources to take notes?

K-2 Pre-Reading Reflection Questions

- How can I model the thinking process behind note-taking for my students?
- What note-taking formats should I be utilizing to support my students’ learning through content organization?
- What note-taking formats should I be utilizing to support the note-taking continuum as a member of my school’s AVID Site Team?
- How can my Think-Alouds and choice of vocabulary support the note-taking progression for my students?








Guiding Principles

- Educators should have a purpose for the taking of notes. Note-taking for the sake of note-taking is neither productive nor worthwhile.
- The focused note-taking process must be explicitly taught, and educators should allow time in class for the phases to occur.
- Students must develop the skill of putting information into their own words.
- Effective notes take many forms. Individual learning preferences and purposes for note-taking will dictate the format and content.
- Notes are living records of thinking as it evolves during the course of a learning experience; consequently, they are often messy rough drafts in constant states of revision.
- For learning to occur most effectively, learners must revisit their notes multiple times in a variety of ways.
- Every phase of focused note-taking involves inquiry. Learners must constantly ask questions of themselves, their notes, and the content.
- The brain must be fully engaged during all parts of the note-taking process. Mindless completion of the phases of the note-taking process limits learning.
- Educators play a key role in guiding students to understand themselves as learners and how to use the five-step focused note-taking process to improve the effectiveness of their learning.
- Digital note-taking applies the same five-step process for taking notes and repeatedly interacting with them, but also allows for notes to be easily revised and include multimedia resources and links. Digital notes can also be saved to the Cloud for easy access, organization, and sharing.



The Five Phases of the Focused Note-Taking Process

AVID’s focused note-taking process has five phases. It is important to note that while *applying learning* is the last phase of the process, it is essential that it inform the first phase, as the note-taking format should be shaped by the note-taking purpose. When teaching the focused note-taking process, educators need to determine how students will use their notes and set up the format appropriately. It is crucial for educators to model and invite students to engage in this thought process so that note-taking becomes a powerful and portable learning tool students can carry with them throughout their educational experience.

<p>Taking Notes</p> 	<p>Create the notes. Select a note-taking format, set up the note page, record the Essential Question, and take notes based on an information source (lecture, book, website, article, video, etc.), selecting, paraphrasing, and arranging information in a way that meets your note-taking objective.</p>
<p>Processing Notes</p> 	<p>Think about the notes. Revise notes—by underlining, highlighting, circling, chunking, questioning, adding, deleting—to identify, select, sort, organize, and classify main ideas and details. Evaluate the relative importance of information and ideas in the notes.</p>
<p>Connecting Thinking</p> 	<p>Think beyond the notes. Analyze the notes using inquiry to make connections and deepen content knowledge by asking questions and adding your own thinking to create greater understanding, identify gaps or points of confusion, and connect your new learning to what you already know.</p>
<p>Summarizing and Reflecting on Learning</p> 	<p>Think about the notes as a whole. Pull together the most important aspects of your notes and your thinking about them to craft a summary that captures the meaning and importance of the content and reflects on how the learning helps you meet the note-taking objective.</p>
<p>Applying Learning</p> 	<p>Use the notes. Save and revisit your notes as a resource or learning tool to help you apply or demonstrate what you have learned.</p>

THE FOCUSED NOTE-TAKING PROCESS: Phase 1 – Taking Notes

Create the notes. Select a note-taking format, set up the notes, and take notes based on an information source (lecture, book, website, article, video, etc.), selecting, paraphrasing, and arranging the information in a manner that meets your note-taking objective.

The first phase of the focused note-taking process is the one most people envision when they think of note-taking: the creation of the notes themselves. During this phase, the learner writes or types notes from a source or an experience. This step in the process is, however, more complicated than it appears, as it involves much more than jotting down information. Taking notes demands conscious choices such as determining the purpose for the notes, identifying the note-taking objective, selecting the appropriate format, setting up the notes, and taking the notes themselves.

To teach students how to take notes, educators must be able to do the following:

- Plan for note-taking.
- Establish and share a note-taking purpose with students.
- Teach students how to determine a note-taking purpose of their own if one is not provided for them.
- Instruct students on formats and best practices for note-taking.
- Model and practice note-taking with students.
- Provide opportunities for students to implement what they have learned to take their own notes.
- Model digital tools when appropriate, to use for taking notes, as well as annotating and organizing them.

INSTRUCTIONAL PRACTICE: Planning for Note-Taking

Thoughtful preparation and planning before taking notes ensures student success in the focused note-taking process. If the intent is that notes move from being an organizational tool to a tool used for learning, it is crucial that educators, and eventually students, develop a plan for note-taking.

Instructional Goal

- Students will use *Student Resource: Planning for Note-Taking* to develop a plan for taking notes and identify the appropriate questions to ask before taking notes in order to ensure that their notes will be a useful learning tool.

Resources

- *Planning for Note-Taking* (Educator Resource)
- *Planning for Note-Taking* (Student Resource)

Preparation for Instruction

- Determine which questions should be answered by the educator when planning the lesson or learning sequence, which questions should be answered by the educator as part of a Think-Aloud during the learning experience or lesson, and which questions should be answered by students as part of the gradual release of the note-taking process. For example, if modeling referencing additional resources during the revision phase of the focused note-taking process, then have those references available to show students what that looks like and how new information is layered or added to the notes.
- Identify which questions from *Educator Resource: Planning for Note-Taking* will be answered during a Think-Aloud or instructor modeling phase of the lesson delivery. Develop a plan for what the answers will look like or involve.
- Have a clear learning objective for the lesson or learning experience that includes how students will use their notes to apply what they have learned.
- Identify where students are in the gradual release of planning for note-taking and if this will be done with the entire class, in small groups, or with students reflecting and planning individually.

Instructional Strategies

- Using the pre-identified questions from *Educator Resource: Planning for Note-Taking*, provide a Think-Aloud or model for students.
- Structure time for students to work with a question or questions in small groups, with a partner, or individually. The intent is that these questions are thought through before note-taking occurs. However, these questions also provide excellent opportunities for metacognition during and after a lesson depending on the question, rigor of content, and where students are in learning the focused note-taking process and how to use their notes as a tool for learning.



Planning for Note-Taking

Thoughtful preparation on the part of the instructor can ensure student success in the focused note-taking process. Educators can use the following questions prior to beginning a learning experience to clarify students' note-taking needs and provide guidance for them as necessary.

1. What are the overall learning goals for this lesson, activity, assignment, or experience?
2. How will I determine whether a student is successful? What indicators will I use to measure success?
3. Where will note-taking be necessary in this learning experience?
4. What will be the purpose of the notes? How will students use their notes to achieve success?
5. What questions or objectives can I provide the students to let them know how to focus their efforts?
6. What should the students' notes contain? Will all learners have similar notes, or will the content vary?
7. What resources might students use for reference when they revise their notes?
8. What type or format of notes will be most conducive to the note-taking purpose?
9. How much structure will I need to provide in advance for the students' notes?
10. Where are my students likely to encounter difficulty in the learning or the note-taking? What kind of assistance or instruction will I need to provide before or during the process? Is there a digital tool that could support this need?
11. When will feedback be useful to the students in the note-taking process? What kind of feedback will be most beneficial? How will I provide that feedback?

Planning for Note-Taking

Thoughtful preparation on the part of the student can ensure success in the focused note-taking process. Students can use the following questions prior to beginning a learning experience to clarify their note-taking needs and identify opportunities where additional information or guidance might be necessary.

1. What are the overall learning goals for this lesson, assignment, or experience?
2. What does success with this lesson, assignment, or experience look like? How will success be measured?
3. Where is note-taking necessary in this learning experience?
4. What is the purpose of the notes? How will I use my notes to be successful with this lesson, assignment, or experience?
5. What questions or objectives are provided that let me know how to focus my efforts?
6. What information or content should my notes contain?
7. What resources might I reference when revising my notes?
8. What type or format of notes will be most conducive to the note-taking purpose?
9. Where am I likely to encounter difficulty in the learning or the note-taking? What kind of assistance or instruction will I need before or during the process? Is there a digital tool that could support this need?
10. When will feedback be useful in the note-taking process? What kind of feedback will be most beneficial? How will I ask for or receive that feedback?

Educators should have a purpose for the taking of notes. Note-taking for the sake of note-taking is neither productive nor worthwhile.

INSTRUCTIONAL PRACTICE: Determining the Purpose for Taking Notes (List, Group, Label)

“Why am I taking notes?” is the key question students should ask themselves before embarking on the note-taking experience. Instructors might ask themselves a similar question: “Why am I asking my students to take notes?” Beginning with a purpose in mind helps the note-taker make strategic decisions about the form and content of notes. Note-taking itself should never be the end goal in a learning experience.

Instructional Goals

Students will:

- Explore various purposes for taking notes in school and in the world beyond the classroom.
- Create and categorize a list of note-taking purposes.
- Be able to determine a purpose for their own note-taking and consider how that purpose drives the form and content of their notes.

Preparation for Instruction

- Determine whether this instructional practice should be completed as an entire class or in smaller groups. Unless the class requires a great deal of guidance from the instructor, the students will benefit from working in groups.
- Collect and organize materials; students will need note cards, sticky notes, and small pieces of paper, or their devices and an online collaborative space such as a shared document or online whiteboard on which to record brainstormed ideas.
- *Optional:* Prior to conducting this instructional practice, ask students to interview adults to find out all the types of notes they keep in their lives at work and outside of work.

Instructional Strategies

List, Group, Label

- Divide the class into groups. Make sure each group has the necessary materials to engage in this collaborative brainstorming session.
- Ask students to work together in groups to *list* as many examples of note-taking as they can think of from school or the world beyond school. Each example should be written on a note card, sticky note, small piece of paper, or within the online collaborative space designated for brainstorming. (Examples may include taking notes on an instructor’s lecture, reading an article and taking notes of information to use in a research paper, or a lawyer keeping notes of what an opposing lawyer said in a trial for follow-up questioning.)

- Instruct students to *group* their examples according to the purpose for note-taking, putting similar activities together. The goal here is to sort the examples into a manageable number of groups, each with definable characteristics. (For instance, the students might put taking notes on a lecture, taking notes on a chapter from a textbook, and taking notes about a video shown in class in the same category because they all are note-taking activities assigned by an instructor, and they will need to use the information later on a test.)
- Students should create a *label* for each of their groupings. The labels should relate to a purpose for note-taking. (For example, the purpose may be to study for a test, to compile research, or to aid in decision making.) Students can record their labeled categories on a piece of chart paper or within the online collaborative space they used for brainstorming.
- Share each group's labels with the class orally, or conduct a Gallery Walk in which students observe each other's labels.
- *Optional:* Combine the labels of the groups into one master list of note-taking purposes for the entire class.
- Have the students complete a quickwrite, responding to the question: *How would my purpose for taking notes affect what I would write down and the format I would use to write it down?*
- Use the quickwrite as a jumping-off point for a class discussion of purposes and formats for note-taking and the importance of keeping the purpose in mind before and during note-taking.

Extensions

- To increase rigor, ask students to continue to search for real-world examples of note-taking and to test their categories to see if all examples fit into their system. Adjust the categories as necessary to create an all-encompassing list of groupings.
- To increase scaffolding, have students brainstorm the examples in groups, but guide the students through the grouping and labeling as a full class.



Identifying the Note-Taking Objective

Ideally, educators should communicate an objective to students prior to every note-taking opportunity so that students will have a clear picture of why they are taking notes and what content they should view as important. The note-taking objective should help students answer the questions “Why am I taking these notes?” and “What will I be doing with these notes later?”

A good note-taking objective should relate to the overall learning objective for a lesson and should specify the function of the notes within the lesson itself. Educators may prefer to also share the objective in the form of an **Essential Question** that students can answer using their notes. Note-taking objectives and Essential Questions should be written in language that is easily understood by students, maintaining consistent use of academic language and content-specific vocabulary.

Sample note-taking objectives and related Essential Questions for various content areas are included in the following chart. Add some of your own to the end of the chart (on the next page).

Essential Questions are objective-based, student-generated, or teacher-generated questions appropriate to a particular lesson, unit, or concept. They are used by students to guide thinking and frame note-taking and summarization in order to accomplish an assigned task.

Subject Area and Learning Task	Note-Taking Objective	Essential Question
Science – cellular respiration lab	Collect quantitative and qualitative data about what occurred during the lab to use for writing a lab report.	<i>What data can I collect to measure the occurrence of cellular respiration in a living organism at different temperatures, and what can I conclude from the data?</i>
History – examining charts about population trends in Europe from 1000–1700 CE	Make observations from the data to use in a Socratic Seminar about population trends in Europe from 1000–1700 CE and the social, economic, and political causes that explain them.	<i>What trends can I identify in the data, and how can I explain those trends using my understanding of European history during this time period?</i>
Math – geometry activity about defining triangles	Record/capture observations, patterns, and trends discovered by creating examples of triangles and non-triangles, for use when writing a rule to define the Triangle Inequality Theorem.	<i>What patterns from the data can I use to write a rule that will determine whether three given side lengths will form a triangle?</i>
English – close reading of the balcony scene from Shakespeare’s <i>Romeo and Juliet</i>	Record and reflect on examples of Shakespeare’s use of light and dark imagery to express the developing feelings of Romeo and Juliet, for use in a literary analysis essay.	<i>How does Shakespeare use light and dark imagery to convey the feelings of Romeo and Juliet?</i>
AVID Elective – career interview	Prepare a presentation to the class about the career of the person you interviewed, focusing on what the career involves and the training and skills required.	<i>What does a [name of occupation] do, what skills are required, and what would I have to do to become one?</i>

Subject Area and Learning Task	Note-Taking Objective	Essential Question
Government – lecture about checks and balances	Explain the idea of checks and balances and how it relates to the structure of the U.S. government, an important concept to understand for the unit test.	<i>How does the U.S. government's organization prevent one group or person from gaining too much power or having excessive influence?</i>
Music – video of a recent choir concert performance by the students	Make observations about the performance to provide critical feedback for the class as a whole and to set personal goals for improvement.	<i>In our most recent concert, what did we do well, what do we need to work on, and what will I do to improve for the next performance?</i>
Health – nutrition log	Analyze your intake of food and beverages for a week to develop a personal nutrition plan.	<i>How healthy is my diet, and what improvements do I need to make in my diet to meet my fitness goals?</i>
Art – baroque art video	For the upcoming exam, identify important works of southern baroque art and explain how historical factors influenced their content and style.	<i>What are the key characteristics of important works of southern baroque art, and what historical factors explain their content and style?</i>
Add your own:		
Add your own:		

Students will likely encounter instructors who do not provide a note-taking objective or Essential Question. Educators who are teaching their students the foundations of note-taking should spend some time helping students learn to identify objectives and create Essential Questions on their own. This can be done in a number of ways:

- Provide students with a note-taking objective and allow them to practice writing an Essential Question that addresses that objective.
- Prior to taking notes on a reading assignment, preview a chapter in the textbook, looking at subject headings, section divisions, visual aids, and other elements to determine what content the chapter is likely to contain. As a class, create a note-taking objective and Essential Question to guide the note-takers' efforts.
- When working with a document describing a project or large assignment and its requirements, encourage students to identify the places where note-taking will be necessary in the completion of the assignment, the purpose for each note-taking task, and the question they should focus on while taking notes.
- For a student-directed research assignment, ask students to create a note-taking objective and Essential Question during the planning phases of the project. Conference with students to provide feedback on the quality and usefulness of the students' objectives and questions.



See the *AVID Writing for Disciplinary Literacy* webpage on MyAVID for examples of note-taking format templates.

Selecting the Appropriate Format for Note-Taking

The chart below examines the key features of several popular note-taking formats. Educators and note-takers should consider the purpose for note-taking to determine which format will be most conducive to their objective.

Type of Notes	Description	Uses and Caveats
Cornell Notes	Includes a space at the top to write the Essential Question, a large column on the right for the notes themselves, a slimmer column to the left of the notes space for questions, and a place for a summary at the end.	The format facilitates the phases of the focused note-taking process by designating space for note-taking, connecting, and summarizing. The notes column may be lined or unlined and can be used with many note-taking styles.
Two- and Three-Column Notes	A structured form of note-taking in which content is organized into two or three columns based on note-taking objectives and the purpose of the lesson.	This style of notes is useful when information is highly structured or the note-taker's response to the information follows a repetitive pattern. It can also be useful if the instructor wants to build in space for student input or processing in multiple modes. The headings or purposes for the columns can be adapted to many situations and note-taking styles, both linguistic and visual, and are usually determined by the instructor.
Sketchnotes/ Mind Maps/ One-Pagers	Graphic forms of notes in which information is represented with a combination of pictures, shapes, symbols, and text.	The visual nature of these styles of notes engages learners who thrive on creativity, allows note-takers to make connections among ideas, and appeals to students who like to doodle and draw.
Graphic Organizers	Diagrams, webs, flowcharts, concept maps, and other visual organizers that use shapes, arrows, and lines to show connections between ideas. The instructor or note-taker will predetermine the best organizational format to use to meet the note-taking objective.	Graphic organizers help learners see patterns, connect ideas, and produce nonlinguistic representations of learning in their minds (Marzano et al., 2008). Graphic organizers may be used as the sole note-taking structure for an entire lesson or interspersed into traditional notes as needed to clarify a relationship.

For more information on Interactive Notebooks, see Chapter 2: Learning Through Writing (pages 22–37) or visit the Core Strategies: Interactive Notebooks page on MyAVID.

Type of Notes	Description	Uses and Caveats
Charts and Tables	A multi-column grid formation with headings at the top. Students fill out the chart or table during the lecture, video, or reading, extracting only the specified information.	When a lecture or text follows a repetitive structure or when students are expected only to extract certain elements from a source for research or other purposes, charts and tables effectively focus students' note-taking. These can be frustrating for students if the content deviates from the pattern.
Interactive Notebooks	A living archive of student learning, set up on facing pages in a notebook. Typically, right-side pages are used for teacher input (notes, texts, handouts, etc.) while the left-side pages are designated for student processing and reflection on the content on the facing page.	Notes are one component that appears frequently in Interactive Notebooks. The format itself encourages reflection and student input on the notes. Interactive Notebooks are usually teacher-assigned for a particular course, so this format would be less useful for research.
Combination Notes (Marzano et al., 2008)	A flexible style of note-taking that includes an informal outline (a linear style in which indentation indicates the relative importance of ideas) and web formats for note-taking. Note-takers divide the page into two columns. The left is for traditional, linear notes; the right is for notes taken using webbing or some other visual means. The note-taker leaves room at the bottom of the notes for a summary.	Not unlike Cornell notes, this style requires students to revisit and reconsider the information in multiple forms and to think about the content of the notes several times. This style of note-taking takes more time than other approaches because students interact with the information more than once, but the repetition incorporates much of the thinking expected in the focused note-taking process.



INSTRUCTIONAL PRACTICE: Setting Up Cornell Notes: Creating the Cornell Note Format

The Cornell notes format provides space to facilitate the phases of the focused note-taking process by including a column for connecting thinking and an area for the summary reflection. Students can easily set up the format for Cornell notes on their own page—lined, unlined, or graph paper—with a ruler or by folding the paper over to make a vertical line about one-third of the way across the page. When taking notes digitally, students can use a blank Cornell notes template with a left and right column or take notes using the entire page and add questions and connections using the commenting feature, if available.

Instructional Goal

- Students will learn how to set up the format for Cornell notes.

Resource

- *Cornell Note Template* (Educator Resource)

Preparation for Instruction


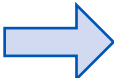
- Determine the note-taking purpose. Write an Essential Question to direct students' thinking about the topic.
- Prepare a sample note-taking page to use as a model for students when setting up the notes.

Instructional Strategies

- Discuss the note-taking purpose and the Essential Question for the notes. Ask students to write the Essential Question at the top of the note page.
- Model how to set up a page for note-taking in a journal, notebook, on loose-leaf paper, or using word processing software.
 - When taking notes on paper, students may create their own note-taking pages with sections and columns drawn with a ruler or by folding the paper.
 - When taking notes digitally, students may use a template or set up their notes using tables.
 - Project the sample note-taking page for students to use as a model as they set up their own page of notes.
- Begin note-taking, and model using a Think-Aloud or discuss with students the sort of input that should appear in each section of the notes.
- Utilize the 10–2–2 scaffold, allowing students to compare notes with a partner throughout the note-taking phase to compare notes, add information, or make necessary adjustments.

Cornell Note Template

This resource is for educators to use to teach students how to set up their paper for Cornell notes. Students should be encouraged to set up their own note-taking format rather than use pre-formatted note paper.

Topic:		Name:
Objective/Note-Taking Purpose:		Class/Period:
		Date:
Essential Question:		
Questions/Connections:	Notes:	
<p>Leave this space blank for adding questions and ideas in the Connecting Thinking phase.</p> <p style="text-align: center;">  About 1/3 of the page  </p>	<p>Take notes in this section using whatever method you prefer: outline, webbing, bullets, charts, diagrams, or a combination.</p> <p>Leave space for additions and revisions.</p>	
Summary Reflection:		
<p>Add a space for a summary at the end of your notes. When taking notes on paper, you might want to wait to designate this area on your paper until you finish taking the notes so you do not run out of space for note-taking.</p>		

INSTRUCTIONAL PRACTICE: Two- and Three-Column Notes

Two- and three-column notes offer flexibility to customize the note-taking format in response to the needs of the students and the note-taking objective. The options for column headers should be tailored to fit the purpose of the lesson (see *Two-Column Notes Ideas* and *Three-Column Notes Ideas* on pages 113 and 114). These styles of notes allow input in various modes for the separation of content into categories.

Instructional Goal

- Students will learn how to set up the formats for two- and three-column notes.

Resources

- *Two-Column Notes Ideas* (Educator Resource)
- *Three-Column Notes Ideas* (Educator Resource)

Preparation for Instruction

- Determine the note-taking purpose. Write an Essential Question to direct students' thinking about the topic.
- Select the best format for the notes and determine the headings for the columns.
- Prepare a sample note-taking page to use as a model for students when setting up the notes.

Instructional Strategies

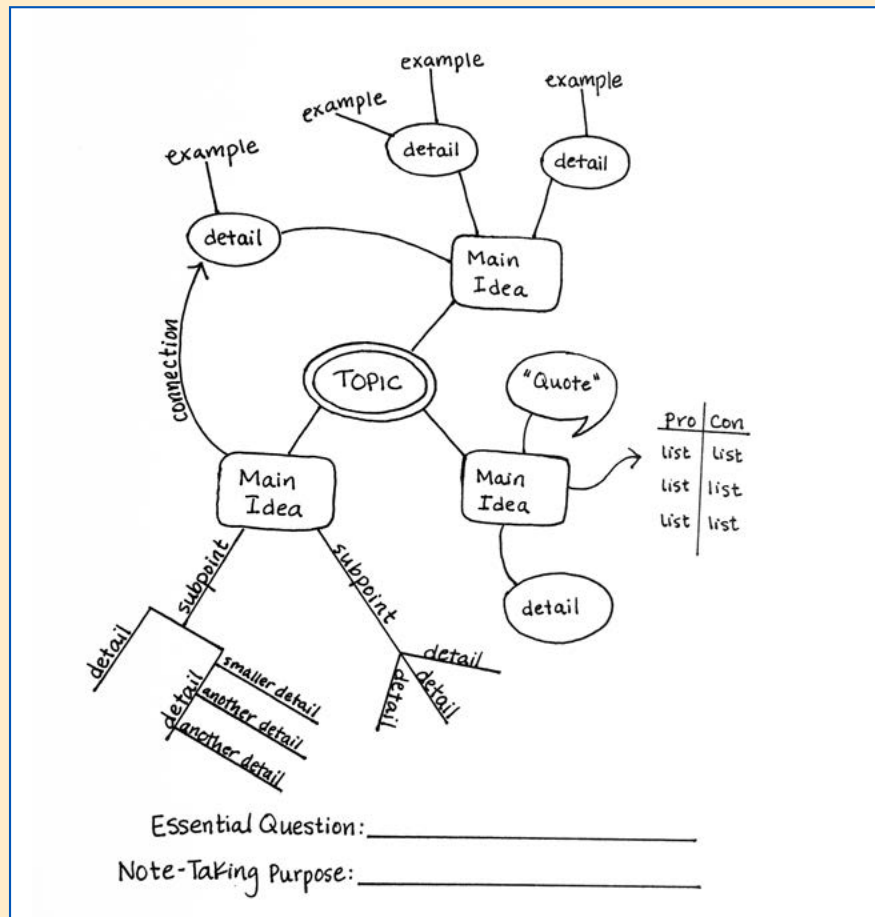
- Discuss the note-taking purpose and the Essential Question for the notes. Instruct students to write the Essential Question at the top of the notes page.
- If necessary, model for students how to set up their page for note-taking in a journal or notebook, on loose-leaf paper, or using word processing software.
 - When taking notes on paper, students may create their own note-taking pages with columns drawn with a ruler or by folding the paper. Column widths can be adjusted according to the note-taking purpose.
 - When taking notes digitally, students may use a template or set up their notes using tables.
- When students are learning a new format for note-taking, it is helpful to project a sample note-taking page for them to use as a model as they set up their own note pages.
- *Optional:* Students can leave space on the side for questions and thoughts during the Connecting Thinking phase of the focused note-taking process and space at the end of the notes for a summary reflection.
- Begin the notes with the students, modeling with a Think-Aloud or discussing with the students what sort of input should appear in each column of the notes.
- Allow students to check in with a partner throughout the note-taking phase to compare notes, adding to or correcting their notes if necessary.

Extensions

- To increase rigor, ask students to select their own format and headings based on the note-taking purpose. After an initial reading of a complex text, students can select the most applicable format for taking notes over that text.
- To increase scaffolding, provide the input for one of the columns in the notes, and allow students to complete the other columns on their own.

Variation

- Students can use a webbing strategy for note-taking. Mind maps or webs are nonlinear notes that use lines, shapes, colors, and arrows to show connections and relationships among ideas. Marzano, et al. (2008) and Dean, et al. (2012) have included webbing among the top note-taking strategies. The visual nature of webbing appeals to many students, and the structure allows for flexibility in recording the notes and in adding to and revising them. Larger ideas are usually placed in shapes in the center of the page, and elaborative details extend outward. Size and placement of shapes and words can signify the relative importance and relationships of ideas and concepts in the notes. The following example shows some common techniques and methods for webbing.



Two-Column Notes Ideas

Column 1	Column 2
Main Idea	Details
Claim	Evidence
Cause	Effect
Concept	Example
Term	Definition
Hypothesis	Results
Steps (in a process)	What the Step Looks Like (drawing or explanation)
Historical Event	Details
Character (in a story)	Traits
Philosopher's Name	Major Ideas and Works
Question	Answer
Vocabulary Word and Definition	Visual Representation, Sketch, or Example
Math Problem Solved (show work)	Explanation of the Steps to Solve It
Idea	Commentary (pros, cons, considerations)
Person	Accomplishments
Issue	Connection to Self, Another Text, or the World
Component (e.g., part of a cell, branch of government)	Function
Fact/Person/Term/Event/Work	Significance
Example	Non-example

Three-Column Notes Ideas

Column 1	Column 2	Column 3
First Source	Second Source	Connections
Differences of First Idea	Similarities	Differences of Second Idea
Vocabulary Term	Definition/Explanation	Visual or Sentence
Know	Want to Know	Learned
Description	Information	Importance
Something Being Observed	Observations	Conclusions
Name	Characteristics	Real-World Examples
Questions	Book Notes	Class Notes
Topic	First Source	Second Source
Cause	Effect	Importance
Pre-Reading Thoughts	Reading Notes	Post-Reading Thoughts
Person	Accomplishments	Challenges
Concept	Advantages	Disadvantages
Artwork and Artist	What the Book Says About It	Thoughts and Observations
Title	Summary	Themes
Claim	Evidence	Reasoning

INSTRUCTIONAL PRACTICE: Best Practices for Taking Notes

Teaching note-taking to students goes beyond format. Knowing and using best practices is how students learn to take organized notes that they can revisit again and again. This instructional practice is designed to teach students key best practices while allowing flexibility for additional best practices to be identified as students recognize how they can make their notes a useful learning tool.

Instructional Goal

- Students will learn best practices for note-taking by taking notes on an article about note-taking.

Resources

- *Best Practices for Taking Notes (Grades 4–6)* (Student Resource)
- *Best Practices for Taking Notes (Secondary)* (Student Resource)
- *Common Note-Taking Abbreviations and Symbols* (Student Resource)

Preparation for Instruction

- Make copies of *Student Resource: Best Practices for Taking Notes* (using the version appropriate to your students' grade level) and *Student Resource: Common Note-Taking Abbreviations and Symbols*.

Instructional Strategies

- Prior to distributing the student resources, tell students that today they will be learning some of the best techniques for becoming better note-takers.
- Ask students to quickwrite about what they already know regarding note-taking. What do they predict will be the most important ideas in the article?
- Have students share their quickwrites in pairs. Ask for a few volunteers to share their predictions with the class.
- Set up a page for note-taking using your preferred form. Cornell notes would be useful for this particular instructional practice. Write the Essential Question at the top of the page: *What are strategies I can use to take better notes in school?* Inform students that the objective for their note-taking is to identify the most effective techniques for note-taking so they can learn to take better notes themselves.
- Distribute *Student Resource: Best Practices for Taking Notes*. Ask students to read through the article one time and mark the text, underlining note-taking tips and circling the most important words in each paragraph.

- Have students share their markings of the text in pairs or triads. Discuss the best way to organize the information they learned in their notes.
- Ask students to take notes on the text, “Best Practices for Taking Notes,” keeping in mind the Essential Question. Provide students with *Student Resource: Common Note-Taking Abbreviations and Symbols* to use as a reference while they take notes.
- Students should keep these notes to use as a reference. As they learn the other phases of the focused note-taking process, they may wish to revise and revisit the notes to complete the learning process.

Extension

- Students can share their notes with the class and decide how to create a composite list of note-taking tips, which can be posted to a class website or a poster to display in the room as a reminder of what they learned.



Best Practices for Taking Notes (Grades 4–6)

An important success skill that all students should know is how to take good notes. Just like playing a sport or an instrument, being able to take good notes requires practice. Since notes can be taken while listening to a lecture, reading a piece of text, or watching a video, it's important to know how to take notes from each type of source. Don't expect your notes to be perfect the first time, but if you keep a few tips in mind, you will soon see your note-taking skills improving.

To start, it's important to understand why you are taking notes. When you understand why you're taking notes, you will have a better idea of what information you need to write down, and what you can leave out.

Don't worry about your notes looking perfect. You will be adding new ideas, scratching out mistakes, and creating connections in the margins. Although your notes don't have to be perfect, they should be legible. If you (or your teacher) can't read your own notes, they won't help you out much.

Also, when taking notes from a text, resist copying everything word-for-word. It's important to read the information, think about what it says and means, and then shorten the most valuable parts using your own words. Think and shrink! If you're worried that your interpretation of the text is incorrect, you can always cite where to find the text in your notes and revisit it to double-check.

On the topic of shrinking things, another note-taking shortcut is to use abbreviations when you can. Most good notes rarely contain complete sentences. Using abbreviations, symbols, tiny drawings, shapes, and arrows shorten the amount you have to write without changing the information. It's like text messaging on paper!

Additionally, when organizing your notes, don't overcrowd your space. Skip lines between main ideas and leave plenty of room on the page to add information later. If you don't, you'll have two problems: 1) you won't be able to tell where one idea ends and another begins, and 2) you won't be able to add additional notes or questions as you study.

How do you know if information is important enough to write down? Look (and listen) for phrases like "the most important" or superlative adjectives such as *best*, *biggest*, *most*, *least*, *worst*, and *main*. These words and phrases are red flags signaling valuable information you should probably add to your notes. If a speaker slows down, repeats something, spells out a word, or writes something on the board, pay attention and write it down. If a word or phrase is **bold**, *italicized*, or underlined, the writer meant for it to jump off the page for the reader to notice. Read the text surrounding that word carefully.

Taking good notes is a skill that takes time and practice to master. Just like riding a bike, it might be a bit bumpy in the beginning, but if you keep trying, you'll get the hang of it. And remember, taking good notes is a skill that will make you more college- and career-ready!

Best Practices for Taking Notes (Secondary)

Taking notes over a lecture, a piece of text, or a video is a task you will be asked to perform throughout your life as a student, so there's no better time to start developing and improving those note-taking skills than right now. Effective note-taking requires practice. Don't expect to be skilled at it immediately. By keeping a few pointers in mind, however, you will soon see your note-taking abilities improving, and you will be one step further on the road to student success.

One of the most important things to remember when you are taking notes is to keep your purpose in mind. When you understand why you're taking the notes, you have a better idea of what you need to have in your notes and what is okay to leave out. Listen or read carefully, and engage your brain to sift out the information and ideas that will be most useful to you.

Your notes are a work in process, not a finished product. Therefore, they shouldn't look perfect because you will be adding to them, scratching things out, correcting mistakes, supplying clarifying details, and using them as an active tool for learning. Even though your notes needn't be perfect, they should be legible. If you can't read your own notes, they won't help you out much.

Research by Marzano, Pickering, and Pollack (2008) indicated that taking more notes is better than taking few notes. Therefore, make your notes as complete as possible, but resist the temptation to copy down every word from your source. Verbatim, or word-for-word, notes are the least useful type of notes. It's a better idea to phrase things using your own words. Your brain should act like a big coffee filter. All the information from the source goes into your brain, but only the worthwhile stuff makes its way into your notes—and it doesn't look exactly the same as before your brain filtered it. Think about the information and shrink it into something more compact. Think and shrink! Be mindful of this when you are typing notes on a computer. Since most people type more quickly than they write by hand, it's much easier to type your notes verbatim from the source. Resist the urge to transcribe everything.

While you're shrinking things, shrink the length of what you write. Great notes seldom contain complete sentences; words and phrases are generally better. Use abbreviations, symbols, tiny drawings, shapes, arrows, and whatever else you find useful in order to keep the meaning while shortening the amount you have to write down (and the amount you have to reread later). Leaving out vowels or chopping off the ends of words can make your note-taking more efficient. *Whn u use thse abb., the msg is still clr, yes?*

The one exception to the rule that less is more occurs when you are taking notes that you plan to use for a piece of writing or another product where you might want to quote a source directly. If you find a particularly powerful quotation or a sentence or two that is worded so effectively that you want to keep the original wording intact, copy the text down verbatim in your notes. Make sure that you put quotation marks around the words you copy so that you can give the author credit when you use those words in your product. Also, it's a good idea to keep track of where the source came from, the author or speaker's name, and the page number, if available, so you can cite the sources of your research.

Look and listen for clues to help you determine what information is most important. Phrases such as “the most important” or “the key feature” and superlative words such as *best*, *biggest*, *most*, *least*, and *main* are red flags signaling information you probably want to have in your notes. Similarly, when the speaker slows down, repeats something, spells out a word, or writes on the board, pay attention and write it down. Textbooks and informational texts sometimes put important terms or items in bold; include those boldface or highlighted words in your notes, perhaps underlining them to show they are important. A phrase like “One reason...” or “The first...” might tip you off that a list is about to begin.

As you’re taking notes, think about how the information is organized. What are the main points? What are the supporting details? How does it all fit together? Try to make the arrangement of ideas on your note page reflect the organizational pattern. Some note-takers like to use an outline format or bullets, with big ideas closer to the left margins and less-important details indented. Others create mind maps or webs with big ideas in the center and smaller ideas on the arms that reach outward. Skip lines between main ideas, and leave plenty of room on the page to add information later. If your initial notes are one crowded mass of words, you’ll have two problems: 1) you won’t be able to tell what the main ideas are, and 2) you won’t be able to add additional notes or questions as you study.

Finally, a splash of color can make it easier to find information in your notes later. Consider using a different pen color for important names, terms, or other key information. Perhaps you would find it useful to change pen colors each time your notes move to a new concept or section. Be careful, though, that your color-coding doesn’t distract from the most important task, which is paying attention to the information and trying to get the key ideas into your notes in a clear and retrievable manner.

Note-taking is a life skill that takes a lifetime to master. We can all continue to practice and improve the ways we take notes. In time, the process gets easier and more efficient. Keep working at it, and soon you will be enjoying the benefits of taking notes that help you work and learn more effectively in and out of school.

Common Note-Taking Abbreviations and Symbols

Instead of writing...	Consider using this shortcut...
against	vs.
and	& / +
and so on	etc.
approximately, around	c. / approx.
at	@
bad	X / ☹
because	bc
causes, leads to, produces	→
century	C
decrease, fall, decline	↓
ditto (same as above)	“ ”
equals, same as, means	=
not equal to, not the same	≠
example	ex. / e.g.
foot/feet	ft.
good	✓ / ☺
important	impt / *
increase, rise, growth	↑
in other words, that is	i.e.
interesting	!
is less than, less	<
is more than, more	>
man, men, male	♂
woman, women, female	♀
maximum	max
minimum	min
money	\$
negative	-
number	#
people	ppl.
per (3 weeks per year)	/
positive	+
question	Q
answer	A
uncertain, possibly	?
square	sq.
therefore	∴
very	v.
extremely	vv.
with	w/
without	w/o
yard(s)	yd.

Making the Note-Taking Process More Accessible: What Educators Can Do

Though it is important to strive toward the goal of students becoming self-sufficient note-takers, while students are learning how to take notes, educators can provide scaffolding to make the process accessible to all students. Appropriate support strategies will vary depending upon the age and developmental needs of the students; however, as students approach independency, providing fill-in-the-blank outlines or copying notes verbatim is strongly discouraged as these common practices do little to develop students' skills for discerning what information is important and how that information should be organized in their notes. If the instructor makes all the decisions, the students will never become autonomous note-takers.

There are, however, some ways in which educators can help make the note-taking process more student-friendly:

Provide a Preview: Prior to beginning note-taking on a lecture, a video, or a text, explain the organizational structure of the material the students are about to encounter. This allows them to focus on the content itself rather than trying to determine how the pieces fit together in an overall plan. It will also give them a better idea of how they could structure their notes. Example: *“The video you are about to watch begins with an overview of the Enlightenment and then examines the life and work of the most prominent philosophers of the age. The discussion of each philosopher will have three parts: an overview of his or her life, an explanation of the philosopher’s most important ideas, and a description of the long-term impact of the philosopher’s beliefs.”*

Advance Organizers: David Ausubel described advance organizers as instructional materials “presented at a higher level of abstraction, generality, and inclusiveness than the information presented... to provide ideational scaffolding for the stable incorporation and retention of the more detailed and differentiated materials that follow” (as cited in Marzano et al., 2008, p. 117). Providing a skeletal outline or a graphic organizer (such as a very general mind map) can give students a structure to help them make sense of the material they are about to learn. It is essential that the advance organizer does not contain too much information, so that the onus of the note-taking rests on the students.

10–2–2: Break up the information students are taking notes on into chunks to allow students processing time; this could include information from working collaboratively in groups, watching a video, listening to a lecture, reading, etc. Stop every 10 minutes to allow students time to process their notes. Provide 2 minutes for students to confer with a partner about the notes they have taken, revising, adding to, deleting, questioning, and clarifying what they have written. Then provide 2 minutes for individual reflection and revision of the notes before moving on. This is also a good time for students to identify words that should be added to the communal word bank. This word bank can be posted on the walls of the classroom as well as online, providing students access to the word bank outside of the classroom. Allow 5 minutes at the end of class to respond to questions generated by students during the processing time. The opportunity to

compare notes with a peer allows the learner to observe others' note-taking styles and practices and provides reinforcement of the material students are learning.

“Wait, wait! Hold on!”: The fast pace of some lectures causes panic and frustration for students who are unable to catch everything that is said. In some cases, students feel familiar enough with the instructor that the class will cry out in unison for the lecturer to slow down. Be aware of students' note-taking abilities and vary the lecturing speed accordingly, but do not let students dictate the pace of the lecture, as this is inappropriate behavior in an academic setting. Instead, teach students to indicate in their notes the places where they were unable to write all they needed or missed something. Encourage them to insert a blank to fill in later or to indicate a gap with a question mark. Provide time during or after the lecture for students to compare notes (perhaps using the 10–2–2 structure described above). If students are unable to fill in the missing information by consulting with a classmate, encourage them to ask the lecturer at the appointed time at the end of the lecture or class time.

Modeling Note-Taking: Ask students to take notes about a portion of a lecture, a video, or a reading passage, such as an informational article or textbook excerpt. After students have completed their notes, allow students to view instructor-taken notes on the same content. Emphasize that every note-taker's notes will look different and that the example is not necessarily the only “right” way to take notes. Talk through the notes with the students, pointing out the note-taking techniques used and discussing the decisions about what was included, what was left out, and how the material was organized.

Think-Aloud Note-Taking: Use a document camera or project your screen to display real-time note-taking for the students. Take notes over a source while verbalizing the thinking underlying the note-taking. As with any form of writing, taking notes in front of the students and modeling the best practices allows students to see the mental work that occurs during the note-taking process.

PAT List: Nancy Motley (2013) encourages instructors to provide students with a PAT (“Pay Attention To”) List prior to a reading assignment. This gives students a heads up about what is important for them to focus on in a particular text. A PAT list might look like this: “As you read about the early river-valley civilizations, pay attention to each civilization's main accomplishments and lasting impact.”

Word Banks: Before lecturing, provide students with a visible word bank of key terms, names, and concepts they will want to include in their notes. Word banks help students focus on essential ideas and assist with fluency of note-taking for students struggling with getting the ideas on the page. As another option, a class can create a “communal word bank” containing words students identify as important throughout the course of a unit. This shifts the ownership of identifying vocabulary from the instructor to the class as a whole. Consider posting this word bank in the classroom and online, as doing so can give all students the ability to add to and edit it, and provide access to the word bank outside of class. This is a powerful strategy to embed into the 10–2–2 note-taking structure.



INSTRUCTIONAL PRACTICE: Side-By-Side Note Comparison

Providing students with the opportunity to compare their notes to a mentor text or model version of notes taken on the same topic allows for rich discussion, reflection, and the identification of strategies to employ with future note-taking. For students to see notes taken by the content expert, their teacher, they have a better understanding of some of the nuances that occur when taking notes in one subject area versus another.

Instructional Goals

Students will:

- Compare pre-prepared examples of notes to identify effective techniques of note-taking.
- Generate a list of strategies for effective note-taking and consider how to implement them into their own note-taking practice.

Preparation for Instruction

- Have students read part of an informational text, view a video, or listen to a lecture and take their own notes.
- Prepare two one-page sets of notes (in the note-taking format you are asking the students to use) on the source the students took notes on:
 - *Example 1:* Showcase less desirable note-taking techniques (no writing space, complete sentences, no hierarchy of information evident, copied verbatim, too much information, etc.).
 - *Example 2:* Utilize as many effective note-taking techniques as possible. (Notes should be shorter, easier to read, and include color and images. This example should be less overwhelming and show more evidence of processing while taking notes.)

Instructional Strategies

- Organize the class into groups of approximately four students. Give each group a copy of both sets of notes. Allow groups to make observations about which set of notes is more useful, better for learning, and easier to study from, and why.
- Ask each group to use a large piece of paper, whiteboard, or online collaborative space to generate a list of “good” note-taking techniques they noticed from the better example or they deduced from the other example.
- Conduct a Gallery Walk in which students visit all groups’ lists. Ask students to put a checkmark, a small colored sticker dot, or their initials next to the strategies they like best.
- Using the students’ marks as “votes,” generate a class list of top practices for note-taking. Post this master list in a prominent location or make a copy available online to the whole class so that students can reference the list when they are taking notes.
- Ask students to complete a written reflection about the effectiveness of the notes they took on the same material and write an individual goal for their next note-taking experience.

Variations

- Using a graphic or content-based illustration, create a mentor set of notes on a piece of chart paper that includes important objects or pieces of the graphic. Keep your mentor notes hidden from the class and recreate a set of student-generated notes based on their observations. Reveal the mentor set of notes in a side-by-side comparison to see if students were able to identify important objects. You may then choose to facilitate a whole-class guided reflection debrief about the comparison, what information was confirmed, and what information should be added to the notes.
- After students have taken notes, provide structured time for students to work with a partner to put their notes side by side and compare formats, the organization of information, use of abbreviations and symbols, as well as the usefulness of the information captured in their notes as compared to their partner's notes.



INSTRUCTIONAL PRACTICE: Guided Reflection

Integrating time in class to have students reflect on their notes—what is working, what should be improved, and how to take notes within a particular content area that will be a more powerful learning tool—is crucial for students to become proficient note-takers. Note-taking within content areas varies as the usage of notes changes from classroom to classroom. Educators can help students hone their note-taking skills in math or science or art when building time into class for reflection. Additionally, this reflection time provides another opportunity to revisit content, which further cements students' learning of both the note-taking process and the content.

Instructional Goals

Students will:

- Reflect on the effectiveness of their note-taking techniques.
- Make a personal plan for note-taking improvement.

Preparation for Instruction

- Use this instructional practice in class after students have taken notes individually on a lecture or informational text, such as a chapter in a textbook.

Instructional Strategies

- Ask the students to take out their notes and a piece of paper or open a document on their device to record their reflections to the following questions.
- Read the following questions and prompts to the class, giving students time to reflect in writing about each.
 - First, I'd like you to look at your notes as a whole. How easy are they to read? How difficult will it be to locate information in the notes or use the notes as a tool for studying at some time in the future? Explain what features make your notes easy or challenging to read.
 - Part of the note-taking process involves going back to your notes to add other information and to revise the notes to ensure they are clear. If you are working on paper, did you leave enough room to add information? Is there plenty of white space? Reflect on how your notes will function in the processing phase.
 - Next, think about your own thinking while you were taking notes. On a scale from 1 to 10, with 10 being completely engaged, how engaged was your brain while you were taking notes? In other words, how often were you thinking and processing while you were taking notes, and how often were you mindlessly writing down words? How do you know?
 - Effective notes are organized in a way that allows the reader to tell how important each idea is. What is the organizational pattern of your notes? How do you show which ideas are main ideas and which are less important details? Comment on the effectiveness of the organization of your notes.

- One way to make your notes more efficient is to write what needs to be written in the shortest way possible. The best note-takers don't write in complete sentences, and they include abbreviations, symbols, drawings, mini-organizers (such as T-charts or Venn diagrams) and other shortcuts to speed up the writing process and communicate more succinctly (or briefly). This makes writing the notes easier and cuts down the time required to reread the notes later. What did you do to shorten your notes without leaving out essential information? Where could you have shortened things further?
- Read back through your notes and consider the quality of the content. Assuming you want to use these notes to recall the information you learned during the reading (lecture), did you include too little, too much, or just enough information in your notes?
- Now look back at what you have written about your notes. Based on your reflections, what changes would you like to make to continue to improve on your note-taking skills?
- Consider having students share their final reflections with their classmates either as a whole class or by using a small-group collaborative strategy like Stand–Share–Sit or Team Huddle.

Extension

- To increase scaffolding, display the following sentence stems as you move through each part of the reflection. Sentence stems are especially useful for students learning English or students who are working on strengthening academic language usage.
 - My notes are easy/difficult to read because...
 - During the processing phase of the note-taking process, my notes will be useful because...
 - On a scale from 1 to 10, I would rate my mental engagement ____ because...
 - The organization of my notes is (very, somewhat, not) effective because...
 - I shortened my notes by... I could shorten them further by...
 - My notes have (too little, too much, just enough) detail because...
 - In order to improve as a note-taker, I will...



THE FOCUSED NOTE-TAKING PROCESS: Phase 2 – Processing Notes

Think about the notes. Revise notes—by underlining, highlighting, circling, chunking, questioning, adding, deleting—to identify, select, sort, organize, and classify main ideas and details. Evaluate the relative importance of information and ideas in the notes.

“Taken together, the relationship between repetition and memory is clear. Deliberately re-expose yourself to the information if you want to retrieve it later. Deliberately re-expose yourself to the information more elaborately if you want the retrieval to be of higher quality. Deliberately re-expose yourself to the information more elaborately, and in fixed, spaced intervals, if you want the retrieval to be the most vivid it can be. Learning occurs best when new information is incorporated gradually into the memory store rather than when it is jammed in all at once.”

John Medina, *Brain Rules: 12 Principles of Surviving and Thriving at Work, Home, and School*

Many a college grad can tell nightmarish stories about notes that sat unlooked-at for weeks, until the night before the midterm. When the note-taker at long last picked up the notes to study, they found that the words and ideas had left their brain sometime in the distant past. In some cases, portions of the notes no longer made sense to the learner, but, unfortunately, the acceptable time for asking clarifying questions had ended long ago. Faced with a midterm the next day, the student had to not only reinterpret the notes, but also relearn all the material under the pressure of a time crunch. Pulling an all-nighter may have been the learner’s only option at that point, and whatever was learned while cramming for that test didn’t stick around for long in the student’s brain that time, either.

Students and educators frequently underestimate the importance of repetition in the note-taking process. The work of Hermann Ebbinghaus (1913) underscores the brain’s propensity to forget (see *Educator Resource: The Rate of Forgetting*). Without reviewing and thinking about notes, the note-taker’s knowledge of the content drops to 58% only 20 minutes after the information is learned. After a day, the learner retains only 33.7% of the information. Ebbinghaus discovered that revisiting and interacting with the content multiple times reactivates the learning and that the more frequently the interaction occurs, the less time is required to return to a state of full recall. These findings make the phases of AVID’s focused note-taking process crucial aspects of students’ learning.

Too frequently, students complete a note-taking task and put their notes away, abandoning them until right before a test. In the meantime, they aren’t learning, they aren’t able to use the material daily in class, they aren’t able to make connections in their learning from day to day and week to week, and they have a herculean task ahead of them when it is time to actually do something with the material in their notes. When students understand that most of the learning from their note-taking is lost within 24 hours if they don’t review and think about the notes, they recognize the importance of the second step in the AVID focused note-taking process: timely processing of notes.

Students who view their notes as finished products are reluctant to dive back into them to look more closely at the material with a critical eye. By developing a growth mindset (Dweck, 2008) in relation to note-taking, students learn to value the process itself as worthy of continual improvement. It is critical for educators to convince students of the value of revisiting their notes thoughtfully to deepen their understanding and make their notes increasingly effective learning tools. It is crucial that authentic opportunities for revisiting notes are an integral component of lesson design and delivery. Collaborative online platforms allow teachers “to work alongside students in the editing process

and observe their students' thinking and work in progress" (Purcell, Buchanan, & Friedrich, 2013).

This section of the chapter will discuss two important aspects of processing notes:

1. Revise the notes to add or delete information and to identify main ideas, key words, and important vocabulary.
2. Sort and classify main ideas and details.

These aspects may be taught and practiced with students separately or combined in an all-encompassing lesson on the processing of notes. However students learn these techniques, educators must help them understand the importance of processing their learning in a timely fashion—within the first 24 hours after taking the notes—so that the effects of Ebbinghaus's forgetting curve do not kick in. Educators can facilitate this by providing time within the instructional period for students to process notes and by replacing other homework assignments with students' processing of their notes. This overt attention to revisiting notes in meaningful ways shows students that the practice is valuable in the eyes of the instructor, and, in turn, students will come to value it themselves.

As with any educational process, this phase of note-taking will need to be modeled and practiced with students and then, as students become more accustomed to processing their notes, educators can gradually release the responsibility to the students. The ultimate goal is automaticity so that processing of notes becomes a routine and essential part of students' note-taking practice.

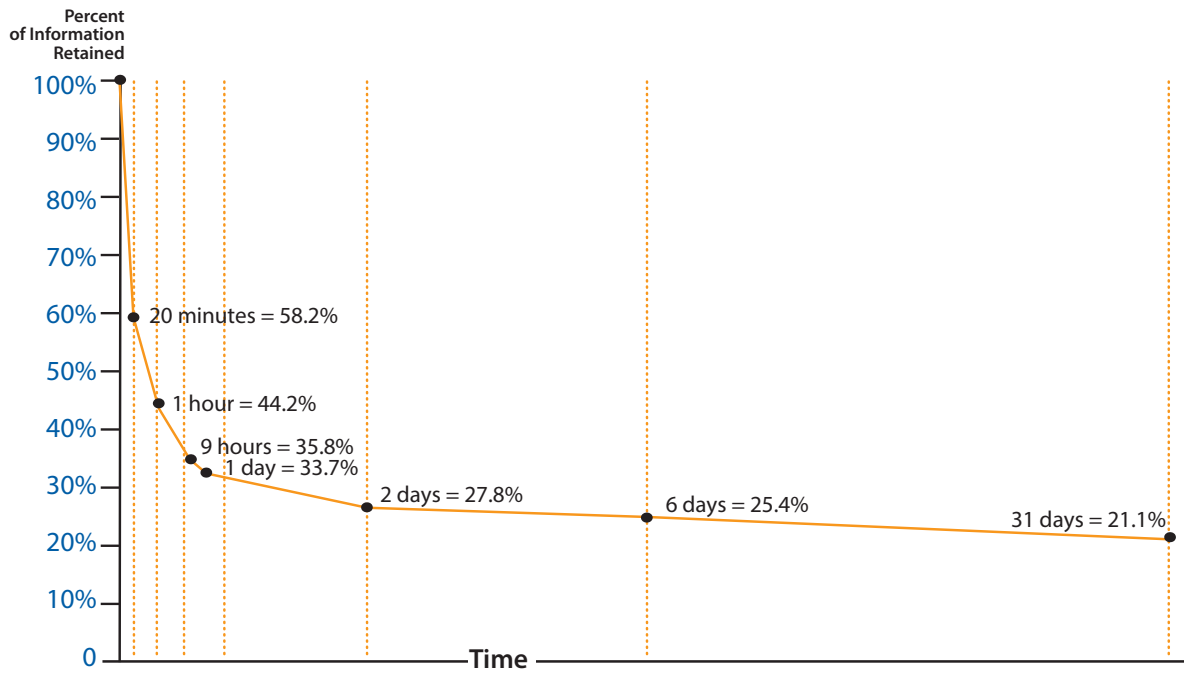
Resources

- *The Rate of Forgetting* (Educator Resource)
- *Note Revision Checklist* (Student Resource)
- *Note Revision Checklist Template* (Educator Resource)

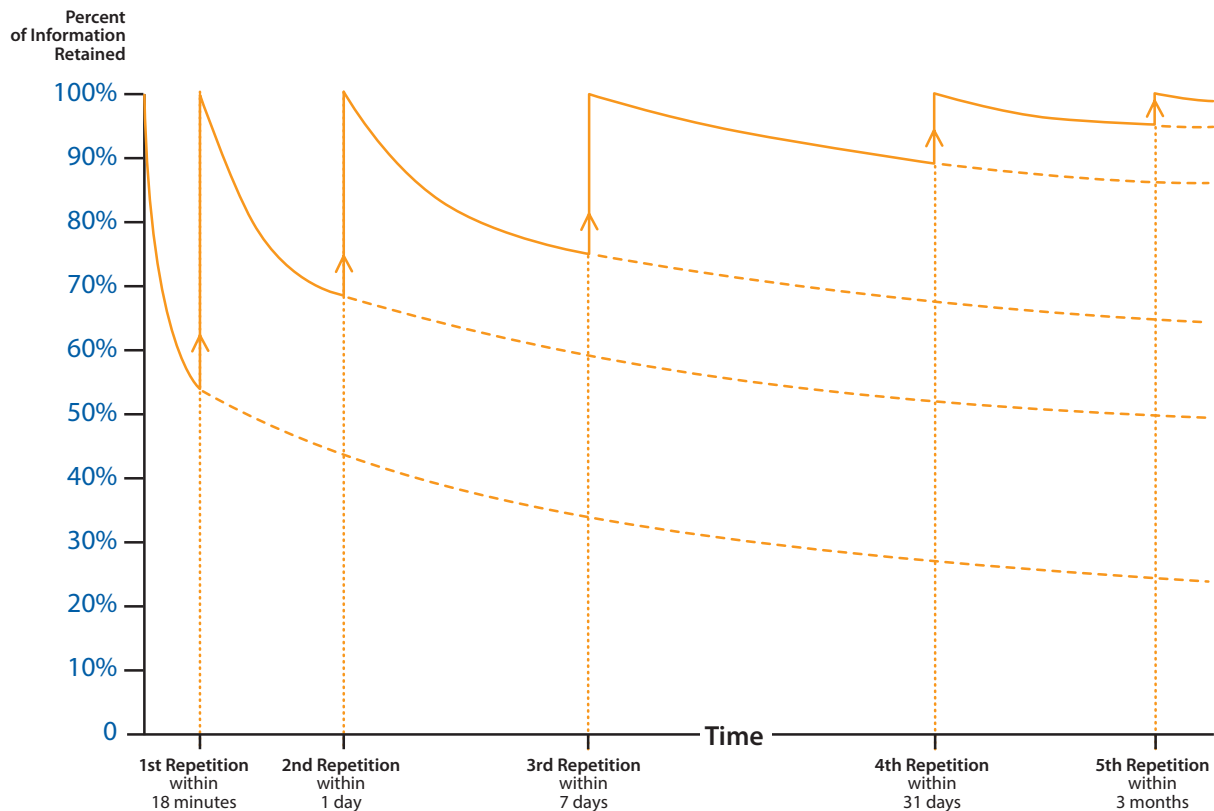


The Rate of Forgetting

Rate of Forgetting Without Study/Repetition



Rate of Forgetting With Study/Repetition



Ebbinghaus, H. (1885). *Memory: A contribution to experimental psychology*. New York, NY: Dover.

Revising Notes

Why this is important: Teaching students to go back into their notes and update them as their understanding of the content deepens provides an opportunity for review and revision. The review-and-revision process must be intentionally taught. Because forgetting begins immediately after learning, revising should take place as soon as possible after the notes are taken. Giving students specific elements to include in revision provides learners something tangible to look for as they deepen their skills through this cognitive process.

How it works: During this step, learners will dive back into their notes to identify what is important (key ideas, terms, people, etc.) and to clarify the existing information to make the notes a useful learning tool. Relying on classmates as a primary source for filling in missing information or returning to the original source for clarification, the learner will make sure notes are complete, clear, and ready to use in the applying learning phase of note-taking. Note revision is a messy process as students add, subtract, or mark information by underlining, color-coding, crossing out, or amending. The evidence of revision serves as a visible indication of students' thinking about their learning.

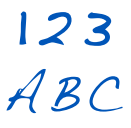






Key strategies for revising notes include:

- Identifying and marking key terms or vocabulary words
- Color-coding to indicate important people, events, places, or works
- Crossing out extraneous or unimportant information
- Adding information to fill in gaps, clarify, or elaborate
- Indicating important information and points of confusion that require clarification or further explanation
- Marking most important ideas or main points
- Representing information in visual or symbolic ways to help with recall
- Annotating notes by paraphrasing large or wordy chunks of material

Student Resource: *Note Revision Checklist* can serve as a guide for learners to revise their own notes or to collaborate with a partner to revise.



Note Revision Checklist

Completed	Symbol	Revision
<input type="checkbox"/>		1. Number the notes for each new concept or main idea.
<input type="checkbox"/>		2. Circle vocabulary/key terms.
<input type="checkbox"/>		3. Highlight or underline main ideas.
<input type="checkbox"/>		4. Fill in gaps of missing information and/or reword/rephrase in red.
<input type="checkbox"/>		5. Delete/cross out unimportant information by drawing a line through it with a red pen.
<input type="checkbox"/>		6. Identify points of confusion to clarify by asking a partner or teacher.
<input type="checkbox"/>		7. Identify information to be used on a test, essay, for a tutorial, etc.
<input type="checkbox"/>	Visual/Symbol	8. Create a visual/symbol to represent important information to be remembered.

Note Revision Checklist Template

For developing note-takers, provide one or two revision expectations at the beginning of the year, and slowly add more as students gain understanding and independence around the process of revising notes.

Completed	Symbol	Revision
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

Sorting and Classifying Main Ideas and Details

.....

The two steps in the processing phase—revising notes, and sorting and classifying main ideas and details—do not have to occur separately. Overlap between the two is natural and expected. Educators may find it useful to introduce the two parts as separate lessons at first, but eventually most students will revise their notes and sort and classify main ideas simultaneously as they revisit their notes after the initial note-taking step.

Why this is important: Teaching students to sort main ideas and details into categories—identifying the connection between those categories—and to relate them to the Essential Question enhances their understanding and ability to use knowledge.

Creating visual representations and titles for sections helps students synthesize their learning, understand the structure of their ideas more deeply, and forge lasting mental connections. Seeing connections and categorizing ideas requires inquiry and encourages students to examine their notes at a level beyond the content-knowledge level.

How it works: Students spend time categorizing the big ideas in their notes. This causes them to reflect on the overall organization of their notes and to recognize similarities and differences among the ideas. Collaboration can be incorporated if students mark notes together or explain their markings to one another.

- Identify the main ideas and mark them in the notes by underlining them.
- Color-code main ideas according to category. Also use colored arrows, lines, or symbols to indicate relationships among the ideas in the notes.
- In the process of noticing the patterns and major ideas in the notes, chunk the notes by dividing them into sections, separating one from another with a horizontal line or other marking if the notes are nonlinear.
- Create a title and/or a visual to represent each chunk of the notes. Visuals could represent similarities or differences, or they could represent processes (such as a model for how something works).
- If taking notes digitally, use tags and heading styles to chunk the notes and make them easy to search.

Facilitating the Processing of Notes: What Educators Can Do

The following is a collection of strategies and ideas to use for planning and implementing the processing phase of the focused note-taking process.

Content Re-creation: Students attempt to re-create the content of the lecture, video, or reading using the key words they highlighted in their notes to guide them. Re-creations can be oral (as in a Pair-Share) or written (as in a quickwrite).

Guided Paraphrase: Use a Think-Say-Write strategy to paraphrase using guiding questions posed by the instructor. Students think for 30–60 seconds, share with a partner, receive feedback, and then add to their notes in writing. Possible topics for guiding questions include:

- How would you rewrite a definition of a term in your own words?
- What would be an example of _____?
- How is _____ related to _____?
- What might be confusing about this topic to someone else?
- Why is this important or significant?
- What are some other ways to say this?

Timed Note Share: After students have divided the notes into chunks, give students one minute each to select one chunk and share their answers to the following questions with a partner or trio:

- The most important thing I learned in this chunk of my notes is...
- Something that is still a little foggy is... /Something I want to know more about is...

Educator Modeling: The instructor models how to process notes by conducting a Think-Aloud using a pre-prepared set of notes projected in front of the class. Modeling is useful for students who are learning how to process notes. Another option is to have a student volunteer model processing of notes for the class. The students can process and mark the notes with the help of the class or can show notes with evidence of processing to get class feedback. Modeling can occur at the end of a lesson, as a stand-alone lesson, or prior to beginning the next lesson to make connections between one set of notes and new material.

Revision as Homework: The processing phase of note-taking can be meaningful homework. This teaches the habit of revisiting notes after class and shows that the instructor places value on the notes and on the note-taking process. The instructor should follow up the next day with a processing strategy (30-Second Expert, comparing revision with a partner, Timed Note Share, etc.).



Key Word Brainstorm: As a collaborative way to initiate the initial processing of notes, use the Whip-Around collaboration strategy to allow students to brainstorm in round-robin fashion and highlight key words and vocabulary in their notes. The words can be compiled to create a digital or paper community word bank to use for further writing or speaking opportunities or lessons about the topic.

Top Five: Ask students to identify and mark (highlight or circle) the top five most important words or terms in the notes. Then have students explain to a partner why they selected those words. An optional extension is to ask students to mark the next five words in importance if the notes are complicated. Add the words to a digital or paper community word bank.

30-Second Expert: To review content of notes after processing, ask students to form pairs. Partner A explains one topic he or she is an “expert” on for 30 seconds using the stem, “One topic from my notes that I have expert understanding of is...” Partner B then paraphrases what Partner A said (for 30 more seconds) with the stem, “According to (expert’s name), _____. Did I get it right?” Partners then switch roles and complete the process again.



THE FOCUSED NOTE-TAKING PROCESS: Phase 3 – Connecting Thinking

Think beyond the notes. In this phase of the focused note-taking process, return to the notes with an eye for inquiry. The aim of this phase is to take the learner into the realm of higher-level cognition in several ways.

“Any fact becomes important when it is connected to another,” wrote Italian novelist Umberto Eco in *Foucault’s Pendulum*. This quotation implies that most facts are not important in isolation. To take it a step further, notes don’t become important to students’ learning until they begin to make connections. The way to make any learning stick is to make thoughtful connections to see how the parts fit together, how they relate to the wider world, and how the information might be useful to the learner. To maximize the effects of the learning and minimize Ebbinghaus’ forgetting curve (1913), these connections should be made within 24 hours of the original note-taking.

Asking Questions: One way for note-takers to access higher-level thinking is by creating questions of their own about their notes. The typical model of classroom instruction involves the instructor as the creator and poser of questions; flipping the model puts all the mental work on the students. It allows them to reach new depths of understanding by activating their natural curiosity about their own learning.

Asking questions during the note-taking process involves students interacting with their information (individually or collaboratively) and developing questions about their notes. If students are using Cornell notes, the left column provides space for the students’ questions. Two- or three-column notes can be set up with a column designated for students’ questions after the note-taking occurs. If the note format itself does not have space for the questions, students can write the questions on sticky notes, in the margins, or add them between the lines of their notes in another color of ink. When taking notes digitally, students can use the commenting feature to add their questions. Students who chunked their notes while they were processing should be encouraged to write at least one question for each chunk. Rereading the main ideas and circled key words can generate thinking that leads to questions.

The most powerful learning occurs when students ask higher-level questions Scardamalia and Bereiter (as cited in Chin, 2001) called “wonderment questions,” which fall into five categories:

- Comprehension questions seeking an explanation of something not yet understood
- Prediction questions (“What would happen if...”)
- Anomaly detection questions, where students try to resolve some cognitive conflict caused by the information or to address an identified discrepancy or anomaly in their notes
- Application questions, where students ponder the usefulness of the information
- Planning or strategy questions, in which students contemplate what to do or where to go next



Many students do not naturally gravitate to wonderment questions and instinctively dwell in the realm of basic information questions. With prompting and practice, however, most students will ask wonderment questions, which lead to deeper learning and potentially to more complex understandings. Sharing of questions in collaborative groups allows inquisitive students to model inquiry for their peers (Chin, 2001).

In some cases, basic information and comprehension questions may be desirable. If the note-taking purpose is merely to record information the student needs to memorize for an assessment, students may find that writing questions that take them to a more analytical level are not useful for their intended task. Generally, though, the goal of instruction—and thus the goal of note-taking—should be to go beyond the literal, informational level.

Adding Original Thinking: The second way for learners to tap into higher-level thinking and inquiry and make connections during this phase of the note-taking process is to add their own thoughts to their notes.

To do this, note-takers will return to their notes once again with several questions in mind:

- What is missing? What do I not know from these notes that I would like to know? How can I find those things out?
- What is alike? Where can I make connections within parts of my notes?
- Where does this fit with what I already know? How does this relate to other concepts or content?
- What patterns or trends do I find in these notes? Do they appear elsewhere? Where?
- What do I think? Do the ideas here challenge or confirm what I already know or believe? What is my emotional response?
- What are additional examples? What examples can I add to my notes to help me understand or remember these concepts better?
- What might I do with the information? How will this be useful for my note-taking purpose or in my wider learning experiences?

Memorizing the above list is unnecessary. These questions are merely cues for the type of thinking note-takers should use as they add their own thoughts and make connections in their notes. Students can jot their thoughts in their notes in a new color or in an area of the notes devoted to connecting thinking.

The process of connecting thinking requires students to dive deeply into their notes and think about the content from as many perspectives as possible. In doing this, students may become aware of their gaps in understanding, the specific places that are giving them trouble. Educators should encourage students to identify and focus on trouble spots—called points of confusion in the AVID tutorial process—rather than becoming overwhelmed because they “don’t understand” their notes. When students clarify what they understand, they can more effectively pinpoint the spots that are giving them difficulty and determine how to clarify those points of confusion.

Facilitating Connecting Thinking: What Educators Can Do

The following is a collection of strategies and ideas to use for planning and implementing this phase of the focused note-taking process.

Q.C.C. (Question, Confusion, and Connection): Ask pairs of students to come up with one Costa's Level 2 or 3 question about their notes, one point of confusion they would like to have cleared up (or, if they understand everything, something they would like to know more about), and one connection to something they have learned or experienced in this class, in another class, or in their own lives. Then, send each group member to meet with a member of another group to share their findings and add new ideas to their own notes.

Costa's Collaboration: Instruct students, in groups, to come up with a good Level 1, Level 2, and Level 3 question about each chunk or section of the notes. For an optional follow-up strategy, have students form new groups containing one student from each original question-writing group. Then, have each member pose his or her questions as the basis for small-group exploration of the notes. For students who are emerging question writers, or perhaps aren't familiar with Costa's Levels, scaffold by providing whole-class or group lessons that familiarize students with each level. Scaffolds for early elementary or emerging students might include sentence stems or question sorts until they can proficiently and independently identify and create their own leveled questions.

Collaborative Study Groups: A variation of the tutorial process in the AVID Elective, Collaborative Study Groups are student-led inquiry groups where the scholars work together to address one another's points of confusion. The difference between a Collaborative Study Group and a more traditional tutorial session is that students do not answer questions or solve problems for one another. Instead, classmates support one another by asking guiding and clarifying questions to help each student learn to solve his or her own problems. It is important for the study groups to involve self-discovery on the part of each participant so that all students work to understand their own mistakes or knowledge gaps and grow as learners.

- Instructors should have students complete some pre-work prior to meeting with their study groups. Each of the students should identify a problem or concept from the notes for which they need additional clarification or desire a deeper understanding. Zeroing in on a point of confusion will help focus the study session.
- During the study group, students take turns asking their questions to the group and thinking through the concept or problem on a whiteboard while the group asks questions to help the student presenter arrive at a solution.
- All group members should take notes during the study group session, and all should end the process by reflecting on what they have learned.



“I Wonder...” Round-Table: Students studying notes on a common topic work collaboratively in groups to generate questions by beginning with “I wonder...” statements about the notes. After allowing group members some time to peruse their notes and ponder, ask the students to proceed around the table sharing their statements while one group member records the responses on paper or digitally. Do not stop to discuss or critique the responses. Allow enough time for groups to go around the table several times. When time is called, students should review the list of “I wonder...” statements and write some questions they would like to discuss about the notes. The questions generated could be used for discussion in the groups that posed them, they could be switched with other groups, or they could become the questions for a full-class discussion or Socratic Seminar.

Socratic Seminar: Although a Socratic Seminar is often a final purpose for notes, this collaborative, inquiry-based discussion process would also be useful for students to use after they create questions about their notes.



Effective Scaffolding and Excessive Scaffolding

In an effort to scaffold the note-taking process for students, some educators provide subject headings or questions for students before the actual note-taking commences. In Cornell notes, for instance, educators may be tempted to provide printed copies of note pages with questions or cues in the left column and ask the students to take notes that answer those questions in the space on the right-hand side of the page.

Over-scaffolding the note-taking process in this way is risky business because the educator has eliminated the need for the Processing and Connecting Thinking phases by doing the thinking for the students. Predetermining the left-side questions or section titles deprives students of the opportunity to think through and make sense of the notes for themselves.

More effective scaffolding leaves much of the cognitive role for the students by providing the necessary guides for the process. Word banks, collaborative discussions about the notes, and advance organizers can support students in the note-taking process while still building the essential skills students need to become autonomous note-takers.

A Word About Instructor-Provided Notes

As our world advances technologically, it is inevitable that students will at times receive electronic copies or printouts of someone else's notes. Websites make chapter notes from textbooks readily available. Some university professors make copies of the class lecture notes available online. Presenters often provide their audience with copies of their slides from a presentation. What does this mean for the note-taking process?

Obviously, pre-written notes do not improve students' note-taking skills. They eliminate the valuable thinking and processing of the content that occurs while taking notes. Although printing out lecture notes is an efficient practice to ensure all participants have the same information, it does not encourage cognitive engagement during the lecture itself. If students use pre-written notes, it is crucial that the instructor involve the learners in subsequent steps to process, connect, summarize, and apply the learning. Providing opportunities for students to pause for individual and collaborative processing during the lecture itself will offer them some of the thinking opportunities that would occur during their own note-taking.

Students receiving or locating pre-written notes will likely believe that they have been given a valuable shortcut. It is up to the instructor to underscore the importance of deliberate completion of the other steps in the note-taking process. The Curve of Forgetting cannot be thwarted if the students have not learned anything to forget in the first place.



INSTRUCTIONAL PRACTICE: Layering Notes

Layering is a strategy that clarifies the second and third phases of the focused note-taking process by asking students to revisit their notes multiple times, each time with a different purpose in mind. Each layer added to the notes is completed in a different color, so a student's interactions are visible to the instructor and to the student. This not only allows the instructor to assess the quality of the student's thinking and interaction with the content, but it also solidifies learning about the process and the content itself. Additionally, the use of color enhances retention for visual learners.

Instructional Goals

Students will:

- Add layers of thinking to their notes to process and connect their thinking.
- Use colors to show their repeated interactions with their notes.

Preparation for Instruction

- If taking notes on paper, students will need a variety of colored pens, colored pencils, highlighters, and markers to use for the note-taking layers.
- Determine what specific layers you will ask your students to complete and in what order. Decide whether students will follow oral instructions for each layer or whether they will receive written instructions to complete at their own pace.
- For maximum benefit, this process should be completed over several days. Some layers could be completed for homework.

Instructional Strategies

- Provide time for students to complete each layer by adding to their notes with a different color.
- Work on one layer at a time. Consider whether developing learners need more structure or fewer components to add during each layering session, compared with more experienced note-takers.
- *Optional:* Have students keep a key to indicate what color is used for each layer.
- Suggestions for possible layers include the following.
 - **Additions:** Students add to their notes.
 - Record vocabulary, ideas, or concepts they missed the first time or have learned since they wrote the notes.
 - Add markings to indicate important points, vocabulary, or ideas (underline, highlight, star, etc.).

- **Clarifications:** Students review their notes and add to them to clarify points, concepts, or ideas.
 - Look up and add definitions, examples, or synonyms to words or phrases that are unclear or unfamiliar.
 - Rephrase a confusing concept in their own words.
 - Add symbols or pictures to make concepts more clear.
- **Main Ideas:** Students circle, underline, or highlight main ideas in the notes, or write main idea key words in the notes or margins.
- **Concepts and Examples:** Students review concepts and add specific examples to notes.
 - Add examples provided by the textbook.
 - Add examples from teachers, peers, or students' own life experiences.
 - Add examples from things they have read, watched, seen, or heard.
 - Add visuals or memory triggers that connect to the concepts.
- **Making Connections:** Students revisit their notes and think about ways they can connect and apply their learning.
 - Text-to-Text: Identify how the subject, content, or ideas relate to other texts, concepts, or learning they have encountered.
 - Text-to-Self: Identify how the subject, content, or ideas connect to their own life or personal experiences.
 - Text-to-World: Identify how the subject, content, or ideas connect to the world around them.
 - Text-to-Purpose: Identify how the subject, content, or ideas connect to the learning purpose for these notes.
- **Wondering and Questioning:** Students incorporate inquiry into the note-taking process.
 - Develop questions from the notes and add them to the notes. Use Costa's Levels 2 and 3 for higher-level inquiry.
 - Add "I wonder..." questions to the notes.
 - If relevant for the note-taking purpose, turn the headings and section titles into questions that are answered by the notes.
- Collaboration can enhance any phase of the layering process by allowing students to work on the layering or share their markings in pairs or small groups. Students can discuss one another's questions and wonderings together to deepen thinking about the notes.

Variation

- To increase scaffolding, reduce the number of requirements for each layer, have the students create fewer layers, provide more specific parameters, or allow students to process and add to their notes with a partner or small group. The instructor can also model the layering process on a set of sample notes using a document camera.



THE FOCUSED NOTE-TAKING PROCESS: Phase 4 – Summarizing and Reflecting on Learning

Think about the notes as a whole. Pull together the most important aspects of your notes and your thinking about them to craft a summary that captures the meaning and importance of the content and reflects on how the learning helps you meet the note-taking objective.

Before the note-taking process is complete, students should take time to view the notes as a whole and think about the big picture: *What have I learned and how will this be useful?*

Summarizing is crucial to students' understanding of a source because it requires learners to sift through the information, sort out the big ideas from the less significant details, consider how the pieces fit together, and communicate the big idea in several succinct sentences. Effective summarizing asks students to make strategic decisions about what to delete, what to substitute, and what to keep, all of which requires students to process the information at a fairly deep level (Marzano et al., 2008). Summarizing in itself is an effective strategy, but in isolation it is not as powerful as structured summarizing and summarizing in conjunction with other cognitive strategies (Dean, Hubbell, Pitler, & Stone, 2012), as occurs in AVID's focused note-taking process.

Reflection is an often-overlooked component of note-taking, though notes are used as a processing tool in everyday life and numerous professions. In this capacity, note-taking "contributes to the carrying out of a range of intellectual processes, such as making judgments, resolving issues, and making decisions" (Boch & Piolat, 2005, p. 102). Adding a reflective element to the formal closure of the note-taking process helps students identify how the notes will be useful to them. The note-taker once again considers the note-taking objective and engages in metacognitive reflection about the notes' relevance. This helps the student answer the question, "Where do I go from here?"

INSTRUCTIONAL PRACTICE: Creating a Summary Reflection

Like all phases of note-taking, summarizing must be explicitly taught. Instinctively, students want to skip this step because it seems superficial or “too easy,” but when students take the time and effort to review their notes and synthesize the information into a concise statement that addresses the Essential Question, they are working harder than they realize. It is easy to summarize poorly; to summarize well requires practice and lots of brain power.

Chapter 2: Learning Through Writing provides more extensive explanation and instructional practices for summarizing. The upcoming section of this chapter focuses on how to teach students to write an effective summary reflection about notes they have taken.

Instructional Goals

Students will:

- Develop their summary writing skills.
- Effectively reflect and summarize their learning about the content they have taken notes on.

Resources

- *How to Create a Summary Reflection* (Student Resource)
- *Examples of Summary Reflections* (Student Resource)

Preparation for Instruction

- Have students read part of an informational text, view a video, or listen to a lecture and take their own notes.
- Determine whether this will be done as a whole group, in small groups of 3–4, or in student partnerships.
- Prepare two summaries (using *Student Resource: Examples of Summary Reflections* as a resource)
 - Example 1: Showcase a less desirable summary reflection.
 - Example 2: Utilize *Student Resource: How to Create a Summary Reflection* to craft a well-written summary reflection.

Instructional Strategies

- Model for the whole group, have students work in groups of 3–4, or have students partner up to analyze the two example summary reflections. Have students make observations about which summary reflection is a better summary of the learning that took place in the notes, and assess why the selected reflection is better.



- Working as a whole group or within smaller groups, have students generate a list of “good” summary reflection techniques they noticed from the better example. These observations should go on a large piece of paper, whiteboard, or online collaborative space.
- Conduct a Gallery Walk where students visit all groups’ lists. Ask students to put a checkmark, their initials, a smaller colored sticker dot, or a small sticky note next to the strategies for writing a summary reflection that they like best.
- Using the students’ marks as “votes,” generate a class list of top practices for summary reflection writing. Post the class list in a prominent location or make a copy available online so all students can reference the list when they are writing their summary reflection.
- Have students write a summary reflection of the notes they took, using the classroom-created guide.

Variations

- Use *Student Resource: How to Create a Summary Reflection* to develop a summary reflection frame for students to use as a scaffold.
- Distribute *Student Resource: How to Create a Summary Reflection* and use the gradual release of responsibility model to take students through the process of writing a summary reflection, releasing one chunk of the student resource at a time.

How to Create a Summary Reflection

Follow these steps to write a reflective summary at the end of your notes:

Identify the important ideas.

- Revisit your notes, paying attention to the layers you have added during the note-taking process—additions, text markings, questions, etc.
- Focus on each chunk of your notes:
 - What is the big idea of each chunk?
 - Which vocabulary is essential to your overall understanding of this content? Mark those words, or consider making a word bank containing the words you want to use in your summary.
- Think about how the chunks fit together.
 - What is the big-picture structure of the notes? How do the chunks of content relate to one another?
 - What phrases or vocabulary show the relationships between the ideas in your notes? Generate a list of these words (which may not be ones already in your notes), such as *opposes*, *supports*, *justifies*, *proves*, *concludes*, etc.
- Think about what belongs in your summary and what does not.
 - Your summary should be less specific than your notes, but not so vague that it leaves out the important big ideas.

Write your summary.

- Review the Essential Question that guided your note-taking. Your summary should be an answer to that question.
- Your summary should be written in complete sentences. You will probably have one sentence for each chunk of your notes, but that may vary depending on the content and organization of your notes.
- Capture the big ideas and the essential details to create a big picture of the content. Use the most important words and phrases from your word bank.
- Make sure your summary explains the content, not just the format.
- Your summary might begin with a sentence that communicates the overarching idea of the entire note page.

Add a reflection.

- Review the note-taking purpose. Consider why you took the notes and how you will need to use what you learned in the notes.
- At the end of your summary, add a reflection that expresses how these notes will be useful to you or what your future steps should be concerning the content in these notes.
- Remember that the reflection is for you. This is your chance to make your learning meaningful, to remind yourself of the thinking you have been doing, to consider how this learning impacts you, and to personalize your learning.
- Do not merely write that your notes will be useful; explain *how* they will be useful.

Examples of Summary Reflections

Good Summary Reflections

Example 1: The three types of rocks differ in the ways they were formed. Igneous rocks are formed from crystals that developed from the exothermic process of the cooling of magma. Sedimentary rocks are formed as small pieces of broken-off rock (clasts) or organic matter, such as shells and bones, settle in layers and are compacted. Metamorphic rocks change form as the materials that form one kind of rock become unstable and change in an effort to restore equilibrium. Careful examination of the appearance and materials of rocks I observe in the lab will help me determine how the rocks were formed, which gives me an idea of the rock's type.

Example 2: In classical Greece, performances of tragedies were public events involving all members of the polis. The original Greek tragedies were performed in a competition among playwrights at the Festival of Dionysus. The most important tragic playwrights were Aeschylus, Sophocles, and Euripides. Rules for tragedies were defined by the philosopher Aristotle in the *Poetics*. Plays begin in *medias res* (in the middle of things) and observe the unities of time, place, and action. Understanding the contributions of the playwrights and the rules for tragic plays will help my group as we compose our Greek-style tragedies. We need to study how they made their plays so thrilling without showing violence on stage or having multiple locations.

Example 3: In the article, Gina Barreca defends her belief that English majors are ready to do any job they want after graduating from college. Many parents fear that degrees in the humanities are useless and that English is something anyone can do. Barreca says that English majors are prepared for understanding our complex world, for sniffing out misinformation, for making complex arguments, and for preserving our shared culture. Also, English majors harness the power of words, so they can perceive more deeply and communicate more powerfully—the marks of any effective leader. This article was short on facts, and Barreca (an English professor) has a clear bias, but it will be a worthwhile source for my essay on the importance of the humanities. I will want to find additional resources that give more concrete evidence to support my position.

Example 4: You can't add fractions if the denominator (the number on the bottom) is not the same in all the fractions you are adding. Once you have made a common denominator for all the fractions, you simply add the numerators (the numbers on top) together. At the end, you have to check to see if you need to simplify the fraction. This process is not very difficult as long as I remember the thing about the common denominators and don't just add the top and the bottom across.

Weak Summary Reflection

This chapter talks about the Mongol Empire of Chinggis Khan. It tells about the life of Chinggis Khan and how he came to power. Then, it explains how the empire developed and what life was like under his rule. Finally, the chapter tells about his death and how the empire got divided. This was interesting information that will be very useful for me in my life.

Consider: What makes the above example less useful and effective than the preceding examples?

INSTRUCTIONAL PRACTICE: Cooperative Summaries With GIST Statements

Giving students opportunities to practice and reflect on how to write exemplary summary reflections will improve their abilities to summarize and will increase the effectiveness of the reflective component in achieving the learning objective. This instructional practice allows students to work together to mine their notes for important words and use those words in their summaries. Using the GIST strategy (see pages 80–81 in Chapter 2: Learning Through Writing for more explanation) encourages students to expand their thoughts and to use language with intentionality and precision.

Instructional Goals

Students will:

- Work in pairs or trios to write a summary reflection on a set of notes using GIST statements.
- Practice the steps involved in reviewing their notes to generate an effective summary.

Preparation for Instruction

- Have students take notes on a shared source (such as a lecture, article, or book chapter) and complete the first three phases of focused note-taking: Taking Notes, Processing Notes, and Connecting Thinking.
- Make sure each student has a set of notes. Each group will need blank paper, or an online document shared with all group members, for creating word banks and drafting.

Instructional Strategies

- Have the class form groups of 2–3 students.
- Ask the class to chorally read the Essential Question for the notes.
- Instruct students to talk in their groups about the main idea of the entire set of notes, and write an introductory or topic sentence for the summary on their summary reflection.
- With students still in their groups, instruct them to collaboratively discuss their notes chunk by chunk and complete the following tasks.
 - Identify each chunk of notes. If not everyone in the group has the same chunks of information this is a good time for them to collaborate around what the important chunks of information are and revise their notes accordingly.
 - Identify the main idea of each chunk of information in their notes.
 - Make a small shared word bank with the most important words or phrases in each chunk in the top half of each page, one page per chunk of notes. There might be some variety in the words or phrases students identify as being important. This is a good time to have them look back at the Essential Question and learning objective(s) for the notes to determine which words or phrases are the best choices.



- Groups should review the main ideas and word bank for each chunk.
- Instruct students to write a 20-word GIST summary statement for each chunk of notes in the bottom half of each page. Encourage them to incorporate words from the word bank and explain the main idea of the chunk in one meaning-packed sentence.
 - Have the group write the statement for the first chunk together.
 - Have students work on the remaining chunks individually. If there are not enough chunks for all members of the group to work individually, allow them to pair up on one.
 - Students should feel free to revise their GIST summaries by crossing out, inserting, and substituting words to make their sentence more powerful, clear, or specific.
- Group members should review each other's work and share feedback to verify that the content meets their approval and then revise together as needed.
- Prior to writing the learning reflection, review the note-taking purpose. Then, ask each member of the group to complete one of the following sentence stems and share aloud with the rest of the group.
 - *This information will help me achieve my note-taking goal by...*
 - *I will be able to use this information to...*
 - *One important thing about this information is...*
 - *Now that I understand this, my next step is...*
- Groups should use the responses to assist them in drafting their groups' final reflection, which should be 1–3 sentences in length.
- Share the groups' summary reflections with the class. To do this, consider:
 - Projecting a set of notes in front of the class.
 - Having groups read theirs aloud.
 - Sharing final reflections in a Gallery Walk.
- Debrief by having students engage in a quickwrite on the following prompt, and then discuss responses as a class: *What makes an effective summary? What makes an effective reflection? What will I want to remember about this skill?*

Extensions

- To increase rigor, encourage students to add words and phrases to the final GIST summary statements to show how the parts connect to one another as they put the pieces together to create the final versions of their summary reflections.
- To increase scaffolding, the class could generate the word banks as a whole group and work through the chunks in pairs.

THE FOCUSED NOTE-TAKING PROCESS: Phase 5 – Applying Learning

Use the notes. Put your notes to use as a resource or learning tool to help you apply or demonstrate what you have learned.

The focused note-taking process is not meaningful unless the notes serve a purpose and help the note-taker achieve that purpose. Otherwise, there was no need to take the notes in the first place. Going through the phases of the focused note-taking process prepares students to apply their learning. Often, students try to apply learning without having done the prior work; this makes it difficult to deepen learning. When students reach the final phase and see the fruits of their labors, the notes have a satisfying “so what” to them. This is when educators achieve buy-in from their students about the worth of the note-taking process in its entirety.

With deliberate planning, educators can design learning experiences in which note-taking plays a vital part in student success. Ensuring that learning opportunities require a depth of understanding makes the phases of focused note-taking essential. Students who have thought *about* their notes, thought *beyond* their notes, and reflected on their notes as a whole are prepared for cognitively rigorous work involving the content or topic they are learning. Students can use their notes for many purposes, including the following:

- Socratic Seminars
- Philosophical Chairs
- Debates
- Problem solving
- Researching a topic
- Writing (narrative, argumentative, or expository)
- On-demand writing
- Reporting findings to others
- Project proposals
- Speeches
- Instructing others
- Panel discussions
- Authentic projects

In an academic setting, notes are often used as a study tool to prepare for a test or exam. Students can be notoriously bad studiers if left untrained. Most, when asked how they would study for a test, respond, “I would go over my notes.” When asked how they would study for an especially difficult test, these same students reply, “I would go over my notes more times.” Passive studying is ineffective, and more passive studying just wastes more time. Learning occurs when it is effortful: by repeated retrieval, connecting to prior learning, expressing the learning in one’s own words, extracting underlying principles or rules, and approaching the material in a variety of ways (Brown, Roediger, & McDaniel, 2014). The focused note-taking process requires such effortful learning and contributes to the effectiveness of studying. This section will address ways to help students improve their study efforts and apply the learning captured in their notes.

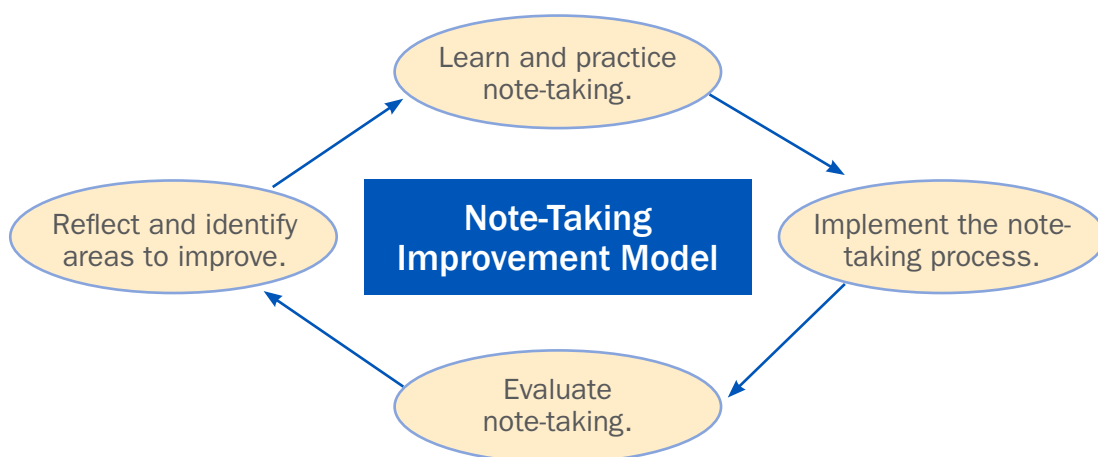
Throughout the note-taking process, we have asked students to consider the note-taking objective or purpose as they create and interact with their notes. Ideally, students have been preparing for the use of their notes from the outset, as their efforts have been focused with the end goal in mind. At this point, students are ready to use their notes to show what they have learned and make all this effort worthwhile.



Evaluating Notes

Unless note-taking is an objective in your course, as it would be in the AVID Elective, grading students' notes is probably not desirable. The "test" of effective notes is whether they are useful in the Applying Learning phase of the note-taking process.

Since focused note-taking is a skill that requires continual improvement, classroom efforts to teach students the process should follow this Note-Taking Improvement Model:



Students learn and practice the techniques of the focused note-taking process with their classmates. When they are able, students implement the process for a specific learning purpose, with or without guidance from the instructor. The goal is eventual independence from the instructor. After students attempt focused note-taking, the students and educator can all evaluate the effectiveness of the note-taking process. Evaluation leads to self-reflection and a plan for improvement, targeting specific skills or areas. The improvement likely involves more learning and practice, so the cycle begins again. As the complexity of the required note-taking increases and students use notes for new learning purposes, the cycle may require revisiting to continually improve.

Educator Resource: Focused Note-Taking Reflection Tool for Educators provides guidance for teachers to evaluate their own note-taking instructional progress.

Student Resource: Focused Note-Taking Reflection Tool (Elementary) or (Secondary) can be used to encourage students to assess their note-taking and identify areas for further improvement.

Resources

- *Focused Note-Taking Reflection Tool for Educators* (Educator Resource)
- *Focused Note-Taking Reflection Tool (Elementary)* (Student Resource)
- *Focused Note-Taking Reflection Tool (Secondary)* (Student Resource)
- *20 Questions: A Note-Taking Self-Quiz (Elementary)* (Student Resource)
- *20 Questions: A Note-Taking Self-Quiz (Secondary)* (Student Resource)
- *Note-Taking Reflection* (Student Resource)
- *Strategies for Studying* (Student Resource)

Focused Note-Taking Reflection Tool for Educators

0 No Focused Note-Taking	1 Educator-Modeled	3 Guided Practice (Educator/Student Collaboration)	5 Independent Practice (Educator-Facilitated/Independent Learner)
TAKING NOTES: FORMAT AND CONTENT			
<p>Instructor does not require students to take notes or does not plan for or require a specific note-taking format.</p>	<p>Instructor plans, selects, and models note-taking format for students. Instructor provides students with content for note-taking or provides fill-in-the-blank note-taking format.</p>	<p>Instructor collaborates with students for input on note-taking format and content. Instructor scaffolds note-taking process through modeling, asking questions, and providing opportunities for student-to-student interaction.</p>	<p>Instructor <i>monitors</i> student design of note-taking format. Instructor <i>monitors</i> student note-taking content.</p>
<p>Students do not take notes, or notes have no intentional format.</p>	<p>Students take notes in the format directed by the instructor. Students copy instructor-provided notes word for word.</p>	<p>Students collaborate with instructor for note-taking format. Students begin to paraphrase and organize notes with support and guidance from the instructor and/or peers.</p>	<p>Most students independently: 1. select note-taking format and 2. set up notes, sometimes working collaboratively with peers. Most students independently: 1. take notes, 2. paraphrase content, and/or 3. use <i>hierarchy-based organization</i>.</p>
OBSERVATION NOTES			

Monitoring occurs as the teacher moves through the classroom, actively checking for appropriate note page formats based on the purpose of the note-taking. The teacher asks questions while monitoring to push students in their thinking regarding format and usability of notes.

In *hierarchy-based organization*, students use bullet points, arrows, starring, spacing between ideas, or other organizational structures or visual aids to demonstrate how similar content is chunked together for the sake of referring to it when needed. This can also include starring, highlighting, circling, or underlining key ideas in the notes.

0 No Focused Note-Taking	1 Educator- Modeled	3 Guided Practice (Educator/ Student Collaboration)	5 Independent Practice (Educator- Facilitated/ Independent Learner)
PROCESSING NOTES			
<p>Instructor does not provide opportunities for students to revise their notes.</p>	<p>Instructor models strategies for note revision.</p>	<p>Instructor guides and supports students in their interactions with notes through use of additions, revisions, and/or clarifications.</p>	<p>Instructor provides <i>opportunities</i> (time) for students to:</p> <ol style="list-style-type: none"> 1. interact with their notes, add to or modify notes, and/or 2. exchange ideas about format and/or content with peers. <p>Instructor monitors progress.</p>
<p>Students do not interact with focused notes.</p>	<p>Students interact with notes as modeled by the instructor.</p>	<p>Students work with instructors and peers to add to, revise, and clarify notes under the guidance of the instructor.</p>	<p>Working independently, most students add to notes through one or more of the following:</p> <ol style="list-style-type: none"> 1. highlighting or underlining important points, 2. identifying main ideas, and/or 3. using symbols or pictures to enhance the content.
OBSERVATION NOTES			

..... The instructor plans for and embeds structured segments into class time so students have *opportunities* to either work independently or work with a partner or small group.

<p>0 No Focused Note-Taking</p>	<p>1 Educator-Modeled</p>	<p>3 Guided Practice (Educator/Student Collaboration)</p>	<p>5 Independent Practice (Educator-Facilitated/Independent Learner)</p>
<p>CONNECTING THINKING</p>			
<p>Instructor does not provide opportunities to make connections.</p>	<p>Instructor models making connections to content for the class by providing questions and giving examples.</p>	<p>Instructor prompts students to make connections with opportunities for writing “I wonder...” questions, thinking about the notes at a level beyond simple comprehension, and adding original thinking to notes.</p>	<p>Instructor provides <i>opportunities</i> (time) for students to use their notes to:</p> <ol style="list-style-type: none"> 1. exchange ideas, 2. discuss student-generated questions, and 3. link learning beyond the notes themselves.
<p>Students do not revisit notes to write questions or make connections.</p>	<p>Students interact with notes as directed by the instructor.</p>	<p>Students work with instructor to write higher-level wonderment questions and add original connections.</p>	<p>Most students interact with notes through one or more of the following:</p> <ol style="list-style-type: none"> 1. layering 2. making connections, and/or 3. adding thoughtful questions unprompted by the instructor.
<p>OBSERVATION NOTES</p>			

0 No Focused Note-Taking	1 Educator- Modeled	3 Guided Practice (Educator/ Student Collaboration)	5 Independent Practice (Educator- Facilitated/ Independent Learner)
SUMMARIZING AND REFLECTING ON LEARNING			
Instructor does not ask students to summarize their notes.	Instructor models reviewing notes, writes a summary for the class, and reflects on the usefulness of the learning.	Instructor guides students to draft summaries through a thoughtful review of their notes and to reflect on the usefulness of their new learning.	Instructor provides opportunities for students to summarize and reflect on their new learning.
Students do not write summaries or reflect on their learning.	Students review notes and write a summary reflection along with the instructor.	Students draft summaries including key concepts and terms and reflect on the usefulness of their new learning, under the guidance of the instructor.	Most students independently write summaries: <ol style="list-style-type: none"> 1. including key concepts and terms and 2. reflecting on their new learning.
OBSERVATION NOTES			

<p>0 No Focused Note-Taking</p>	<p>1 Educator-Modeled</p>	<p>3 Guided Practice (Educator/Student Collaboration)</p>	<p>5 Independent Practice (Educator-Facilitated/Independent Learner)</p>
<p>APPLYING LEARNING</p>			
<p>Instructor does not provide a purpose for note-taking.</p>	<p>Instructor:</p> <ol style="list-style-type: none"> 1. walks students through the purpose for note-taking and 2. models reviewing of the notes for the class. 	<p>Instructor guides students in:</p> <ol style="list-style-type: none"> 1. evaluating the effectiveness of their notes related to meeting their note-taking purposes and 2. modifying their strategies to improve. 	<p>Instructor provides opportunities for students to independently:</p> <ol style="list-style-type: none"> 1. evaluate the effectiveness of their notes to meet their note-taking purposes and 2. modify their strategies to improve.
<p>Students are asked to write notes for the sake of writing notes, not for use as a learning tool.</p>	<p>Students observe the modeling being done by the instructor and follow the instructor's directions to use their notes for the specified purpose determined by the instructor.</p>	<p>Students work with the instructor and a partner or small group to utilize their notes for studying or other specified purposes.</p>	<p>Students successfully use their notes to demonstrate their learning in different ways for a <i>variety of purposes</i>.</p>
<p>OBSERVATION NOTES</p>			

... *Purposes for note-taking can include a test or quiz, writing assignment, research project, collaborative group work, jigsaw, Socratic Seminar, Philosophical Chairs, class discussion, or any other opportunity for students to show what they have learned.*

Focused Note-Taking Reflection Tool (Elementary)

Phase	Newbie	Developing Skills	Like a Pro
Taking Notes	<p>Set-up: I have to follow my teacher's example notes.</p> <p>Taking: I copy information from the book or speaker, using the same words.</p> <p>Adding: I don't really think about how my notes look on the page.</p>	<p>Set-up: I can set up my notes on my own if I know what format to use.</p> <p>Taking: I shorten information from the book or speaker, and use some of my own words.</p> <p>Adding: I try to leave breaks and space between sections of my notes.</p>	<p>Set-up: When given an option to choose, I can select a format that helps me learn and remember information best.</p> <p>Taking: I use abbreviations and symbols combined with my own words to create the shortest notes possible without losing the meaning.</p> <p>Adding: A person looking at my notes could see how the ideas are organized. I leave plenty of room for later additions.</p>
Processing Notes	<p>Reviewing: I underline, highlight, or circle words without really thinking about it. I don't really study my notes.</p>	<p>Reviewing: I revisit my notes once to mark main ideas, clarify, layer and add information, or chunk information.</p>	<p>Reviewing: I revisit my notes often to add new information or clarify new understandings. Each visit adds a layer of understanding.</p>
Connecting Thinking	<p>Thinking: If I write a question in my notes, it's a question I already know the answer to, or know where to find the answer.</p>	<p>Thinking: I write questions about parts of my notes I don't understand, or want to know more about.</p>	<p>Thinking: I combine my curiosity, prior knowledge, and information from my notes to write many questions that I am eager to find the answers to, and to share my learning with others.</p>
Summarizing and Reflecting on Learning	<p>Summarizing: I rarely write a summary of my notes. I don't really know how to, or why I would.</p>	<p>Summarizing: I know a summary needs to have the main idea of my notes. The main idea should answer the Essential Question or learning target.</p>	<p>Summarizing: Writing a summary allows me to think about the most important parts of my learning, and to paraphrase it into my own words. Rereading my summaries helps me study and remember information.</p>
Applying Learning	<p>Applying: I sometimes use my notes to help work on other projects, but not often.</p>	<p>Applying: My notes are a useful study tool. They help me when I get stuck or when I need to study for a test.</p>	<p>Applying: Using my own notes is what makes me a successful student. I can use my notes in many different ways to become a better student.</p>

Focused Note-Taking Reflection Tool (Secondary)

Phase	Newbie	Developing Skills	Like a Pro
Taking Notes	<p>I can follow the format for my notes if my teacher shows it to me.</p> <p>My notes contain complete sentences, and I often copy or use the same words as the speaker or text.</p> <p>I don't really think about how my notes look on the page.</p>	<p>I know how to use several formats of notes but pretty much stick to the same one unless my teacher tells me what to do.</p> <p>My notes are shorter than the original. I use some abbreviations and try to write in phrases rather than sentences.</p> <p>I try to follow an organizational pattern and leave breaks between sections of my notes.</p>	<p>I consider the purpose for my notes and select the best format based on what I will use the notes for.</p> <p>I'm always thinking about how to get the ideas into my notes in the shortest way possible while keeping the original meaning.</p> <p>A person looking at my notes could see how the ideas are organized and distinguish the main ideas from the details. I leave plenty of room for later additions.</p>
Processing Notes	<p>If my teacher tells me to revise my notes, I underline, highlight, or circle words without much thought. Otherwise, I rarely go back to my notes until I have to study or use them.</p>	<p>I revisit my notes once after taking them to mark main ideas, clarify, add information, and divide them into chunks.</p>	<p>I realize my notes are a work in progress and routinely revisit them to make them as clear and complete as possible. Each new encounter with my notes adds a layer of written interaction.</p>
Connecting Thinking	<p>The answers to questions I write on my notes can usually be found in the notes. I don't spend much time thinking about how the information in my notes relates to me or to ideas outside my notes.</p>	<p>I write questions in my notes that help me understand the content and think about it more deeply. I add my thoughts about how the ideas in my notes relate to me, to other learning, and to the wider world.</p>	<p>The questions I write about the content are ones I would enjoy discussing intellectually with others to get a deeper grasp on the topic. I try to make as many connections outside the notes as possible to link my learning to a bigger picture.</p>
Summarizing and Reflecting on Learning	<p>I wouldn't summarize my notes if I didn't have to. I don't find that it helps me understand what I've studied. I sometimes make general reflections at the end of my summary.</p>	<p>I write a clear summary that captures the main ideas of the notes. I include a reflection at the end to show how my notes will help me reach my learning objective.</p>	<p>Writing my summary provides me with another opportunity to review my notes, this time to capture the most important ideas to make sure I understand the big picture. I include several sentences of thoughtful reflection because I know that reflection makes learning meaningful.</p>
Applying Learning	<p>I sometimes find my notes to be useful in studying or in doing things to show what I have learned.</p>	<p>My notes help me to be successful on assessments and learning experiences that require me to demonstrate my learning. They are a useful study tool.</p>	<p>My notes—with their layers of interaction—are the key to my success in applying what I have learned to a new situation. The process of note-taking has increased my long-term understanding, and I can apply my learning in whatever ways I am asked.</p>

20 Questions: A Note-Taking Self-Quiz (Elementary)

Answer the following questions about how you take notes when reading from a textbook or other written source (like an article). Choose “yes” or “no” based on what you are most likely to do while reading and taking notes.

While Reading:

1. Do you read in a quiet place, free from television, computers, or other distractions?	yes	no
2. Do you look ahead through the text to see how it is organized (headings and subheadings)?	yes	no
3. Do you label your columns in a way that helps you focus on information you are reading to find?	yes	no
4. Do you think about what you’re reading while you’re reading it?	yes	no
5. Do you leave extra lines between main ideas so you can add more information later?	yes	no
6. Do you use abbreviations or symbols as shortcuts?	yes	no
7. Do you shorten sentences from the text into main ideas or your own words?	yes	no
8. Do you use headings from the text to help organize your notes?	yes	no
9. Can another person read your notes?	yes	no
10. Do you separate your main ideas from the details?	yes	no
11. Are your notes free from unimportant details?	yes	no
12. Do you read for signal words (“the most important reason...,” “another cause...,” “however...,”) to find important details to add to your notes?	yes	no
13. Do you add sketches or charts to help you understand vocabulary or concepts better?	yes	no
14. Do you add color to help organize, highlight, or layer information?	yes	no
15. Do you include graphic organizers in your notes to help organize your thinking?	yes	no
16. Do you review your notes?	yes	no
17. Do you change and revise your notes, if needed?	yes	no
18. Can you create questions about topics or concepts you don’t understand?	yes	no
19. Can you create questions to record what you hope to learn more about?	yes	no
20. Can you write a summary of your notes that answers the Essential Question?	yes	no

Count how many “yes” answers you recorded.

- 0–5 = Emerging or Beginning Note-Taker
- 6–10 = Developing Note-Taker
- 11–15 = Proficient Note-Taker
- 16–20 = Distinguished Note-Taker

Making a “Yet” Mindset Plan:

Review the questions that you answered with a “no.” Highlight or star one, two, or three of those questions that represent skills you would like to improve on during this school year. You may choose to include those skills as part of your short-term and/or long-term goals (weekly, trimester/semester, or yearly goals). Record these goals in your planner or another location where you will see them often. Remember, if you are not where you would like to be on the note-taking chart, you just aren’t there yet. Keep practicing, and your note-taking skills will improve! (McKinney, 2017).

20 Questions: A Note-Taking Self-Quiz (Secondary)

Answer the following questions about your reading and note-taking from a textbook. The “best practice” answer for each question is “yes.” If you’re struggling with note-taking and studying, consider ways you might change some of your “no” answers to “yes.”

While Reading:

1. Do you preview the chapter before reading to get an overview of how the author has organized the text?
2. Do you read in an environment that is free of distractions (no television, music, text messages, computer interruptions, etc.)?
3. Do you think while you read? (You should be actively working to construct meaning and understand as you read.)
4. When taking notes on paper, do you leave white space in your notes so you can add more information or make connections later?
5. Do you abbreviate whenever possible?
6. Do you avoid writing complete sentences in your notes, focusing instead on phrases, words, or pictures?
7. Do your notes reflect the organization of the chapter? Do you write the names of sections?
8. Can a person looking at your notes distinguish main ideas from supporting details?
9. Do you try to see the big ideas in the reading? Are you thinking about how the author organized the chapter, why the author included specific information, how ideas compare and contrast, etc.?
10. Are you categorizing the information or grouping the information by theme (e.g., social, political, economic; causes, effects) as you read?
11. Are you avoiding minutia (tiny details or trivia like dates and statistics)?
12. Do you look for cues in the text (“the most important reason...”, “another cause...”, “three goals...”)?
13. Do you put information in a chart, picture, or diagram when it is useful to do so?
14. Are you thinking about your notes as a reminder of what you learned in your reading rather than as a storage place for information you didn’t take the time to put in your brain?
15. Do you think about why people, events, examples, etc. are important?
16. Are your notes legible?

After Reading (*steps that lead to long-term learning*):

17. Do you review and revise your notes after taking them (preferably before class)? Are you underlining or highlighting key terms? Putting stars by important ideas? Color-coding your notes?
18. Do you write higher-level questions about your notes after reviewing and revising them?
19. Do you summarize the notes as a whole after writing questions?
20. Can you use your notes to retell the story or overview of the chapter?

Note-Taking Reflection

Answering these questions will help you get a sense of how well your note-taking skills are progressing and allow you to create goals for future improvement.

1. How does the purpose for your note-taking influence the way you take notes and how you use the notes you take?

2. How useful are your notes in each of the following areas?

	What's useful?	What needs work?
Appearance		
Organization		
Content		
Success in achieving the note-taking purpose		

3. In what ways did your layers of interactions with your notes deepen your understanding of the content?

4. What could you do to make your notes a more useful tool for learning? How will you make that happen?

Strategies for Studying

Effective Studying	Ineffective Studying
Active	Passive
Explaining the notes aloud in your own words	“Going over” or “reading over” the notes
Visiting the content in as many ways as possible—visually, auditorily, conversationally, kinesthetically	Using only one modality of learning, probably visual
Thinking about the type of assessment you are taking and adjusting your studying accordingly	Studying the same way for every type of assessment
Generating mnemonics (songs, rhymes, acronyms, silly or unusual ways to remember)	Looking over content without intentionally trying to commit it to memory
Targeting the information you don’t know or know the least	Studying all the notes or content in their entirety
Creating questions and answering or discussing them	Letting the notes speak for themselves
Revisiting material over time in spaced intervals	Cramming or having a marathon study session
Coming up with examples and making the learning relevant to your experience	Only trying to learn the facts or the wording from your notes
Categorizing, grouping, manipulating, dissecting, or reorganizing the information	Leaving the information in its original form or order
Practicing retrieving content in the notes from your memory or self-quizzing by covering up the notes and reciting them	Assuming the information is stored in your brain without checking to make sure
Prioritizing content by separating main ideas from smaller details	Treating every bit of information as if it has the same importance
Diagnosing what you understand versus what you don’t understand and figuring out how to understand the things you don’t understand	Treating all the content equally
Explaining the content aloud to yourself or another person	Reading through the notes in your head without ever attempting to explain them yourself
Asking a friend or educator to explain things that are unclear	Not asking for help
Concentrating on the meaning of your notes	Regurgitating the material in your notes without thinking about what it means
Focusing on the long-term, thinking about how you can understand the content beyond the day of the test	Storing the content temporarily in your short-term memory

AVID Site Team Connection: *Applying Focused Note-Taking Schoolwide*

Educators need opportunities for collaboration and input from colleagues. The AVID Site Team is one of the key elements in moving high-leverage strategies and core beliefs across a campus. When a Site Team unites around an essential strategy like focused note-taking, builds collaboration opportunities into scheduled meeting times, and supports one another in seeing the value of focused note-taking within each discipline, students across the campus will benefit.



INSTRUCTIONAL PRACTICE: Give One, Get One

This structure is intended to foster critical thinking and collaboration. Give One, Get One is an interactive method for reviewing content, eliciting background knowledge, or processing newly taught information.

Instructional Goal

- Educators will draw upon their own prior knowledge in order to share information with their peers.

Preparation for Instruction

- Each participant needs paper or a device with which to record their thinking.
- Have *The Five Phases of the Focused Note-Taking Process* projected on a screen or place a list of the phases on each table (see page 98 in this chapter).
- Ask each person to bring in lesson plans or samples of students' notes showing the focused note-taking process in action.
 - Use students' work to focus on what note-taking looks like across the campus, to identify which phase(s) students are struggling with in the process, or to recognize opportunities for consistent practices across disciplines.
 - Use lesson plans to identify what is working well within content areas, pinpoint opportunities for going deeper with any of the focused note-taking phases, determine whether educators are struggling to embed focused note-taking into their lesson design and delivery, or to consider ways to establish consistent practices that work across all disciplines.
 - When using samples of digital student notes, share **The 4 A's** (page XV) with participants to use as a lens for thinking about how technology can enhance the note-taking process and what types of modeling and support students will need to continue developing their skills.



Instructional Strategies

- Have participants divide their page into thirds.
- Provide time for participants to analyze their lesson plan or student work sample using the following sentence frames. They should write one response per section of their page.
 - Focused note-taking in (Math/Spanish/History/Science/[Other]) is an effective tool for learning when _____.
 - A struggle/challenge I have with the _____ phase of note-taking is _____.
 - I would like to get better at _____ by doing more/providing opportunities to figure out how to _____.
- Tell participants to find a partner and sit together, bringing their student work sample or lesson plan, as well as their sheet of paper or device.
- Partners will take turns sharing their thoughts and providing feedback by doing the following:
 - Share their lesson plan or student note-taking sample and take a moment to skim it.
 - Take turns sharing what they wrote on one of the sections of their paper.
 - Listen to their partner's feedback or input and record this information on their page.
- Once both partners have shared and recorded each other's ideas and feedback, participants should find new partners and continue this process until time is called.
- Debrief as a whole group, identifying *a-ha!* moments and next steps.

Post-Reading Reflection Questions

- How will I teach the focused note-taking process to my students?
- How will I reinforce the importance of the process phases by building in time to have students practice them?
- How will the focus on the process lead to greater student success?
- Where do I most need to grow in my own practice to help my students become autonomous note-takers?
- Using **The 4 A's** (page XV) as a guide, how might students use technology to enhance the focused note-taking process?

K-2 Post-Reading Reflection Questions

- How will I model the thinking process behind focused note-taking for my students?
- What note-taking formats (two- and three-column, graphic organizers, Cornell notes, etc.) will I utilize to support my students in learning through content organization?
- What note-taking formats (two- and three-column, graphic organizers, Cornell notes, etc.) will I utilize to support the note-taking continuum as a member of my school's AVID Site Team?
- How do my Think-Alouds and choice of vocabulary support the note-taking progression for my students?



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CHAPTER FOUR

Using Modes of Writing to Build Disciplinary Literacy



Visit the *AVID Writing for Disciplinary Literacy* webpage on MyAVID for additional materials and resources.

“ *The best way to become acquainted with a subject is to write about it.* ”

Benjamin Disraeli

Four **modes of writing** are found in all disciplines:

- **Descriptive writing**
- **Narrative writing**
- **Expository writing**
- **Argumentative writing**

Grades 3–6 refer to argumentative writing as persuasive writing, which is the foundation for argumentative writing in secondary and higher education.

CHAPTER Introduction

In and out of school, people write for many reasons. During the course of an academic day, a student may write an essay, a lab report, a problem analysis, and a poem. Career professionals write policies and procedures, cover letters and résumés, memos and emails, annual reports, performance appraisals, and grant proposals. Writing is too pervasive in the real world and in academia to relegate all writing in school to the confines of the English classroom. The ability to write is an essential component of authentic literacy and determines how we are perceived by peers and authority figures. It is so much larger than an English classroom, or even 12 years of English classes, as it is a factor in determining access and equity (Schmoker, 2006).

Expectations for what writing looks like vary from discipline to discipline. For instance, though both are describing something, the language and form a scientist would use to describe observations during an experiment are not the same as the words and sentences an art historian would use to describe Rembrandt’s style of portraiture. Instruction in content-specific writing can build on the instruction occurring in language arts by teaching what writing looks like in various disciplines and by providing opportunities for students to develop skills to write in every subject. Not only will this deepen students’ understanding of the course content, but it will also build writers’ skills in approaching writing for varied purposes. Student writers must learn to make strategic decisions about style, form, and content so they can tackle any writing situations they encounter in their futures.

The manner in which students will write is as important as the topic. Most academic writing falls into one of four **modes of writing**:

1. **Descriptive writing:** creating a visualization of a person, place, thing, event, or idea
2. **Narrative writing:** telling a fictional story or giving a narration of an event or real-life story
3. **Expository writing:** presenting and explaining information that is factual and to the point
4. **Argumentative writing:** expressing opinions, beliefs, or arguments that allow a writer to take a stand while providing compelling support for the ideas presented in order to persuade or influence opinions or actions

Understanding the four modes of writing can help educators make conscious decisions about the writing they assign and the moves they are asking their students to make as they write across the curricular areas. It also provides some common language to use with students as educators help them see that while writing may look different in different subjects, the overarching skills and principles are universal to all writing modes.

Modes and Modes Within Modes

There is no hierarchy within the modes, nor are they grade-level or content-specific. All modes are based on thinking that is foundational to reading, writing, speaking, and listening, which operate as interconnected brain processes. It is important for students at all levels to be well versed within each mode of writing as they master the distinct forms and are able to understand how the forms are connected. Although each mode is distinct, in practice two or more of the modes are usually combined to achieve the purpose. For example, elements of descriptive writing are used when writing a narrative in order to set a mood or tone and help the reader visualize what is happening. Elements of a narrative may be used when a writer uses a story to explain a concept or support an opinion through expository or argumentative writing. The purpose is still to explain or persuade, but the writer is using storytelling or narration to achieve that purpose. Though one mode may be the primary mode for the composition, writers embed other modes within the primary mode to achieve a desired effect.

A final example outlines the use of all four modes within one piece of writing. A student who has been asked to study the migratory patterns of ruby-throated hummingbirds may demonstrate her learning in an article or blog post that includes the following:

- a passage that discusses the distinct physical characteristics of ruby-throated hummingbirds (descriptive)
- an anecdote about a bird bander in Colorado who caught a hummingbird during a banding workshop and was able to tell from the code on its leg tag that it had previously been tagged in Belize (narrative)
- an explanation of how and why ruby-throated hummingbirds' migration habits differ from other species of hummingbird (expository)
- a conclusion that illustrates that migration patterns are being affected by climate change (argumentative)

As students move through their school experience, interaction with all modes across all disciplines, helps students build their skills as writers and internalize each mode as a writing tool to help them develop clear and efficient communication of ideas.

“*Writing is thinking on paper. Anyone who thinks clearly should be able to write clearly—about any subject at all.*”

William Zinsser, *Writing to Learn*

Chapter 4 Objectives

As a result of interacting with this chapter, educators will be able to:

- Determine why and how to use a particular mode(s) of writing based on curricular goals and/or students' needs.
- Purposefully incorporate modes of writing to engage students in deeper understanding of content.
- Craft writing assignments that convey a clear purpose, target a relevant audience, and incorporate the use of various modes of writing that focus on extending thinking.

Pre-Reading Reflection Questions

- What types of writing do I use in both my personal and professional life?
- In what types of writing do I have students engage?
- When crafting a writing assignment, how do I use modes of writing to convey the purpose to my students?
- How might I use multimedia technology to enhance a mode of writing?

K-2 Pre-Reading Reflection Questions

- To what extent do I currently teach all four modes of writing?
- What is a student expected to know and be able to do by the end of the school year?
- When assessing student writing, do I tend to focus more on conventions or content? When is it appropriate to focus on one over the other?

Guiding Principles

- When given opportunities to process ideas through a variety of writing modes, students become better writers, readers, learners, and thinkers as they grasp new concepts and information, clarify their thinking, and communicate through academic discourse.
- The modes of writing exist at all levels of education and all levels of thinking.
- The amount of scaffolding, or support, needed for success with each mode depends on students' prior experiences and interactions with the modes.
- The complexity of the writing purpose and task determines the level of rigor as students deepen their content knowledge.
- The modes of writing are not linear and compartmentalized; rather, they are interconnected and interdependent on each other.
- Educators and students should develop the ability to choose the mode(s) of writing that will allow them to express and develop the intent and purpose of their writing and speak to their audience with clarity and voice.
- Writing in various modes across all disciplines reaches out to the diversity of student voices and experiences within classrooms.
- All instructors should be teachers of writing within their discipline as they model and guide students through various writing experiences that bridge the gap between basic content knowledge and deep understanding of content.
- Multimedia technology can enable writers to polish all modes of writing by making it easier to understand based on the inclusion of graphics and other visuals.



Everyone Is a Writing Instructor

Pretend you have been asked to write a legal brief on wildlife trafficking and poaching in foreign countries. Your first thoughts would probably be, “But I don’t know anything about writing a legal brief, much less about wildlife regulations in other countries. I don’t know where to begin.” Often, students have the same kind of reaction when presented with a writing task requiring them to write in a mode they are unfamiliar with on a topic about which they have limited knowledge.

“*Writing across the curriculum isn’t just a method of getting students to write who are afraid of writing. It is also a method of getting students to learn what they are afraid of learning.*”

William Zinsser,
Writing to Learn

Students begin each school year with varying degrees of writing experience and with different levels of background knowledge. Instructors cannot assume that students will know how to write successfully within a specific discipline. Instructors, of course, are experts within their disciplines, and thus should commit to the role of writing teacher for their content area as they build on foundational writing strategies students bring with them. Writing within a specific content area is best taught by content-area teachers, who can show examples and provide experiences with subject-specific writing that deepens content knowledge (Vacca, Vacca, & Mraz, 2013). When every educator teaches writing and builds students’ familiarity with the four modes of writing as they appear within specific content areas, students learn to understand and respond to the expectations of different writing modes and purposes.



INSTRUCTIONAL PRACTICE: Pre-Assessing Students' Content Knowledge and Writing Skills

Knowing that students can deepen their content knowledge by engaging in varied writing experiences, instructors often create writing assignments to enhance students' learning, but they are sometimes disappointed in the results and the writing abilities of their students. It is imperative that instructors pre-assess by determining the answers to the following questions relating to students' prior knowledge of the topic and experiences as writers:

- What do my students know about the content on which they will be writing?
- What do I need to do to increase my students' baseline knowledge?
- How can I help my students access their prior knowledge related to the topic?
- How do I guide my students to express their questions and wonderings about a topic?
- What writing experiences do my students bring with them?
- What writing experiences have I provided for my students?
- What scaffolding may be needed for my students to be successful with this writing assignment?

Instructional Goals

Students will:

- Develop the knowledge and skills to become successful writers within specific disciplines.
- Begin to understand how utilizing specific modes and conventions of writing within a content area help convey meaning through clear, effective written discourse.

Resource

- *Myself as a Writer* (Student Resource)

Preparation for Instruction

- Pre-assess students' writing abilities to determine how to guide and support them through writing experiences.
- Practice the Think-Aloud strategy and be prepared to share your writing with students.
- Be familiar with and utilize a variety of collaborative structures (see Chapter 1, pages 11–12).



Instructional Strategies

To gather pre-assessment data, utilize:

See *Essential Instructional Practice 1: Quickwrites* in Chapter 2 (pages 18–21) for more information on the quickwrite strategy.

- **Formative writing assessments**, such as quickwrites related to a topic or self-assessment. For example, the prompt might be: “For the next 3 minutes, write everything you know about [content topic].” or, “How would you describe yourself as a writer? Spend 3 minutes writing about your past experiences with writing.” As you review students’ written responses, ask yourself:
 - What content knowledge did my students include? Did they have any misinformation or gaps in their understanding?
 - How well were my students able to express themselves in writing? (Focus on expression of content over mechanics of writing at this point.)
 - What experiences have my students had with specific writing tasks?
 - How did my students assess themselves as writers?
- **Student conferences or surveys**. Ask students about their experiences with writing. Do this early in the school year or semester and use the data to plan for writing. *Student Resource: Myself as a Writer* (page 176) provides survey questions that can be given to students or used in a conferencing format.
 - Consider sharing the questions with students through an online survey tool so results are saved to a central location, easy to access, and can be displayed visually using charts and graphs, making the results easier to understand.
- Once pre-assessment data has been gathered, use the resources and strategies in this chapter to monitor and improve the type of writing interactions students experience in the classroom. As writing experiences are initially scaffolded for students, the goal is to gradually pull the scaffolding away as students move toward becoming independent writers within specific disciplines.



Myself as a Writer

Answer the questions below as you reflect on your experiences with class writing assignments. For Questions 2–4, think about the phases of the writing process—pre-writing, drafting, revising, polishing, and publishing.

1. Which of the following best describes you as a writer?
 - _____ a. **Novice** – I don't have much practice or experience with writing and find it to be a difficult process.
 - _____ b. **Apprentice** – I am an okay writer, but sometimes struggle with what to say and how to get started.
 - _____ c. **Experienced** – I do a good job of writing, especially when I have time to pre-write and get feedback from my teacher and classmates about my writing.
 - _____ d. **Master Craftsperson** – I am a good writer and am able to organize my thoughts into a draft and then use feedback and self-analysis to revise my writing so it is clear and effective.
2. Which part of the writing process do you find to be the easiest for you? Why?
3. Which part of the writing process is the most difficult for you? Why?
4. Which part of the writing process do you think helps you most? Why?
5. What types of writing have you done in the past?
6. What type of writing do you like most? Least?
7. What are two things you think you do well as a writer?
 - 1)
 - 2)
8. What are two things you think you need to work on as a writer?
 - 1)
 - 2)
9. What is one thing you wish teachers would do when they give a writing assignment?

INSTRUCTIONAL PRACTICE: Crafting Effective Writing Assignments

Examples of writing assignments that address different modes and content are included in this chapter.

Ongoing feedback is formative in nature and helps instructors determine what students currently know and are able to do. Ongoing feedback also helps students develop the metacognitive insight to reflect on feedback and make decisions that can enhance their writing. The goal of such feedback is to assess the degree to which a student is or is not making progress with writing and understanding of content, and then use that information to adjust instruction to meet students' needs through scaffolding, differentiation, re-teaching, or acceleration. It is important for instructors to note that it is not necessary to read and comment on everything each student writes. However, it is necessary that instructors monitor student writing throughout the writing process, providing periodic feedback, either through written comments or in one-on-one conferences, and set up opportunities for peer feedback and student self-assessment and review.

Students may not remember a lecture given about current ecological issues in their state and the effect on drinking water, but chances are they will remember composing and writing a letter to their state representative to persuade him or her to vote yes on sanctions that would improve the quality of water in their own backyard. Through the process of developing that letter, students are learning content and concepts related to ecology, water purification, and salinity, as well as how state government works. The design and quality of a writing assignment must be intentionally crafted for writers to interact with and apply knowledge, rather than merely conducting a generic “tell me what you know” activity.

Instructional Goals

Students will:

- Apply their knowledge to new texts or in different situations involving writing.
- Clearly understand the directions and expectations for success with a writing assignment.
- Know the purpose of the writing task and the specific audience they are writing for.

Resources

- *Crafting Effective Writing Assignments* (Educator Resource)
- *Academic Vocabulary in Writing Prompts* (Student Resource)

Preparation for Instruction

- Students' motivation and engagement are stronger when writing assignments allow for choice within a common theme, topic, or genre. Identify appropriate opportunities for students to have choice within the writing assignment, depending on the necessary learning outcomes.
- The vocabulary used to give directions should offer guidance as to the mode(s) of writing needed or recommended to complete the assignment.
- Provide models of writing within the specific mode, along with rubrics that outline clear expectations.

Instructional Strategies

- Use *Educator Resource: Crafting Effective Writing Assignments* (page 178), which provides guiding questions to assist with the creation of writing assignments.
- Refer to *Student Resource: Academic Vocabulary in Writing Prompts* (page 179), to assist with specific vocabulary choices and to aid students' interpretation of vocabulary used in writing prompts.
- Incorporate opportunities for **ongoing feedback** as you plan an effective writing assignment. For more information on effective feedback, see Chapter 5, pages 248–252.

Crafting Effective Writing Assignments

Students are more thorough and effective writers when writing assignments are specific and detailed.

As you begin to craft a writing assignment, be sure to include the following elements:

- **The Task** – Include the topic, the purpose, and any choice students may have within the umbrella of the topic.
- **The Role of the Writer** – Students should become the expert on the topic or step into the role of a real person or fictional character.
- **The Audience** – There should be an intended audience, either real-world or hypothetical.
- **The Format** – Specify or offer choice related to the length, mode, genre, formatting style, documentation of resources, and other relevant details.
- **The Process** – Provide a timeline for completion of pre-writing, drafts, revisions, ongoing feedback, and final products. Specify what notes, resources, documentation, or outlines will be required.
- **The Evaluation** – Explain how both the process and the final product will be evaluated. Provide a rubric that outlines clear expectations.

The following questions can help guide you in assessing the effectiveness of writing assignments.

1. How does this assignment connect to the current learning objectives in place for my students?
2. What do I want my students to learn or experience as a result of this writing assignment?
3. Which of the following do I want students to show through this assignment?
 - a. Mastery of concepts or texts
 - b. Demonstrating critical thinking
 - c. Developing original ideas
 - d. Defending a position
 - e. Demonstrating a procedure
 - f. Organizing ideas
4. How does this assignment allow for inclusion of collaborative structures?
5. How have I allowed for pre-writing, drafting, and revision, as well as ongoing feedback?
6. Will students take this writing to final publication? If so, how will I structure time for polishing, and what publication options will be allowed?
7. How does my assignment define the intended audience?
8. In what ways do I think this topic will engage students?
9. How have I built in an element of choice to give students more ownership?
10. Have I included an option to include a multimedia component?
11. How have I conveyed the expectations and evaluation criteria?
12. What vocabulary have I used to direct my students? Is my vocabulary explicit? (For example, “Explain” is more explicit than “Explore.”) Will my students understand all the vocabulary?
13. In what ways have I given students a clear timeline for completion?
14. What background knowledge will my students need to be successful with this assignment?
15. What scaffolding might I need to provide for the emerging writers in my class?
16. What mini-lessons related to the writing assignment should I prepare?

Academic Vocabulary in Writing Prompts

The following are organizational words in writing prompts for both in-class writing (“essay examinations”) and out-of-class assignments. This page will help you to interpret them.

Analyze	Examine carefully to determine why. Separate or distinguish the elements of anything complex. Break the idea into parts, and explain the various parts.
Assess	Examine critically, and estimate the merit, significance, or value.
Challenge	Ask for justification, question the statements provided.
Compare/Contrast	Point out how things are similar and how they are different. (Sometimes, “compare” means both “compare and contrast.”)
Criticize/Critique	Discuss the good and bad elements in a text, a film, or something else. Give evidence to justify your claims.
Defend	Maintain an argument with evidence; prove the validity of an argument with supporting evidence.
Define	Give the meaning of a term with enough detail to show that you really understand it.
Describe	Explain or write about; put into words a picture or an account. Tell how something looks, how something happened. Include how, where, who, and why.
Diagram	Make a drawing or outline of something and label its parts.
Discuss	Give reasons with details. Explore from different perspectives. Look at the pros and cons.
Enumerate	Count off or list examples, reasons, causes, or effects—one by one.
Evaluate	Using evidence, discuss the strengths and weaknesses.
Explain	Make clear or interpret the reasons why something exists or is happening.
Identify	List and explain.
Illustrate	Make the point or idea clear by giving examples.
Interpret	Give the meaning of; use examples and personal comments to make clear.
Justify	Give reasons for your claim (in an academic argument).
List	List without details.
Outline	Make an organized listing of the important points of a subject. (This outline does not always have to look like the formal outline you may write for your English papers.)
Relate	Show the connections between things or how one thing causes another.
Respond	State your overall reaction (response) to the content, and then support your response with specific reasons and examples, often referring back to the reading.
Solve	Come up with a solution based on given information and your knowledge.
State	Give the main points in brief, clear form.
Summarize	Organize and bring together the main points, keeping out personal opinions.
Support	Back up the statements with evidence.
Synthesize	Pull together parts to make a whole—this requires looking for common attributes among the parts in order to link them together.

Descriptive Writing

Successful writers excel at writing descriptions that use language to evoke emotions and create visualizations for the reader. Descriptions allow the reader to “see” the person, place, thing, event, or idea through use of illustrative details, which allow the writer a wide range of artistic freedom. However, this doesn’t imply that descriptive writing is not structured. The following guidelines should be taken into consideration when working within the descriptive mode.

- Use **precise language** when naming objects. Use “tulip” instead of “flower” or “stallion” instead of “horse.”
- Choose **vivid language** that paints a clear picture of what is being described and holds the reader’s attention. For example, instead of writing, “The pizza was unappetizing,” say, “The pepperoni on the pizza floated in a pool of grease.” Or instead of, “The volcano exploded,” write, “Red, molten lava oozed and flowed from the volcano as it roared to life.”
- Create a **dominant mood** that conveys a feeling or emotion without actually naming the feeling or emotion. The sentence “I snuggled deeper under my covers as I closed my eyes and listened to the rain falling and the wind howling” expresses a feeling of warmth, comfort, and safety without ever using those words.
- Use **sensory details** that appeal to the reader’s senses by explaining sights, sounds, tastes, smells, and feelings of touch.
- Vary **sentence structure** by combining short, choppy sentences into longer, more complex sentences. Avoid repetitive subject-verb structures and use of *being* verbs. Strive to show action through verb choices.
- Choose **adjectives, adverbs, and figures of speech** that are relevant to the topic and enhance the description, but avoid overuse of descriptive words.
- Create an **organized description** that follows a logical order rather than rambling or jumping around without purpose.

When students write descriptively, they are learning to:

- organize their thinking and observations.
- search for, recognize, and communicate details that define people, places, things, ideas, or events beyond surface-level observations.
- write with clarity and purpose.

The descriptive mode may develop as a descriptive essay or become an integral part of other modes of writing. Students should use vivid descriptive detail in narrative writing as they tell stories. Description also can be utilized in expository writing to help explain a concept or idea or describe an observation. Persuasive writing benefits from the use of descriptions that lend relevancy, appeal to the senses, and evoke specific emotions.

Typically, a descriptive mode consists of three parts: the introduction, the body, and the conclusion.

- **Introduction:** The writer briefly introduces the topic of the essay using an engaging format that captures readers’ attention and makes them want to continue reading.
- **Body:** The writer describes in detail each aspect of the topic using vivid language and sensory detail and provides examples that enhance the description.
- **Conclusion:** The writer shares his or her own thoughts and insights to bring closure to the description of the topic.

Some formats that support the use of descriptive writing include menus, travel brochures, letters, journals, catalogs, blogs, instruction manuals, and lab reports.



INSTRUCTIONAL PRACTICE: Using Descriptive Writing in All Disciplines

Descriptive writing is often thought to live exclusively in English classes; however, it is an essential mode within every content area. As educators integrate descriptive writing into their subject areas, students' learning will increase because describing a topic well requires understanding it well.

Instructional Goal

- Students will understand and use the structure of descriptive writing in relation to specific content.

Resources

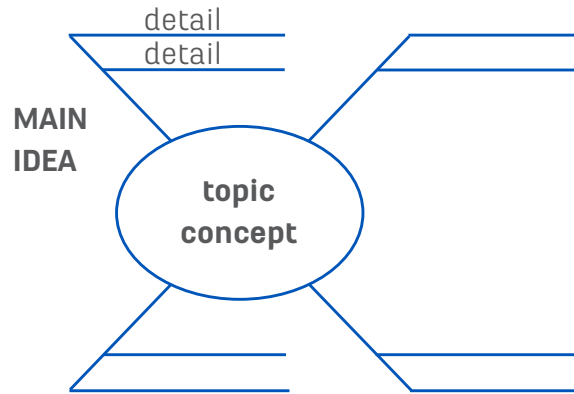
- *Descriptive Writing Sentence Stems and Word Banks* (Educator Resource)
- *Descriptive Writing Graphic Organizers* (Student Resource)
- *Descriptive Writing Rubric* (Student Resource)

Preparation for Instruction

- Determine the topic and select a detailed picture and piece of text related to that topic.

Instructional Strategies

- Divide the class into groups of 3–5 students.
- Provide each group with a picture related to the content you are currently studying. Content-specific examples might include:
 - Science topic: animal adaptations – picture of a blowfish
 - Social sciences topic: child labor during the Industrial Revolution – picture of children working in a factory during that time period
 - Mathematics topic: solving for a variable – picture of a completed problem that arrives at a solution for the variable
 - English or business topic: using metaphors – picture of a metaphor used to convey a business goal or financial target
 - Art topic: the style of Claude Monet – picture of a Monet painting
- Direct students to observe the picture and create a group list of everything they observe. What do they see? Does the picture make them think of certain sounds, tastes, or smells? What feelings or mood does the picture create? Does the picture trigger specific memories or connections?
- Have students add academic or content-specific words to the communal word bank.
- Provide groups with an article or textbook pages that relate to the topic. As students read the material, they should add additional descriptive information about the topic to their list.
- Revisit the communal word bank to add any new words that appeared in the article or textbook.



- Show students an example of a graphic organizer that helps organize descriptive information.
- Direct students to create an organizer on chart paper or use an online concept-mapping tool that allows them to outline the big ideas and cluster the details that emerged from their lists. It may look like the example or be an original creation that works for organizing their information.
- Ask each group to pair up with another group and compare their graphic organizer. Groups should make additions or adjustments to their work based on the comparisons.
- Select one of the big ideas that emerged, for example, physical features of the blowfish, and model a shared writing exercise by creating a paragraph about the physical features using the information on the graphic organizer.
- Direct students to write a descriptive paragraph for each of the big ideas on their graphic organizer. When students are using an organizer that breaks a concept or topic into a classification scheme, the body should have a paragraph for each classification category that includes examples that fit into each category. The descriptive paragraph summarizes the categories used.
- Remind students of the communal word bank and encourage them to use words from this word bank in their descriptive paragraph.
- Model for students how to add an introduction and a conclusion to their writing. If students are able to proceed without modeling, allow them to do so. Sometimes it is easier to write an introduction after the body has been written. The introduction can highlight an unusual fact or interesting detail that might grab the reader's attention.
- Allow time for students to pair up to share their writing.

Descriptive Writing Sentence Stems and Word Banks

Students often benefit from the use of sentence stems to prompt their thinking and word banks to assist with word choice.

Sentence Stems for Descriptive Writing

[The topic] [shows, illustrates, consists of, is known for] _____.

[The topic] is [defined, identified] by _____.

[The topic] has _____ and _____.

In addition, [the topic] contains _____.

For example [the topic] shows _____ and _____.

A [the topic] is like a _____ because it has _____ and _____.

One of the interesting things about [the topic] is _____.

A surprising observation about [the topic] is _____.

Strangely, [the topic] is _____.

Another unusual thing about [the topic] is _____.

[The topic] sounds like _____.

If you listened closely, you could probably hear _____.

It was hard to ignore the sound of _____.

[The topic] felt like _____.

I rubbed my fingers across [the topic] and it felt _____.

As I touched [the topic], it reminded me of _____.

[The topic] looks like _____.

As I looked closely at [the topic], I saw _____.

My eyes widened in disbelief, as I noticed _____.

[The topic] tasted like _____.

As I closed my eyes, I could almost taste _____.

The taste of [the topic] made me _____.

[The topic] smelled like _____.

I inhaled deeply and [smelled, sniffed] _____.

The [scent, fragrance] of [the topic] reminded me of _____.

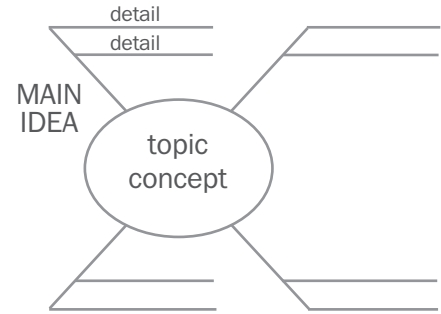
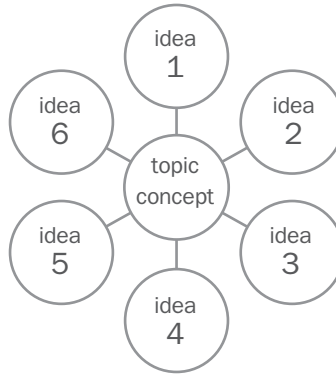
Word Banks for Descriptive Writing

Work with students to brainstorm and create word banks for some of the following categories. There are many others—be creative!

- Sensory Words (touch, taste, smell, see, hear)
- Vivid Verbs
- Overused Words (Instead of ____, use ____.)
- Movement Words
- Feeling Words
- Words that Create a Mood
- Content Vocabulary

Descriptive Writing Graphic Organizers

- Describe attributes, qualities, characteristics, and properties.
- Explain relationships of objects in space.
- Define level of frequency.



Signal Words		Guiding Questions
<i>includes</i>	<i>explains</i>	<ul style="list-style-type: none"> • What is being described? • What are its most important attributes? • What are the characters, places, and objects in the text passage? • Why is this description important? • What is the concept? • To what category does it belong? • How does it work? • What does it do? • How are the pieces related or connected? • What are the functions of its pieces? • What are examples of it? • What are examples of things that share some, but not all, of its characteristics/attributes?
<i>to begin with</i>	<i>shows</i>	
<i>for instance</i>	<i>in fact</i>	
<i>also</i>	<i>in addition</i>	
<i>for example</i>	<i>such as</i>	
<i>to illustrate</i>	<i>furthermore</i>	
<i>another</i>	<i>reflects</i>	
<i>first</i>	<i>second</i>	
<i>in other words</i>	<i>most important</i>	
<i>identified by</i>	<i>associated with</i>	
<i>between</i>	<i>near</i>	
<i>characterized by</i>	<i>among</i>	

Sample Sentence Frames

- _____ shows _____.
- _____ can be described as _____.
- Usually, _____.
- _____ is called _____ and is related to _____.
- _____ is used to illustrate _____.
- Characteristics of _____ include _____ and _____.
- _____ can be characterized by _____.
- _____; in other words, _____.
- _____ can be defined first as _____ and second as _____.
- _____ is _____; for instance, _____.
- _____ happens _____.
- An example of _____ is _____.
- _____ rests among _____ and near _____.

Descriptive Writing Rubric

On a scale of 0–4, rate the writing.

- 0 = no evidence
- 1 = little evidence
- 2 = some evidence
- 3 = frequent evidence, used effectively
- 4 = abundant evidence, used effectively

Elements for Effective Descriptive Writing	Your Assessment	Instructor's Assessment
1. The introduction clearly tells what is being described.		
2. All sentences connect to the topic.		
3. The topic is described in a logical order.		
4. The essay is of adequate length for the intended purpose.		
5. Complete sentences are used.		
6. Complex sentences are used rather than short, choppy ones.		
7. Sentence beginnings are varied.		
8. A variety of descriptive words are used, including sensory words.		
9. Overused words, such as <i>good</i> , <i>well</i> , <i>nice</i> , or <i>big</i> , have been replaced with more specific or interesting words.		
10. The description gives the reader a clear and precise picture of what is being described.		
11. When appropriate, multimedia is used to enhance the overall meaning of the work, and does not detract from it.		

In the space below, respond to the following questions:

What is something I think I did well in describing this topic?

What are some things I will revise in this piece of writing?

What is something I can work to improve the next time I use the descriptive mode of writing?

Narrative Writing

“ After nourishment, shelter, and companionship, stories are the thing we need most in the world. ”

Philip Pullman

The main purpose of narrative writing is to tell a story or give narration by providing the details of what is happening in the order that it is happening. This type of writing is usually categorized as fiction, because it typically grows from the writer’s imagination as he or she tells a story of something that didn’t really happen. However, narrative writing can also be nonfictional when it is telling or narrating a true story about real people or events.

Narrative writing emerged from humans’ history of storytelling. Humans have been telling stories since they first began to speak, and many oral traditions, in the forms of myths, legends, and fables, were passed down from generation to generation. Storytelling is rooted in many cultures and religions as a vehicle for transferring knowledge, wisdom, or spirituality, or purely for the enjoyment of a good story. Today’s written narratives are used not just to entertain, but also to communicate a writer’s moral, cultural, or political perspectives. Narrative writing can be the perfect vehicle for experts to impart information to non-experts, as it allows technical information to be conveyed in a way that engages the reader and allows for increased understanding of the material.

According to Heather Wolpert-Gawron, author of *Writing Behind Every Door: Teaching Common Core Writing in the Subject Areas* (2014), “narratives are important because they form the intrapersonal and interpersonal glue that holds our whole world together. Storytelling helps us understand empathy because it teaches about relationships. It helps us understand the sagas that connect history. It helps us wrap our heads around the stories behind the math that make up the need for scientific discovery. Narratives help us understand the world around us and the world within us.”

A narrative essay could take the reader through events leading up to the signing of the U.S. Constitution, observation of results of a science experiment, or the steps taken to solve a math problem. Or the narrative mode could tell the story of the water cycle with a drop of water as the main character. It is important to provide examples and model this type of writing so students can see that the explanation of the water cycle is the main purpose, but the mode for explaining it is through a narrative story.

The narrative mode relies on descriptive writing to add interest and create visual imagery while narrating or telling a story. And narrative writing itself is often embedded as a vehicle for explaining content within expository and argumentative writing. Lawyers writing their opening and closing arguments usually tell a story while recapping the events and evidence, with the intention being to persuade the jury to think a certain way. A historian writing about the effects of the Dust Bowl might begin with a narration of the events leading up to the cause of the Dust Bowl before connecting to the effects caused by it. Embedding narration alone does not make the writing an expository or argumentative piece. The writer must go beyond the narration and connect it to the underlying concepts, assumptions, opinions, arguments, and points of view that are inherent in those modes of writing. It is about getting to the “so what” of a story, not just telling the story. Think back to the example of the water cycle story with a water droplet as the main character. If the writer simply tells



the story of the water droplet’s journey through the water cycle, they have produced writing that is surface level, but if they include within that story lessons learned about water conservation, clean drinking water, or some other application of knowledge connected to the topic, then they are diving deeper into the content to develop and explain new understandings.

It is helpful to familiarize students with examples of narrative writing formats, including:

- short stories
- novellas
- novels
- poetry
- autobiographies or biographies
- anecdotes
- oral histories
- diaries or journals
- video scripts

In an academic setting, students will typically write narratives in essay form. The following are common components of narrative essays:

- writing from a defined point of view, usually the author’s
- incorporating descriptive writing that often includes feelings or sensory details
- using precise language
- having a central idea that is supported throughout the written work
- relying on sequencing so events are told in the proper order and are well paced
- using dialogue and/or conflict
- bringing closure through a strong conclusion

Most students will have had experience using narrative structures. Opening dialogue between English language arts instructors and teachers in other disciplines will help align what students already know about these structures and how they can apply them in various disciplines. Components of narrative structures include:

- plot development
- establishing a setting
- sequencing of events
- conflict
- conflict resolution
- character development
- dialogue
- descriptive details

Resources

- *Narrative Writing Across the Disciplines* (Educator Resource)
- *Narrative Writing Rubric* (Student Resource)

Narrative Writing Across the Disciplines

English language arts instructors use the narrative mode of writing often and can be resources for ideas and advice as you bring narrative writing into your content area. The chart below outlines some writing prompts that promote the use of narrative writing in social studies, science, and mathematics. Remember that the focus is on imparting knowledge and application of the content in a creative manner.

Social Studies	Tell a story of westward expansion in America from the perspective of a person your age who traveled across the country. To make your story interesting, make sure your narrator encounters some conflict.
	Write a story with two different endings: one in which a person uses social media irresponsibly and another in which a person makes good choices about social media usage.
	Narrate a tour highlighting what makes your hometown special.
	Pretend you are [<u>city mayor, state senator, state representative, Supreme Court justice, president of the United States</u>] for a day. Write a story about your experiences.
	Select an historical figure who overcame adversity. Tell their story.
	Tell the story of your trip in a time machine back to the time of [<u>insert specific historical period</u>].
Science	Develop a story of a space explorer on a solar system adventure and the disasters that await him/her on each planet.
	Using first person voice, create a narrative as if you were a blood cell and relate your adventures traveling through the circulatory system.
	Write an informational children’s picture book for students in a lower grade about [<u>insert current science topic or concept</u>]. The goal is to tell a story using pictures and words while conveying scientific information.
	Write a story about a science experiment that goes badly because unsafe lab practices were used. Include in the story what the characters learned about their mistakes and how they corrected them.
	Create a dialogue between you and Albert Einstein [or another scientist who made significant contributions, such as Marie Curie, Isaac Newton, or George Washington Carver]. A variation would be to write a dialogue between two scientists if they were to meet.
	Using first person voice, create a narrative as if you were a water drop and describe the adventures you have as you travel through the water cycle.
Mathematics	Tell the story of a lonely prime number who only has 1 for a friend.
	Use dialogue to create a skit about place value.
	Narrate the journey through the steps to solving a particular problem and share them with a classmate.
	Write your mathematical memoir. When did you first encounter math? What are your feelings about math in your life? What have you learned about math so far in school?
	Starting with a problem, write a picture book about a boy or girl who is on a quest to solve for x .
	Write a story about a day in your life highlighting all the aspects in which math played a role.

Narrative Writing Rubric

On a scale of 0–4, rate the writing.

- 0 = no evidence
- 1 = little evidence
- 2 = some evidence
- 3 = frequent evidence, used effectively
- 4 = abundant evidence, used effectively

Elements for Effective Narrative Writing	Your Assessment	Instructor's Assessment
1. The theme/topic is clearly stated in the introduction.		
2. Specific details provide effective elaboration.		
3. The narration follows a logical sequence without noticeable gaps.		
4. The conclusion is effective and plausible.		
5. The essay is of adequate length to provide unity and completeness.		
6. Use of standard writing conventions is apparent (punctuation, capitalization, spelling, grammar, paragraphing).		
7. Sentences vary in beginnings, length, and structure.		
8. Word choice includes sensory details, action verbs, specific nouns, transition words, and appropriate descriptors.		
9. The writer's voice is evident and connects to the audience.		
10. The narrative maintains focus and gives the reader a clear and precise picture of the experience or events.		
11. When appropriate, multimedia is used to enhance the overall meaning of the work, and does not detract from it.		

In the space below, respond to the following questions:

What is something I think I did well in writing about this topic?

What are some things I will revise in this piece of writing?

What is something I can work to improve the next time I use the narrative mode of writing?

Expository Writing

Expository writing “exposes” information by explaining, defining, describing, or clarifying in a logical and sequential manner. The focus of expository writing is on presenting the facts without bias or opinion. Effective expository writing requires students to analyze content and convey complex ideas and information clearly and accurately by organizing their thoughts, developing a plan, conducting research, and locating resources to support their thesis, while also attending to the mechanics of writing. It is the most frequent type of academic writing across all disciplines and a type of writing used in many careers.

Some common components of expository essays include:

- writing in third person
- remaining focused on the main topic
- using topics that are not too broad or too narrow
- using language that is precise and to the point
- incorporating factual details related to the topic
- following an organized and logical sequence
- providing baseline knowledge, as well as higher-level details
- incorporating descriptive writing that helps readers develop a picture of the topic, but avoiding unnecessary descriptive language that incorporates mood and feelings

Factual details are critical for successful expository writing. Details might include use of such things as:

- examples
- anecdotes
- quotations
- comparisons
- statistics
- charts or graphs
- explanations
- definitions

When composing an expository essay, writers should include:

- an introduction that informs the reader of the topic and includes a well-defined thesis statement that doesn’t contain opinions or make debatable claims, but is based on fact
- a body that contains at least three paragraphs, each focusing on one subtopic that helps explain and support the main topic with facts and concrete examples
- a conclusion that restates the thesis and brings closure by tying the major points together
- transitions that effectively connect paragraphs

Examples of expository writing include:

- essays
- newspaper articles (not editorial or opinion pieces)
- how-to manuals
- assembly instructions
- directions
- recipes
- business memos
- letters
- textbooks



Expository Structures

- **Extended definition essays** define a subject or topic in an extended mode that is more thorough than a dictionary definition. The introduction usually contains what might be considered a dictionary definition, including the exact term naming who or what is being defined, the classification to which it belongs, and a brief summarizing description of the term. The body then expands the definition of the subject by providing additional descriptive details, examples, or background information. The conclusion briefly summarizes the subject.
- **Compare-and-contrast essays** describe similarities and differences between two or more people, places, things, ideas, or events. The introduction should introduce the subject(s) and explain that the subject(s) will be compared, contrasted, or both. The body should follow a logical order, for example explaining all comparisons first, followed by all contrasts. Another order might be to compare and contrast the subject to one item in one paragraph, a second item in the next paragraph, and a third item in another paragraph. End with a conclusion that summarizes the subject and purpose.
- **Cause and effect essays** explain how things affect and depend on each other by identifying relationships that focus on why things happened and the results of what happened. The writing tends to contain a chain of connected events, with each being the logical result of the preceding one. The subject and purpose of the writing should be included in the introduction, followed by a body containing enough paragraphs to outline and logically link each cause and effect. The conclusion should revisit the causes and effects, summarizing the most important one.
- **Sequence or process essays** explain a procedure or a step-by-step process or provide directions for how to do something. The content of the essay should include the materials that will be needed, as well as detailed steps needed to complete the task. Proper sequencing is critical to the accuracy of this type of writing. The introduction should name the topic and explain why it is important or relevant. The first paragraph of the body should list all necessary materials, while the following paragraphs should contain the instructions in a step-by-step order with details and explanation of each step. The conclusion should explain the outcome of completing the task and possibly restate the importance or relevance of the topic.

Resources

- *Expository Writing – Extended Definition Essay* (Student Resource)
- *Expository Writing – Compare-and-Contrast Graphic Organizers* (Student Resource)
- *Expository Writing – Cause and Effect Graphic Organizers* (Student Resource)
- *Expository Writing – Sequence Graphic Organizers* (Student Resource)
- *Expository Writing Across the Disciplines* (Educator Resource)
- *Expository Writing Rubric* (Student Resource)

Expository Writing – Extended Definition Essay

Use the organizer to gather information to include in your extended definition essay.

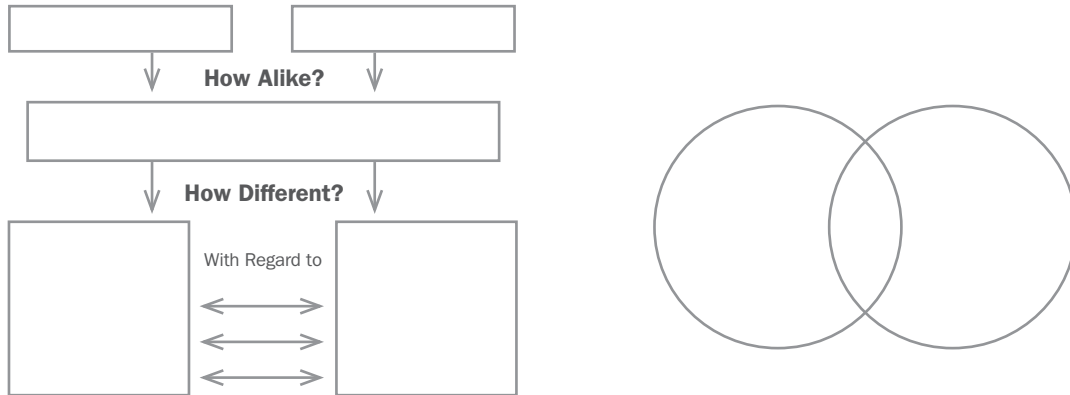
My word:	
Dictionary Definition (source)	
Etymology (origin of the word)	
Synonyms (words or phrases that have the same meaning)	
Antonyms (words or phrases that have opposite meanings)	
Examples	
Non-Examples	
Descriptive Details	

Sample Sentence Stems

- [The word] is defined as _____.
- [The word] originated _____.
- _____ and _____ mean the same as [the word].
- _____ and _____ have opposite meanings from [the word].
- _____ is an example of [the word].
- Other examples include _____.
- _____ is not an example of [the word] because _____.
- [The word] [looks, sounds, tastes, smells, or feels] like _____.
- [The word] is similar to _____ and _____.
- _____ differs from [the word] because _____.
- Interestingly, [the word] is _____.
- It is important to note that [the word] is _____.

Expository Writing – Compare-and-Contrast Graphic Organizers

- Understand and express how two or more things are similar and how they are different.



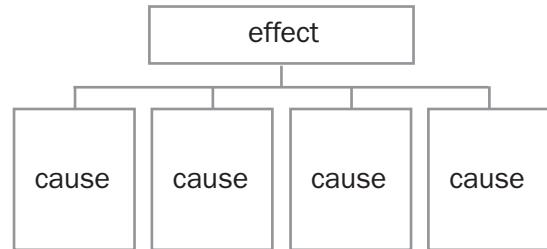
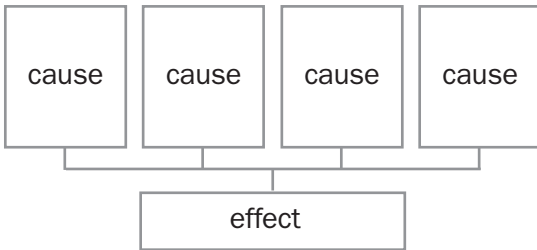
Signal Words		Guiding Questions
<i>however</i>	<i>both</i>	• What is being compared and contrasted?
<i>but</i>	<i>unlike</i>	• What categories of characteristics or attributes are used to compare and contrast these things?
<i>same as</i>	<i>different from</i>	• How are the things alike or similar?
<i>-er, -est</i>	<i>-er than</i>	• How are the things not alike or different?
<i>are similar</i>	<i>just like</i>	• What are the most important qualities or attributes that make them different?
<i>as well as</i>	<i>have in common</i>	• What can we conclude about these things or items?
<i>on the contrary</i>	<i>difference between</i>	• Why are these things being compared/contrasted?
<i>as opposed to</i>	<i>whereas</i>	• When did the compare/contrast structure emerge?
<i>share common traits</i>	<i>on the other hand</i>	
	<i>not only...but also</i>	

Sample Sentence Frames

- _____ is _____ -er than _____.
- _____ is the _____ -est when compared to _____.
- _____ and _____ are similar because they are both _____.
- _____ and _____ are different because _____ is _____ and _____ is _____.
- _____ is _____; however, _____ is _____.
- Unlike _____, _____.
- While _____ is different from _____, _____.
- _____ is _____, as opposed to _____, which is _____.
- Not only is _____, but _____.
- Although _____ and _____ have some similar characteristics, they are very different _____.
- While _____ is able to _____, _____ does not have that capability/feature.
- The most important difference is that _____ has _____, while _____ has _____.
- Just as _____, so too _____.
- By comparing _____ and _____, it is clear that/I realized that/I learned that _____.
- While _____ and _____ are both _____, there are several major differences between them.
- The primary distinction between _____ and _____ can be described as _____.

Expository Writing – Cause and Effect Graphic Organizers

- Explain the cause of an outcome.
- Express why something occurred.



Signal Words		Guiding Questions
<i>because</i>	<i>since</i>	• What is it that happens?
<i>therefore</i>	<i>consequently</i>	• What causes it to happen?
<i>as a result of</i>	<i>this has led to</i>	• What is the effect?
<i>so that</i>	<i>nevertheless</i>	• What are the important elements or factors that cause this effect?
<i>accordingly</i>	<i>if . . . then</i>	• How do these factors or elements interrelate?
<i>thus</i>	<i>subsequently</i>	• Will this result always happen from these causes? Why or why not?
<i>because of</i>	<i>in order to</i>	• How would the result change if the elements or factors were different?
<i>may be due to</i>	<i>effects of</i>	• What is the cause/effect process the author is describing? Why did a cause/effect structure emerge?
<i>for this reason</i>	<i>the cause was</i>	
<i>due to</i>	<i>this led to (caused)</i>	

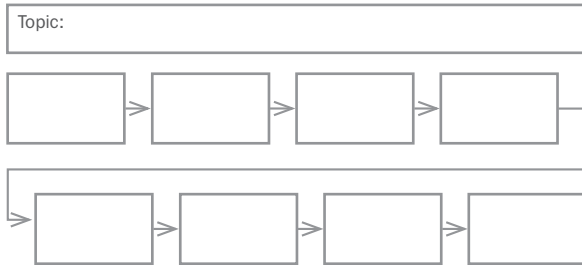
Sample Sentence Frames

- _____ was _____ caused by _____ .
- The _____ because _____ .
- Because of _____, the _____ is _____ .
- _____; therefore, _____ .
- As a result of _____, _____ .
- If _____, then _____ .
- In order to _____, _____ .
- For this reason, _____ .
- _____ has been caused by _____, thus _____ .
- Due to the fact that _____, it seems evident that _____ .
- _____ has led to _____. For this reason I believe that _____ .
- If _____ is _____, then I predict that _____ .

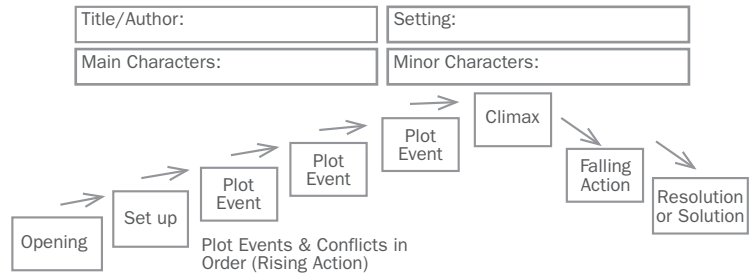
Expository Writing – Sequence Graphic Organizers

- Relate steps in a process.
- Express time relationship and actions within a larger event.

CHRONOLOGICAL



PLOT



Signal Words

<i>first, second</i>	<i>while</i>
<i>next, later, then</i>	<i>now</i>
<i>before/after</i>	<i>finally</i>
<i>beginning, middle, end</i>	<i>earlier</i>
<i>initially</i>	<i>previously</i>
<i>eventually</i>	<i>following</i>
<i>during</i>	<i>prior to</i>
<i>since</i>	<i>preceding</i>
<i>concluding</i>	<i>meanwhile</i>
<i>subsequently</i>	<i>for the past</i>
	<i>simultaneously</i>

Guiding Questions

- What is being described in sequence?
- Why did a chronological order pattern emerge?
- What are the major steps in this sequence?
- What details should be included (people, places, etc.) with each step?
- Is there a part in the sequence where the events are more important than the others?
- Is there a conflict in this sequence? Where does it get resolved?
- Why is the sequence important?

Sample Sentence Frames

- First, _____. Then, _____. Next, there was _____ and _____.
- First, _____ happened. Then, _____ occurred and _____. Eventually, _____.
- In the beginning/middle/end, _____.
- After _____, _____ and _____.
- Before _____, _____.
- Immediately after _____, _____.
- Once _____ happened, then _____.
- As a result of _____, _____ happened.
- Following _____, _____.
- Previously, _____.
- Initially _____, and then _____.
- Preceding the events of _____, _____.
- Meanwhile, _____ was taking place/occurring/happening.
- For the past _____ [set timeframe], _____.
- Immediately following the _____, _____ took place/occurred.

Expository Writing Across the Disciplines

Expository writing is the mode of writing most often used in all disciplines and content areas, as the purpose for expository writing is to convey information accurately. It requires that students apply what they know about a topic and add information from primary or secondary sources so the reader can better understand a topic, procedure, or concept.

Extended Definition	Define and explain the importance of order of operations.
	Define photosynthesis and its connection to cellular respiration.
	Define feudalism.
	Define hyperbole and its role as a literary device.
Compare/Contrast	Explain the differences for working with positive and negative integers within equations.
	Compare and contrast the appearance and function of the lungs in a smoker and a non-smoker.
	Identify similarities and differences among the Mayans, the Incas, and the Aztecs.
	After reading three different versions of <i>Cinderella</i> , explain the similarities and differences you found.
Cause/Effect	Explain examples of the cause-effect relationships created through independent and dependent variables.
	Write an article for the school newspaper explaining the effects that lack of sleep in today's teenagers has on them now and may have on them in the future.
	Personal debt in the United States has skyrocketed over the last century. What are the causes of this massive growth, and what are the effects on individuals, families, or the nation when debt is so prevalent?
	Think of a novel or short story you have read in which a character's death significantly impacted the actions of another character. Explain how the character reacted to the death and how the death affected the overall outcome of the story.
Classification	Write an essay explaining the best way to classify polygons.
	While on a hike with your family you find a strange object. Explain what characteristics you would look for to determine whether the object you found could be a living organism.
	Select a capital city in the United States that you would like to visit. Explain the criteria you used to determine your selection.
	Write a book review of a book you recently read. Determine how you will categorize the information you will include in your book review.
How To/Process	Explain the steps involved in solving a quadratic equation.
	Explain the life cycle of a plant from seed stage to reproduction.
	Explain the steps it takes for a bill to become law.
	Explain the steps needed to create a haiku.

Expository Writing Rubric

On a scale of 0–4, rate the writing.

- 0 = no evidence
- 1 = little evidence
- 2 = some evidence
- 3 = frequent evidence, used effectively
- 4 = abundant evidence, used effectively

Elements for Effective Expository Writing	Your Assessment	Instructor's Assessment
1. The topic is clearly stated in the introduction.		
2. The thesis statement is well defined and does not contain opinions or debatable claims.		
3. Specific details are based on fact and support and explain the topic.		
4. Paragraphs and sentences follow a logical sequence with clear transitions.		
5. The conclusion restates the thesis and ties together the main points.		
6. The structure used is effective for explaining the topic (extended definition, compare/contrast, cause/effect, how-to).		
7. Use of standard writing conventions is apparent (punctuation, capitalization, spelling, grammar, paragraphing).		
8. Sentences vary in beginnings, length, and structure.		
9. Word choice includes descriptive details, action verbs, specific vocabulary, and effective transition words.		
10. The explanation maintains focus and gives the reader a clear and precise understanding of the topic.		
11. When appropriate, multimedia is used to enhance the overall meaning of the work and does not detract from it.		

In the space below, respond to the following questions:

What is something I think I did well in writing about this topic?

What are some things I will revise in this piece of writing?

What is something I can work to improve the next time I use the expository mode of writing?

Argumentative Writing

“ Try to think of yourself as engaged not so much in winning over your audience as in courting your audience's cooperation. ”

Lester Faigley and Jack Selzer,
*Good Reasons: Researching
and Writing Effective Arguments*
(6th edition)

The main purpose of argumentative writing is to persuade or to argue a point in order to influence the reader's actions or thoughts. Argument is integral to human thinking and dictates that the writer take a stand by making a debatable claim, stating an opinion, or choosing a side of an issue. The writer must then support their argument by collecting, generating, and evaluating evidence that supports their stand. This type of writing generally involves extensive research and collection of data through focused note-taking from text sources, interviews, surveys, observations, or experiments. The writer should understand all possible points of view related to the topic to effectively challenge or refute opposing arguments. In elementary and sometimes middle school, argumentative writing is called persuasive or opinion writing, but the purpose of debating a point to sway the reader's thinking remains the same.

Argumentative and expository writing are sometimes confused with one another because information is used in both writing modes. The biggest difference between the two is fact versus opinion. Expository writing is grounded in fact with the intention of informing the audience about the topic so they develop a clear understanding. Argumentative writing is based on opinions that are supported by facts and evidence. Extensive research and analysis of evidence is fundamental to writing a strong argumentative piece, while expository writing relies on less extensive research and is usually shorter in length.

It is critical that students understand the importance of taking a stand and being able to argue for or against it. Throughout history, human knowledge has grown, changed, and evolved because people have challenged thinking and provided convincing evidence that led to new ideas and solutions, which have impacted the quality of life for humans. The Greek philosopher Socrates used cooperative argumentative dialogue to challenge the thinking of the status quo. A strong foundation in the art of argument enables students to think critically, reason, make choices, and evaluate evidence. As students enter postsecondary education, these skills are critical, as argumentative writing is expected and developed at a high level in order to prepare students for future careers involving researching, thinking, and decision making.

Common components of expository essays include:

- a thesis statement that makes a claim or takes a stand
- compelling supporting evidence that is either factual, logical, statistical, or anecdotal
- a consideration of opposing points of view and evidence or explanation that can help refute these opposing views
- citation of sources that are credible, valid, and reliable
- transition words that logically guide the reader through the argument
- a conclusion that is effective and logical leaving no doubt as to the intent of the thesis
- addressing the intended audience

When composing an argumentative essay, writers should include:

- an introduction that includes:
 - a general review of the topic.
 - an explanation of why the topic is important or why it matters.
 - a clear, concise thesis statement.



- a body that contains:
 - paragraphs that each focus on one general idea that connects to and supports the thesis statement by including and analyzing well-researched, accurate, detailed, and current evidence.
 - one or more paragraphs that consider conflicting points of view to refute or disagree intelligently by explaining how they may not be accurate, well informed, or current.
- a conclusion that:
 - restates the thesis.
 - readdresses the claim based on synthesis of the evidence provided.
 - may reinforce the weakness of the opposition, re-emphasize the significance of the claim, suggest a course of action, or challenge the reader in some way.
 - does not introduce any new information.
- transitions that:
 - effectively connect paragraphs.
 - highlight each piece of supporting evidence.

“ Show that you understand and genuinely respect your listener's or reader's position even if you think the position is ultimately wrong. ”

Lester Faigley and Jack Selzer,
Good Reasons: Researching and Writing Effective Arguments (6th edition)

The evidence provided in argumentative writing should not read as a list. The writer must fully incorporate evidence into their argument and make connections to show how the evidence supports the claim. Types of evidence include:

- original documents
- photographs
- charts or graphs
- statistical data
- examples
- anecdotes
- quotations
- notes from interviews or observations
- newspaper or magazine articles
- documentary films
- passages from books or novels

Examples of argumentative writing include:

- essays
- editorials
- commentaries
- book or movie reviews
- advertisements
- critiques

Resource

- *Argumentative Writing: Progression of Skills* (Educator Resource)

Argumentative Writing: Progression of Skills

Argumentative writing is complex, rigorous, and requires building on students' prior writing experiences. With the other modes of writing, progression through the grade levels tends to consist of changes in the complexity of the writing assignments, the level of content being addressed, and the vocabulary involved. With argumentative writing, there is a more delineated progression of skills.

Skills for Elementary – Grades 3–6: Write opinion or persuasive essays.

- Introduce a topic through a topic sentence.
- State an opinion or choose a position.
- Create an organizational structure.
- Provide logically ordered reasons supported by facts and details.
- Use transition words or phrases to link opinions and reasons.
- Provide a conclusion related to the opinion presented.

Skills for Middle School – Grades 6–8: Write arguments to support claims.

- Write a thesis statement.
- Introduce a claim and acknowledge or address opposing claims.
- Support claims with reasons or evidence using credible sources.
- Use transition words or phrases to link claims and evidence.
- Establish and maintain a formal style.
- Provide a conclusion that supports and restates the argument.

Skills for High School – Grades 9–12: Write arguments to support claims.

- Write a thesis statement.
- Introduce precise claims.
- Address alternative or opposing claims.
- Develop claims and counterclaims fairly and completely.
- Supply relevant evidence.
- Use transition words or phrases to link major sections and create cohesion.
- Establish and maintain a formal style and objective tone.
- Provide a conclusion that supports and restates the argument.
- Use specific rhetorical devices (logical reasoning, emotional appeal, ethical beliefs, personal anecdotes, case studies, analogies) to support assertions (Grades 11–12).

Skills for Higher Education: Write argumentative essays.

- Write a thesis statement that reflects the position to be argued and the organizational pattern that will be used.
- Introduce precise claims and explain why they are important.
- Address and refute alternative or opposing claims.
- Develop claims and counterclaims fairly and completely.
- Supply relevant, scholarly evidence.
- Develop an understanding that claims and conclusions are subject to challenge and change.
- Write in a way that encourages others to challenge claims and assumptions, thus leading to further analysis that responds to the challenges.
- Use transition words or phrases to link major sections and create cohesion.
- Establish and maintain a formal style and objective tone.
- Provide a conclusion that supports and restates the argument.
- Use specific rhetorical devices (logical reasoning, emotional appeal, ethical beliefs, personal anecdotes, case studies, analogies) to support assertions.

INSTRUCTIONAL PRACTICE: Pursuing the Art of Persuasion

Persuasive writing is a form of argumentative writing required as part of the high-stakes testing many students face. This type of writing can be challenging because it has unique organizational structures and sentence types relating to the type(s) of persuasion (*ethos*, *pathos*, or *logos*) employed.

Instructional Goals

Students will:

- Understand how persuasion is used to achieve a desired outcome.
- Become familiar with and use vocabulary related to persuasive writing.

Resources

- *Argumentative Writing – Claim and Evidence Graphic Organizer* (Student Resource)
- *Argumentative Writing Across the Disciplines* (Educator Resource)
- *Argumentative Writing Rubric* (Student Resource)

Preparation for Instruction

- Prepare topic cards for Elevator Speeches.
- Provide space for a Persuasive/Argumentative Word Wall.

Instructional Strategies

The following mini-lessons can be used with students to develop their skills in the art of persuasion.

Ethos, Pathos, Logos

- Teach students about the three methods of persuasion, which are usually equally used within a persuasive piece.
 - *Ethos*: ethics; writing to establish credibility of the writer and build the reader's trust in the writer's character and ethics
 - *Pathos*: emotions; writing to appeal to the emotions of the reader
 - *Logos*: logic; using facts and reasoning to appeal to the reader's sense of logic.
- Present students with a topic for persuasion, for example, "Persuade your parents to change your bedtime or curfew to an hour later than it currently is."
- Direct students to provide at least three arguments to persuade their parents. One argument should use ethos, one pathos, and one logos. Challenge students to include a fourth argument that synthesizes all three.
 - Providing mentor texts that show examples of these persuasive techniques is highly recommended. See Chapter 7 for more information regarding the use of mentor texts.

Persuasive Elevator Speech

- Explain to students that they will be conducting an elevator speech of 45 seconds (about the average time of an elevator ride). The purpose of the speech will be to persuade their group members to agree with their opinion. The speeches will be impromptu, so students will have to think quickly.
- Divide students into groups of 4–5.
- Copy the following persuasive topic questions onto cards for each group and place in a bag.
 - *Should students be allowed to have cell phones at school?*
 - *What is the “right” way to eat an Oreo?*
 - *Should students be paid for making good grades?*
 - *What is your favorite season of the year? Convince your group that your favorite season is the best season.*
 - *Should students be given less homework?*
 - *Should people go to jail for abandoning pets?*
 - *Should screen time for children under 16 be limited?*
 - *Which are better pets—dogs or cats? Convince your group.*
- Students will draw a card at random, look at the topic on their card, have 30 seconds to think about their response, have an opportunity to share their thoughts and rehearse their speech with a partner, revise their speech, and then spend 45 seconds giving their speech.
 - Assigning a group timekeeper is helpful to keep speeches within the time limit.
- At the conclusion of the speech, group members will give feedback about the arguments, evidence, or points made that they thought were effective.
- Debrief by asking students to identify uses of ethos, pathos, or logos in their speeches.

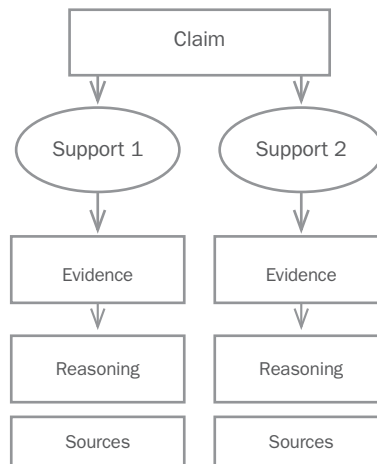
Persuasive Word Wall

- Start a word wall and add words to it throughout the year. Start with these: *ethos, pathos, logos, persuasion, fact, opinion, evidence, argument, audience, claim, and counterclaim*. Add words that help show transitions, as well as powerful words that help emphasize points. Consider capturing the word wall in a digital format and posting it in a shared digital space for students to access as a resource outside of class.



Argumentative Writing – Claim and Evidence Graphic Organizer

- Defend an opinion.
- Explain reasoning.
- Justify a position.
- Make a claim/argument.



Signal Words		Guiding Questions
<i>believes</i>	<i>the question is</i>	<ul style="list-style-type: none"> • What is the claim? • Why is this important? • Who will this impact? • What evidence is given to support the claim? • What reasoning is given using the evidence (commentary)? • What might an opponent say against this claim (rebuttals)? • What arguments can be made against the rebuttals (counterarguments)? • What are the consequences or benefits of this position?
<i>suggests</i>	<i>one answer is</i>	
<i>reasons</i>	<i>therefore</i>	
<i>for example</i>	<i>nevertheless</i>	
<i>states</i>	<i>persuades</i>	
<i>position</i>	<i>opposes</i>	
<i>proposes</i>	<i>argues</i>	
<i>evidence</i>	<i>refutes</i>	
<i>asserts</i>	<i>against</i>	
<i>claims</i>	<i>supports</i>	
<i>defends</i>		

Sample Sentence Frames

- I believe that _____. I believe this because _____.
- I disagree with _____ because _____.
- The evidence suggests that _____.
- _____ proposes that _____. She/he supports her/his position by _____.
- The author's claim is that _____, and she/he supports this claim by _____.
- It is clear that _____; therefore, _____.
- According to _____, _____ is an important issue/is a serious problem.
- _____ justifies this position by _____.
- While she/he tries to persuade us that _____, the evidence suggests _____.
- Nevertheless, the evidence strongly points to _____.
- _____ argues that _____; however, opponents suggest _____.

Argumentative Writing Across the Disciplines

The chart below contains ideas that can be developed into writing prompts for students. Topics in the form of questions allow students to choose the position they wish to take. In some cases, the instructor may dictate the position students will defend.

Science	Make a case for the most necessary component of a human cell (cytoplasm, mitochondria, cell wall, vacuole, etc.).
	Defend the following statement: <i>Self-driving vehicles are the wave of the future.</i>
	Agree or disagree with the following statement, providing evidence for your standpoint: <i>The “placebo effect” should be used for curing all diseases in their initial stages.</i>
	After conducting an experiment to evaluate the factors affecting the rate at which a process occurred, you hypothesized that the major factor was surface area. Defend your hypothesis.
Social Studies	Is social media creating a narcissistic society? Write an essay explaining your reasoning.
	Should the government stop spending money on the space program? Craft an essay to support your reasoning.
	Many students do not see the relevance of learning history. Why do we need knowledge of the past? Write an essay to convince these students that learning about the past is important.
	Persuade the governor of your state to spend a budget surplus in a certain way.
Mathematics	You and your class are planning an end-of-year school celebration. You have been given a budget and must develop a plan that stays within that budget. Persuade your class that your plan gives the most for the money and give reasons why they should adopt your ideas.
	Convince your fellow classmates that your way is the best way to solve a certain problem. Explain your reasoning.
	Should calculators be allowed in all mathematics classes? Explain your reasoning.
	Americans currently pay taxes based on how much they earn. The higher the income, the higher the percentage that must be paid in taxes. Many people argue that a flat tax requiring everyone to pay the same percentage, regardless of income, would be a more equitable tax system. Which of these two tax systems do you think is best, and why? Use specific reasons and examples to support your answer.
English Language Arts	Make a case for a word or phrase that you think should be retired.
	Is reading a book better than listening to one? Explain your reasoning.
	Write an essay persuading readers to read your favorite book of all time.
	“Ignorance is bliss.” Do you agree or disagree with this statement? Explain.

Argumentative Writing Rubric

On a scale of 0–4, rate the writing.

- 0 = no evidence
- 1 = little evidence
- 2 = some evidence
- 3 = frequent evidence, used effectively
- 4 = abundant evidence, used effectively

Elements for Effective Argumentative Writing	Your Assessment	Instructor's Assessment
1. The importance of the topic is clearly stated in the introduction.		
2. The thesis statement is well defined and contains a debatable claim.		
3. The evidence provided supports the writer's position and is based on research that is credible.		
4. Commentary that explains the reasoning connected to the evidence is provided.		
5. Opposing views and/or counter-claims are considered and refuted.		
6. Paragraphs and sentences follow a logical sequence with clear transitions.		
7. The conclusion restates the thesis and re-addresses the claim based on synthesis of the evidence provided.		
8. Use of standard writing conventions is apparent (punctuation, capitalization, spelling, grammar, paragraphing).		
9. Sentences vary in beginnings, length, and structure.		
10. Word choice includes descriptive details, action verbs, specific vocabulary, and effective transition words.		
11. When appropriate, multimedia is used to enhance the overall meaning of the work, and does not detract from it.		

In the space below, respond to the following questions:

What is something I think I did well in writing about this topic?

What are some things I will revise in this piece of writing?

What is something I can work to improve the next time I use the argumentative mode of writing?

INSTRUCTIONAL PRACTICE: Crafting Strong Thesis Statements

A thesis statement, comprised of one or two sentences, captures the topic or argument of the essay. It is usually placed near the end of the introduction paragraph to let the reader know what direction the essay will take. A thesis statement should be very specific and clearly capture the author's position on the topic; for example, "Americans should stop the regular consumption of fast food because it leads to preventable and expensive health issues, such as diabetes, obesity, and heart disease" is more specific than "People shouldn't eat fast food because it is bad for them." This example is a thesis statement for an argumentative essay. These types of thesis statements should be focused and debatable, with the author taking a side and making claims. Thesis statements for expository essays involve introducing the reader to the topic that will be explained, for example, "Aquatic mammals have more complicated respiratory systems than land mammals." This thesis statement informs the reader of the topic and specifies what will be explained.

It is important not to confuse thesis statements with topic sentences. There is only one thesis statement in an essay, but there should be a topic sentence for each paragraph that gives the main idea for that paragraph and directly connects to the thesis statement.

Instructional Goal

- Students will create a focused thesis statement for either expository or argumentative writing.

Resource

- *Thesis Statement Graphic Organizer* (Student Resource)

Preparation for Instruction

- Collect samples of thesis statements that relate to your content.
- Develop frames for thesis statements to help scaffold the process for emerging writers.

Instructional Strategies

The following mini-lessons may be used to help students produce well-written thesis statements.

Guiding Questions

Use the following guiding questions with students as they create thesis statements or to assess ones they have previously written.

- Where is your thesis statement located?
- Is your thesis statement focused on a specific idea?
- If your thesis statement is more than one sentence, what transition words are used to connect them?
- Is your thesis statement too broad or too narrow?
- Does your thesis statement contain vague or abstract language?
- Does your thesis statement use vocabulary that may be unfamiliar or confusing to your audience? If so, how can you define this vocabulary to make it clear?



- Does your thesis statement reveal your position on the topic in confident, firm language?
- How will your thesis statement interest the audience?
- Will you be able to provide adequate evidence to support your thesis statement?

Transforming Thesis Statements

Work with students to model the writing of strong thesis statements by using the following examples of thesis statements. First look at a few examples of strong thesis statements and ask students to explain why these statements are good. Next share an example of a weak statement. Ask students to identify what is missing from the statement. Then model how to rewrite the example so it is more focused and powerful. Have students work with a partner to transform additional examples. Using examples of thesis statements from your content is also beneficial.

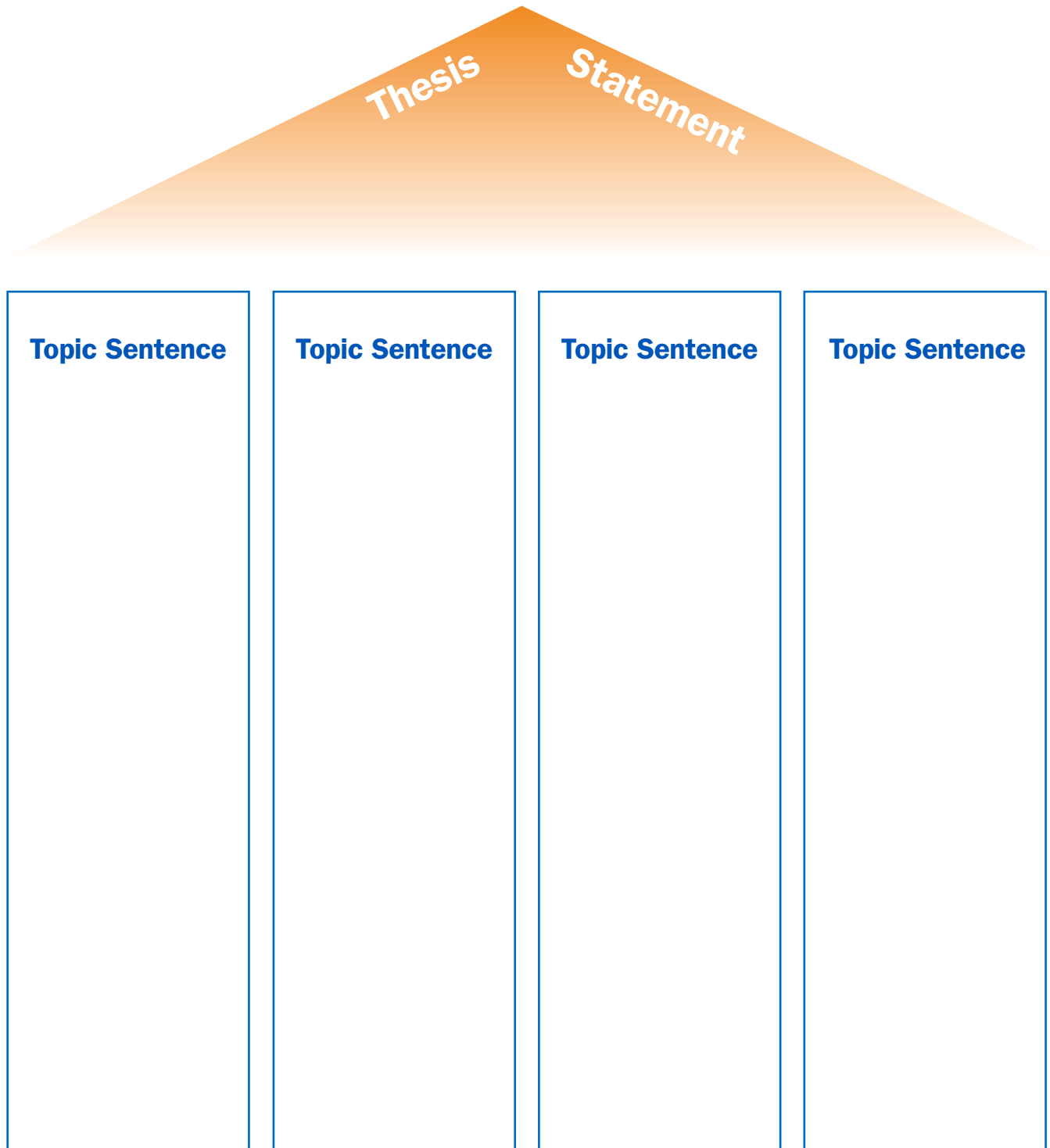
- Examples of strong thesis statements:
 - *People should take advantage of the many advertising and marketing opportunities available on the internet to expand their home-based businesses and build their customer base.*
 - *Over the last 20 years, changes in technology have vastly changed the way American students communicate.*
- Examples of weak thesis statements:
 - *In this essay, I will talk about healthcare and immigration.* (There is more than one topic, and each one is too broad.)
 - *There are some negative and positive aspects to online learning.* (There is no position taken on the topic.)
 - *Mark Twain is a great American author.* (The topic is too broad, and the claim is too general.)
 - *There are a lot of homeless people in the world today.* (The topic is not debatable, no position is taken, and the focus is too large.)
 - *Second-hand smoke is bad for you.* (The statement is too vague.)
 - *Saving the whales is a good thing.* (The statement is too vague.)
 - *Exercise is good for you.* (The statement is true and not debatable)

Thesis Statement Graphic Organizer

Student Resource: Thesis Statement Graphic Organizer (on the following page) can be used with students to help develop thesis statements and topic sentences outlining the main ideas that will support their thesis. Modeling through the shared writing of a thesis statement provides students with the scaffolding they need to be successful.

Thesis Statement Graphic Organizer

Use the graphic organizer to write your thesis statement and determine the topic sentences that will support the thesis statement. The topic sentence should contain the main idea for each paragraph. The number of paragraphs will be determined by the amount of evidence needed to prove or justify the thesis statement. Add more pillars on a separate sheet of paper if needed.



Thesis Statement

Topic Sentence

Topic Sentence

Topic Sentence

Topic Sentence

INSTRUCTIONAL PRACTICE: RAMP

The RAMP strategy is a powerful instructional practice that may be used in a variety of ways as students write in different modes and as instructors develop writing prompts. Through use of RAMP, students will come to better understand their role as a writer, as well as how to effectively and clearly communicate their ideas and purpose to a specific audience. RAMP helps students think about writing from different perspectives and focus on the varied modes of writing as they learn the importance of using the most effective mode to achieve the writing purpose and engage the intended audience.

RAMP stands for:

- **Role** of the writer: Who is the student as the writer? Is the student writing as himself or herself, a critic, a reporter, a scientist, a literary figure, or a raindrop? When students understand their role as the writer, they are better able to understand perspective and often write with a more authentic voice and style.
- **Audience:** To whom is the student writing? Are they writing to a peer, a teacher, their parents, a company, a political figure, or a fictional character? Students must also consider the perspective of their audience as they write.
- **Mode:** Will students write in a descriptive, narrative, expository, or argumentative mode? What genre or format within that mode will they use? It is important to remember that most modes are not written in isolation, but are interdependent. For example, a writer might use the narrative mode within an argumentative essay to develop a specific event as supporting evidence for or against a claim.
- **Purpose:** Why are students writing? The purpose may be directly stated in the prompt, or it may be implied. Purposes can include writing to entertain, to explain, to inform, to describe, to argue, to persuade, to evaluate, or to solve a problem. A clear understanding of the purpose helps students define and plan their writing.

Instructional Goals

Students will:

- Use the RAMP technique as a pre-writing strategy to break down and analyze writing prompts.
- Use the RAMP technique to help develop a perspective that results in a clear voice and connection to the intended audience.

Resources

- *Practicing With Ramp* (Student Resource)
- *RAMP: Sample Writing Prompts* (Educator Resource)

Preparation for Instruction

- Design writing prompts using RAMP as a guide. (See sample prompts on page 212.)
- Understand the ways RAMP may be used to impact student writing.
 - Instructors can use RAMP as a guide for crafting writing prompts to ensure all components are in place.
 - As a pre-writing exercise, students can use RAMP to break down and analyze a given writing prompt to develop a better understanding of the assignment.
 - When given freedom of choice, students can use RAMP to select a topic and determine the manner in which they will write about it.

Instructional Strategies

- Assign students a writing task by giving them a prompt connected to the current unit of study.
- Provide students with *Student Resource: Practicing With RAMP* (on the following page).
- Using a sample prompt, model for students how to determine the components of RAMP.
- Have students work either individually or with a partner to analyze their assigned prompt and determine the role of the writer, the intended audience, the mode of writing, and the purpose of the task.
- Ask students to share their findings with the large group. Ask the following questions:
 - *How will writing from the perspective of this particular role impact your writing?*
 - *How will you ensure that you address this audience appropriately?*
- Once students have a clear understanding of the assignment, have them begin to plan their writing.



Practicing With RAMP

1. What is your **Role** as a writer?
2. What **Audience** are you writing to?
3. What is the **Mode** in which you are writing?
4. What is the **Purpose** for this writing?

Role:

Audience:

Mode:

Purpose:

Role:

Audience:

Mode:

Purpose:

Role:

Audience:

Mode:

Purpose:

RAMP: Sample Writing Prompts

	Role	Audience	Mode/Format	Purpose
Science	Experienced water drop	New water drops	Expository/Travel Guide	Explain the journey through the water cycle.
	Lungs	Brain	Argumentative/Persuasive Speech	Persuade the brain to quit smoking.
	Chemist	Chemical company	Expository/Lab Report	List dangerous combinations to avoid.
Mathematics	Percentage	Student	Expository/How-To Guide	Explain ways to mentally calculate percentages.
	Acute triangle	Obtuse triangle	Argumentative/“Dear John” Letter	Make an argument as to why our differences won’t work in this relationship.
	Exponent	Jury	Expository/Instructions to the Jury	Explain the laws of exponents.
Social Studies	John Wilkes Booth	Congress	Argumentative/Letter	Justify the assassination of Abraham Lincoln.
	Frontier woman	Self	Descriptive/Diary Entries	Describe a week of life as part of the Westward Movement.
	Sacagawea	Jean Baptiste	Expository/Travel Guide	Outline your travels with Lewis and Clark.
English Language Arts	Prepositional phrase	Authors	Argumentative/Persuasive Speech	Let me help you express yourself.
	Comma	9th graders	Descriptive/Job Description	Describe the roles of commas in sentences.
	Reporter	Local community	Narrative/News Article	Report on Atticus Finch’s defense of Tom Robinson during the trial in <i>To Kill a Mockingbird</i> .

AVID Site Team Connection

Applying *Modes of Writing* Schoolwide

Educators need opportunities for collaboration and input from colleagues. The AVID Site Team is one of the key elements in taking high-leverage strategies and core beliefs across a campus. When a Site Team embraces intentionally teaching modes of writing across grade levels and content areas to increase students' learning, confidence, and competence with disciplinary literacy, students are provided the skills they need to be successful in college and careers.



INSTRUCTIONAL PRACTICE: Tracking Students' Writing

Maintaining a running record of students' writing is recommended to collect data on the different modes of writing used across a campus. For instructors, these records provide an opportunity to evaluate the amount of writing students experience in the classroom, as well as the variations in writing assignments. The data collected from monitoring the writing modes most often used within their classrooms allows educators to find new ways to incorporate writing into their content, recognize the most commonly used modes of writing within their subject area or grade level, and infer how writing about content using a particular mode enhanced or further developed students' learning.

For AVID Site Teams, these records provide an overview of the variety of writing modes and opportunities made available to students schoolwide. This data informs self-evaluation and reflection as sites and stakeholders are better able to monitor the depth and breadth of writing occurring on a campus over the course of a school year.

Instructional Goal

- Educators will consider best practices for monitoring and keeping records of students' writing in order to inform self-evaluation and reflection.

Instructional Strategies

- Have participants consider and discuss how they might approach keeping records of students' writing and using the recorded data to inform teaching practices around writing.
 - Consider whether developing a schoolwide record of how writing modes are used across a campus would best be done digitally or on paper. An example of a record-keeping chart is provided below.
- Identify the next steps the Site Team will commit to taking in order to track and reflect on students' use of writing modes schoolwide.

Title/Topic	Audience	Mode	Start Date	End Date	Notes or Thoughts
Identify patterns in nature.	Friends and classmates	Descriptive	Oct. 4	Oct. 10	Students realized that many of the patterns in math are repeated or found in nature. This assignment also provided an opportunity around the importance of using exact vocabulary to help readers visualize math in the real world.
Use slope-intercept form to calculate cost in a real-life example.	Tutor buddy	Expository	Dec. 1	Dec. 14	Finding real-life examples that use slope-intercept form and then having students write an explanation helped the students really understand this concept as evidenced by their test scores.

Post-Reading Reflection Questions

- How will I convey the purpose of writing through the use of varying modes of writing?
- How will I encourage students to use the modes of writing as tools to move them toward developing independence as writers?
- What are my next steps with incorporating modes of writing into authentic writing tasks?
- Where do the modes of writing—descriptive, narrative, expository, and argumentative—fit with the content or subject(s) I teach?
- How will I leverage multimedia technology to enhance the clarity of the four modes for my students?

K-2 Post-Reading Reflection Questions

- How will I embed the four modes of writing into my writing instruction?
- How can the four modes of writing be embedded into what students are expected to know and do by the end of the school year?
- When assessing student writing, how do I focus on conventions and content? What guides my thinking in determining where to focus?

..... **Works Cited**

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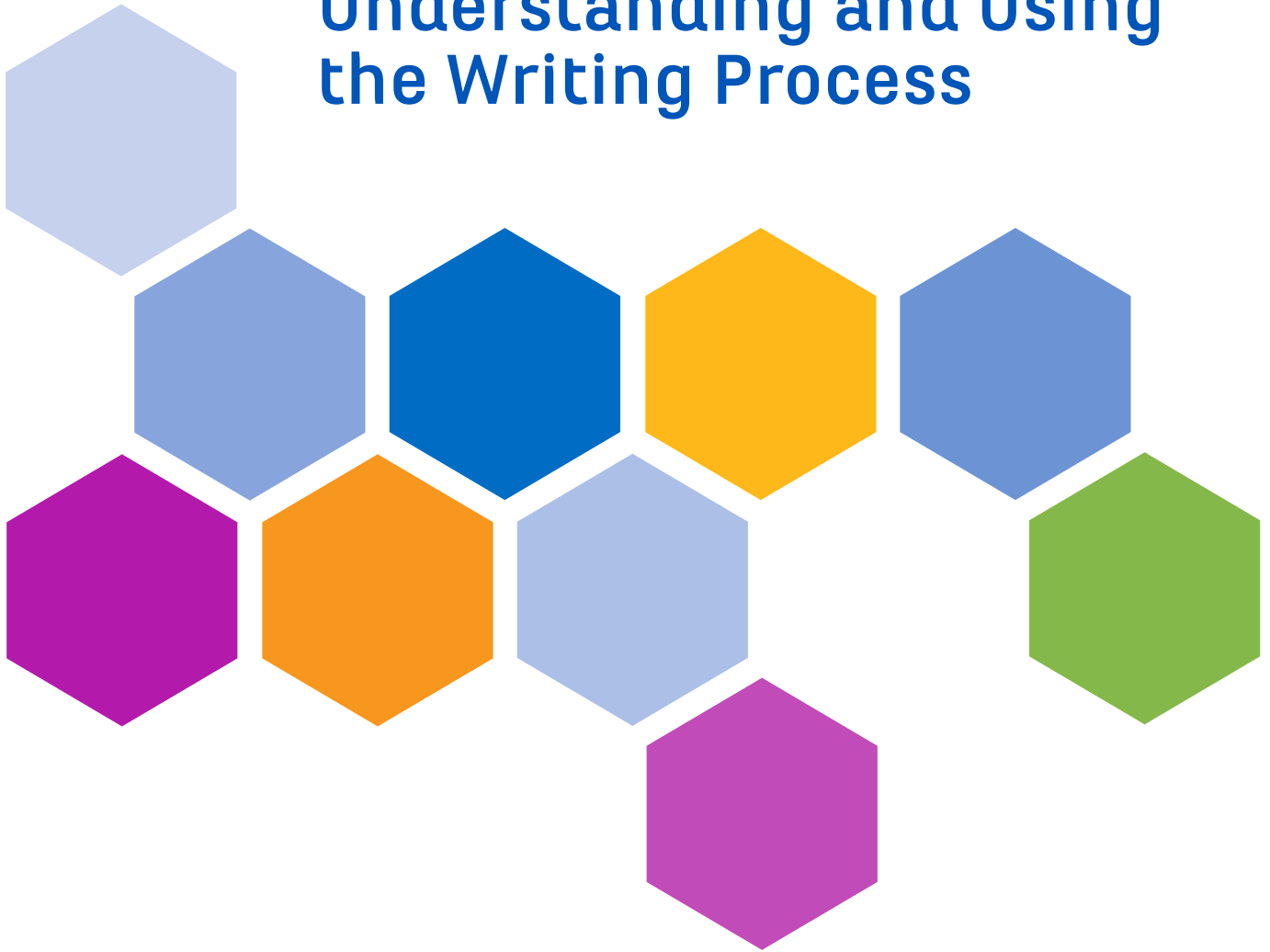
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CHAPTER FIVE

Understanding and Using the Writing Process



Visit the *AVID Writing for Disciplinary Literacy* webpage on MyAVID for additional materials and resources.

CHAPTER Introduction

Writing is a messy, complicated, difficult process. Even the most accomplished writers don't produce flawless, publisher-ready drafts on the first attempt. Before a word ever goes onto a page, a writer brainstorms, researches, plans, dreams, internalizes, and wrestles with content. Getting the words down is the easy part, though it's not *that* easy. Once the sentences are in place, the writer struggles with the questions of whether the words are right, the sentences are in a logical order, the content is easy to follow, and the text communicates the writer's intent. At various points, the writer might seek input from a critical friend, which inevitably leads to more changes. Then there are the hours spent formatting the pages and eradicating spelling, punctuation, and grammatical errors that might distract a reader or diminish the writer's credibility. At long last, the writer sends the product out into the world, where it meets a reader and achieves its intended purpose.

“*Writing is a process in which each person attempts to find the meaning of his life; we use language not so much to report what we know, but to discover what we know.*”

Donald Murray, writing theorist

Writing is more than its result. Though the product matters, the process itself is rich in learning and discovery. Writing theorist Donald Murray (1972) stressed that educators should “teach writing as a process not product.” He asserted that the process should be taught as one of discovery through language as we guide students in exploring what they know, using language to learn and evaluating and communicating what they learn. In teaching the writing process, educators serve as “coaches, encouragers, developers, creators of environments in which our students can experience the writing process for themselves” (Murray, 1972).

The phases of the writing process are as follows.

- 1. Pre-Writing**
- 2. Drafting**
- 3. Revising**
- 4. Polishing or Editing**
- 5. Publishing**

Writing looks different across grade levels and content areas; when educators teach students what it means to write like a mathematician or historian or scientist, students successfully experience disciplinary literacy and learn content through each stage of the writing process. When an entire campus commits to integrating the writing process into every classroom and content area, students make the connection that all thinking and writing is part of a process involving varying stages of pre-writing, drafting, revising, polishing, and publishing.



While not every piece of writing will be formally published, there is great power in educators referring to all stages of the writing process as students are pre-writing or drafting. Awareness of the writing process enables students to be comfortable writing for an audience in a formal assignment or a high-stakes timed writing exam.

Jeff Anderson describes the writing process as a collaborative exploration that grapples with and constructs meaning. Anderson (2011) states, “Although it looks predictable, it’s not. We don’t teach writing process as if it is a process. It’s recursive, messy, ever changing, and flexibly used as needed” (p. 5). A process is often thought of as a systematic series of steps that leads to some type of final result. Writing as a process also consists of a series of steps that lead to an end result; however, the writing process is most effective when those steps, or stages, are fluid rather than rigid so that students can move through and revisit stages as needed to satisfy a given purpose. In fact, the stages of the writing process easily allow for scaffolding and differentiation, as students can proceed through the stages in a variety of ways with varying levels of support. For example, during the pre-writing phase, students can be given a choice in how they access prior knowledge. Some may find a graphic organizer to be useful, while others may choose to use a brainstormed list of ideas. Approaching writing as a process pushes students to explore content and dig deeper.

Writing is a complex task that depends on knowledge of a large body of skills, abilities, and collaboration within each phase of the process. Students who become proficient with all stages of the writing process become flexible, proficient writers who are able to adapt to various purposes. Effective writers spend most of their time in the pre-writing and revising stages, while continuously gathering feedback from peers and instructors throughout the process. External feedback, along with self-reflection and formative evaluation, allow the writer to think critically about the purpose and content of their writing as they strive to communicate effectively.

Providing students with intentional instruction in each stage of the writing process produces learners who have developed the metacognitive insight to know when to pull what they need from the writing process to enable them to be effective communicators. Teaching the writing process should not replace time spent on content—the writing process is not the *what*, but should be the *how* that promotes inquiry and collaboration as students engage in critical literacy and academic discourse through writing experiences. It is difficult to engage in the writing process without also engaging in the reading process. Teaching students how to connect AVID’s critical reading process to the writing process, in conjunction with content, develops students’ disciplinary literacy and hones the skills needed for them to access rigorous content at every grade level.

Chapter 5 Objectives

As a result of interacting with this chapter, educators will be able to:

- Understand and utilize the writing process as a learning tool to help students improve their academic writing and to develop a deeper connection and access to content.
- Clearly define and access varying stages of the writing process to teach critical thinking skills as they connect to content.
- Determine the importance of the writing process as foundational to students' development of effective writing practices in all content areas that impact both formal writing and writing to learn.
- Incorporate opportunities for structured collaboration and feedback loops within each stage of the writing process.

Pre-Reading Reflection Questions

- What strategies do I primarily use to convey information and knowledge to students?
- What opportunities do I provide for students to discover information on their own through varied forms of writing experiences? What barriers exist that inhibit me from doing so?
- What is my understanding of the writing process?
- How do I model the writing process for my students when I write?
- What digital resources are available to enhance the writing process for my students?
- How do I currently plan for and develop writing assignments/tasks for my students?

K-2 Pre-Reading Reflection Questions

- How do I model or utilize each stage in the writing process with my students?
- Is there a stage, or multiple stages, of the writing process where my instruction has room for growth? If so, which areas can be improved?
- What are some challenges that face this particular age and developmental group that inhibit use of the writing process? What steps do I need to take to help break down some of those barriers?

Guiding Principles

- The writing process is not a rigid, linear process, it is a flexible, recursive process that requires writers to be thoughtful and intentional as they move through and return to the stages as needed.
- Teaching the writing process in the early elementary years lays the solid foundation upon which students add multiple layers throughout their education. Beginning this part of their education early is crucial, since it takes years for children to become proficient process writers.

“Through writing, students can increase their comfort with and success in understanding complex material, unfamiliar concepts, and subject-specific vocabulary.”

Judy Willis, *The Brain-Based Benefits of Writing for Math and Science Learning*

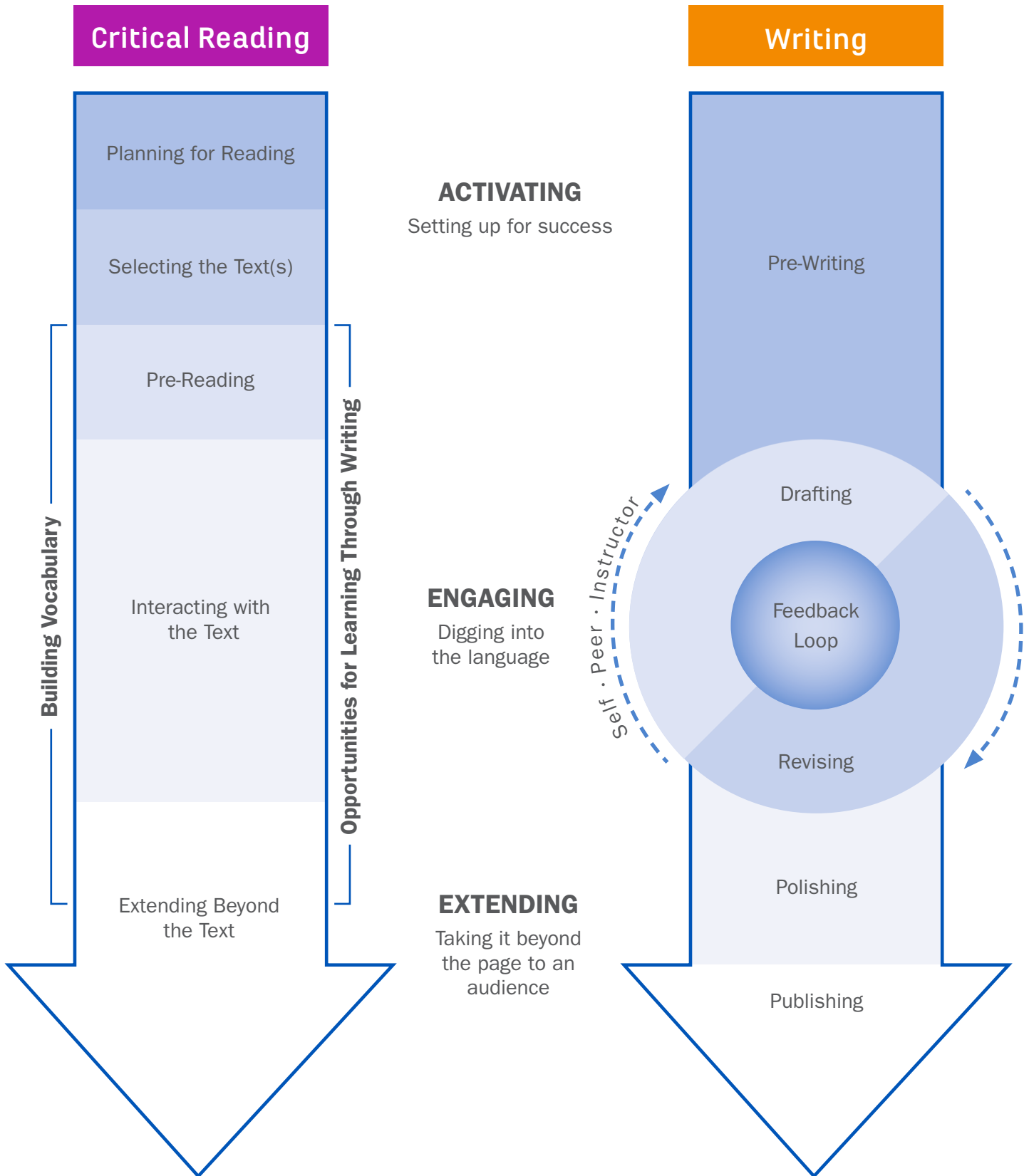
- It is necessary for educators and students to understand each stage of the writing process in order to utilize and internalize it as a lifelong learning and communication tool.
- Instruction and use of the writing process in all content areas provides for greater academic success and development of students' disciplinary literacy, building a solid foundation for learning content.
- Digital tools and resources for writing give students the ability to plan, draft, edit, communicate, collaborate, and publish in ways not otherwise available, creating opportunities for learning not otherwise possible.
- Collaboration is essential to the writing process as writers explore and construct meaning by sharing their writing and receiving, responding to, and giving feedback throughout the process.
- Academic conversation is an essential component of the pre-writing stage and lays the foundation for the writing process to be successful.
- Pre-writing is not busy work; it is one of the most intensive stages of the process and should be where students spend the majority of their time as they brainstorm, inquire, collaborate, set goals, take notes, and work with intentionality to shape their thinking about content as they prepare to write.
- Revision incorporates rigor into the writing process by asking writers to reread, rethink, and rewrite as they challenge their ideas and strive to develop a clearer, stronger voice.
- Not all writing requires that students go through each stage of the writing process; however, educators and students should develop the ability to pull from their interactions with the writing process to enhance and deepen learning through writing experiences.



Connecting Processes: Critical Reading and Writing

Subject Area and Learning Task	Applying the Critical Reading Process	Applying the Writing Process
<p>Science — Analyze a current event graphic on global progress being made in saving sea turtles to develop a CER (Claim, Evidence, Reasoning) paragraph.</p>	<p>Analyze a graphic showing trends in nesting turtle populations globally, highlighting where the sea turtle population is increasing in one color and where it is declining in another color.</p>	<p>Brainstorm reasons why sea turtle populations are increasing or decreasing in preparation for drafting a CER paragraph.</p>
<p>History — Use primary sources, maps, and before-and-after photographs to determine whether the terms of the Treaty of Versailles were fair or contributed to the rise to power of the Nazi party in Germany.</p>	<p>Examine before-and-after photographs of the Western Front in France, death and casualty tolls from France and the United States, and President Wilson’s Fourteen Points speech to Congress.</p>	<p>Write an argumentative paper determining whether the terms of the Treaty of Versailles were fair or contributed to the rise to power of the Nazi party in Germany</p>
<p>Math — Examine data connected to a sport to develop data sets that will be analyzed, incorporated into a graph or infographic, and presented to the class in writing, an oral report, or a video.</p>	<p>Read sports coverage from a major sport and identify commonly followed statistics like MLB pitching statistics, top Major League Soccer goal scorers, or even a baseball’s exit velocity. Identify why this data might be useful and to whom, analyze how newspapers and websites visually represent their data, and determine whether the selected data set is best represented by a bar graph, pie chart, pictograph, or map.</p>	<p>Develop a visual representation of the identified data set and explain the significance of the data. Consider who the audience is and the information the audience needs to best understand and make use of the analysis. Present the information to the class in writing, an oral report, or a video.</p>
<p>Language Arts — Read Harper Lee’s <i>To Kill a Mockingbird</i> to better understand the concept of courage and the different types of courage.</p>	<p>Use three-column notes while reading <i>To Kill a Mockingbird</i> to identify instances of courage by identifying the character, what they did that showed courage, and why their actions took courage.</p>	<p>Write an essay explaining the concept of courage, using textual evidence from the novel.</p>

The Critical Reading and Writing Processes





THE WRITING PROCESS: Phase 1 – Pre-Writing

Pre-writing is the beginning—where thinking starts. During pre-writing, students grapple with how to access and express content knowledge through written language by questioning, generating ideas, gathering information, and organizing ideas. The pre-writing stage is essential to the entire writing process. It takes students from the perspective of staring at a blank page and saying, “I don’t know what to write!” to “I have a plan and am ready to write!” According to Murray (1972), 85% of the thinking and writing work happens in the pre-writing phase. During this phase students work intensively—collaborating, practicing inquiry, brainstorming, taking notes, using graphic organizers, and setting goals as they dive deeper into content and plan for their writing. It is crucial for educators to plan time for pre-writing because it lays the foundation for student success with the writing process. In essence, every question, graphic organizer, opportunity for collaboration, page of focused notes, ticket out the door, or Socratic Seminar is pre-writing. Drawing students’ attention to this fact allows them to see that the work they engage in daily with content is the same work required for writing about content in a formal, academic way.

The pre-writing stage provides an excellent opportunity to meet the needs of diverse learners through scaffolding and differentiation. Scaffolding creates bridges for students by providing varying levels of temporary support that help students move toward greater independence and ensure a stronger understanding before they begin drafting and revising. Scaffolding involves breaking learning into chunks and providing a tool or structure for each chunk. For example, some students have no difficulty brainstorming ideas and organizing those ideas in a way they understand, but students who struggle with or have little experience with brainstorming and organizing ideas need more structure than simply a free flow of ideas. They may need a thinking prompt or graphic organizer to help them get started and organize their thinking. Pre-writing also allows for differentiation through instructional interventions and choice. Emerging writers may need modifications regarding the materials, task, instruction, tools available, and time requirements as they plan their writing, while more proficient writers are motivated to write when given opportunities to choose among pre-writing strategies they find engaging, relevant, and connected to their learning style.

Writers do not have all their ideas in their head before they begin to write. Time to think, to wonder, to question, to brainstorm is necessary for every writing task. As educators, we should not expect students to begin to write immediately upon receiving an assignment, nor should we expect high-quality writing if we do not give students time for pre-writing. Providing opportunities for students to engage in academic conversations around the topic, their background knowledge, and what the prompt is asking of them is an essential component of pre-writing. Creating a classroom environment that is rich in discussion and collaborative thinking allows students to learn from one another. It is important to point out to students that what works for one student may not work for another—the goal is to ultimately move all students toward choosing *how* they plan for writing. The instructional practices on the following pages provide strategies to ignite students’ thinking before they write, so they can become effective writers across all content areas.

INSTRUCTIONAL PRACTICE: Guiding Questions for Students

For students to clearly understand what is expected of them when they are given a writing assignment, they must develop a clear understanding of what they are being asked to do and then begin to ask and answer relevant questions that address the following considerations.

- prompt and developing the thesis
- purpose
- format or style
- audience

Instructional Goals

Students will:

- Identify and explain key vocabulary and the intent of the writing prompt or task.
- Consider and respond to guiding questions related to the prompt, purpose, format/style, and audience.
- Use inquiry strategies to develop additional questions as needed.

Resources

- *Pre-Writing – Guiding Questions (Elementary)* (Student Resource)
- *Pre-Writing – Guiding Questions (Secondary)* (Student Resource)

Preparation for Instruction

- Prepare an authentic writing prompt or task related to the course content.
- Distribute *Student Resource: Pre-Writing – Guiding Questions*, to each student, using the Elementary or Secondary version as appropriate for the students' grade level.
- Encourage active listening and focused discussion during structured collaboration time.
- Prepare to model and share how you use pre-writing strategies to develop your own writing.

Instructional Strategies



- Provide students with the writing prompt or task and ask them to read it silently and circle or highlight key vocabulary that is important for developing a clear understanding of the intent of the prompt or task.
- Direct students to work with a partner to share the vocabulary they circled or highlighted and explain what they think the prompt or task is asking them to do. If the prompt or task is open-ended or allows for choice, students should discuss possible choices with their partner.



- Ask for student volunteers to share the key vocabulary with the class and express why they think the selected words are important for understanding what they are being asked to do. Add these terms to a class word bank or word wall for further development of vocabulary. Consider capturing the word bank or word wall in a digital format and posting it in a shared digital space for students to access as a resource that can be used outside of class.
- Invite several students to share their thinking about the prompt or task, and determine whether students have a clear understanding of what they are being asked to do before proceeding.
- Explain that before the students begin writing, they will need to ponder the following questions:
 - What is the prompt asking that I do in this writing assignment?
 - Why do I want to write about this? What is my **purpose**?
 - What **format** or **style** will I use?
 - Who is my **audience**?
- Instruct the students to refer to *Student Resource: Pre-Writing – Guiding Questions* (use either the Elementary or Secondary version, depending on the students’ grade level). Explain how these questions can guide students’ thinking as they prepare to gather information and plan for their writing.
- Explain that not every question may be appropriate for every task, so they should focus on those that relate to their current task, adding new questions that emerge as they engage in pre-writing strategies.
- Ask students to peruse the questions and add their thoughts.
- Allow time for students to share their ideas with a partner.
- Ask students to reflect on today’s learning by completing a 3-2-1 Summary on a sticky note, responding to the following questions:
 - What are **3** important ideas I need to include in my writing?
 - What are **2** resources I can use to prepare for my writing?
 - What is my **1** central idea, or thesis?

Pre-Writing – Guiding Questions (Elementary)

Questions Good Writers Think About Before Writing

<p>What?</p> 	<ul style="list-style-type: none"> • What am I writing about? What is my topic? • What do I already know about my topic? • What questions do I have, and where can I find the answers? • Are there specific vocabulary words I should include in my writing? • What personal connections do I have with this topic?
<p>Why?</p> 	<p>As an author, I need to know why I am writing (my purpose). Will I be...</p> <ul style="list-style-type: none"> • entertaining my audience with a funny or exciting narrative story? • explaining or informing my audience with facts, dates, and details about a topic? • sharing my opinion about a topic, or trying to change someone’s mind to my point of view using evidence and reasoning?
<p>How?</p> 	<ul style="list-style-type: none"> • How do I start my writing with an introduction that matches my purpose? • How will I organize my information into paragraphs? How will I organize my paragraphs in a way that makes sense? • How will I transition from one idea to the next? • How do I write a conclusion, or ending, that supports my purpose?
<p>Who?</p> 	<ul style="list-style-type: none"> • Who is going to read my writing? • What do my readers already know about the topic? What do I need to include to help them really understand my message? • What questions might the readers ask? Do I know the answers? • When they are done reading, what do I hope the reader learns or takes away from my writing?

Pre-Writing – Guiding Questions (Secondary)

<p>What will be the thesis of my writing?</p> <ul style="list-style-type: none"> • What is my main idea or thesis statement? • What do I know about my thesis? • What questions do I have related to my thesis? • What key vocabulary is unique to this thesis? • What possible solutions or evidence will support my thesis? • What personal connections can I make to this thesis? • What have I heard people say about my thesis? 	<p>What is my purpose for writing?</p> <ul style="list-style-type: none"> • What do I want to accomplish or demonstrate through this writing? • How can I achieve my purpose? • Will I entertain or describe with a narrative mode? • Will I explain or instruct through an expository mode? • Will I persuade, argue, or share an opinion? • What resources will I need to support my purpose?
<p>What format or style will I use?</p> <ul style="list-style-type: none"> • Will I write a report, short story, poem, letter, essay, review, narrative, editorial, etc.? • Does my format/style match my purpose? • What organizational style works best for me? (e.g., Sequence, Compare/Contrast, Cause/Effect, Description/Elaboration, Claim/Evidence) • What ideas do I have for an introduction? • What ideas do I have for a conclusion? • How will I include key vocabulary? • What quotes or statistical information can I use? 	<p>Who is my audience?</p> <ul style="list-style-type: none"> • Will I write for a specific person or group of people, for an online audience, or for publication in a magazine, newspaper, journal, or other medium? • What background knowledge might my audience have? • What does my audience need to know? • What questions might my audience ask? • What should my audience take away as a result of reading my writing?

INSTRUCTIONAL PRACTICE: Generating and Organizing Ideas

As students begin generating ideas, it is important not to censor their ideas. Encourage students to write down everything they can think of. The intent is to generate as many ideas as possible. A bank of ideas to work with allows them to choose the ones that are most interesting, compelling, or engaging, while still supporting the thesis. Students need to understand that it is fine not to use every idea and that the writing process involves decision making about what points to include or eliminate, as well as learning to justify those decisions.

Instructional Goals

Students will:

- Generate multiple ideas that support, explain, or enhance their topic or theme.
- Select strategies that are best suited to their style of learning and are appropriate for addressing the task.

Resource

- *Pre-Writing – Cubing* (Student Resource)

Preparation for Instruction

- Pre-assess to determine students' prior experience with different strategies used to generate ideas.
- Provide opportunities through writing-to-learn exercises or mini-lessons for students to interact with the different strategies.
- Provide opportunities for collaboration so students can bounce ideas off one another.

Instructional Strategies

Allow students to use one or more of the following strategies to generate and organize ideas related to their writing task. Keep in mind that emerging writers may need scaffolding that includes direct instruction, collaboration, or organizational support before moving into free choice of strategies.

- **Brainstorming (Listing):** Students quickly capture or take inventory of all thoughts related to a prompt or developing thesis. The goal is to generate as many ideas as possible and consider everything—do not judge, analyze, or try to make connections—just get thoughts down on paper. Brainstorming may be done as an individual or collaborative exercise. When working collaboratively, participants should be invited to generate ideas without fear of criticism.
- **Free-Writing:** This practice of writing or typing without rules involves writing for a period of time about a specific topic. Free-writing focuses on recording all thoughts that come to mind without analyzing them or trying to make connections. The free flow of ideas should be captured. The more practice students have with this technique, the more effective it is as a strategy for their pre-writing.



- **Clustering/Webbing:** An effective follow-up to brainstorming, clustering or webbing allows students to evaluate the generated ideas and begin to organize their thinking by making connections among like ideas and crossing off ideas that no longer seem effective. Students might be provided with a template or graphic organizer to assist with organizing their ideas, or they may start with a blank page.
- **Mind Mapping:** This format can be used during the brainstorming process or as a way to organize information generated in a brainstorming list. Students start with a blank page with the central idea drawn or written in the center. From the center students should begin to branch out in a hierarchal fashion and add related subtopics and supporting ideas. Mind maps are designed to be visual and include words, colors, drawings, and symbols—capturing thoughts and making connections the way the brain “sees” them.
- **Graphic Organizers:** Numerous types of graphic organizers can assist students in organizing ideas for specific purposes. Examples include Venn diagrams to compare and contrast, flow charts to show a process, or pyramid maps to show hierarchy. The goal is for students to develop an understanding of how graphic organizers function as a tool for organizing thinking and for students to eventually develop their own, rather than becoming dependent on pre-designed organizers that may inhibit thinking due to the amount of space provided.
- **Outlining:** Constructing an outline allows the writer to organize their thoughts, beginning with their thesis, and then decide on the major points or topics to be presented. Under the major points, details should be recorded that support, extend, or clarify the major points. Writers can format outlines using numbers or letters, and can organize the content of an outline in many ways, such as chronologically, showing cause and effect, showing a process, or following deductive or inductive reasoning. Sharing models of outlines provides the structure many students will need as they become more comfortable with outlining.
 - An excellent strategy for enabling students to receive feedback on their outlines is for them to work with a small group of 3–4 students. Each student gives the group their outline, but does not comment or share anything orally. The group members then begin to discuss the outline, while the owner of the outline listens and takes note on how group members respond. Are there parts that were not clear? Were they able to follow the flow of the outline? Were there gaps? Was there too much detail or not enough? What questions did they have? Revisions can then be made to improve the outline before moving to the drafting phase.
- **Think-Aloud:** During a Think-Aloud, instructors model their own pre-writing by verbalizing everything going on in their head as they work, make decisions, and prepare to write. The Think-Aloud structure is especially effective across the different content areas as students can see how their math, history, or science instructor processes and works through content-related writing tasks. The purpose is to make the thinking visible for the students. It takes practice, but becomes easier the more it is utilized. Consider recording the Think-Aloud in an audio format to share with students who were absent or students who need to listen to the Think-Aloud more than once to better understand the process.

- **Cubing:** (*Student Resource: Pre-Writing – Cubing*, on the following page, provides a template for this process.) Developed by Cowan and Cowan (1983), cubing is a brainstorming strategy used in pre-writing that challenges the learner to examine various perspectives of a thesis by looking at it from six different sides. Each side of the cube, or each perspective, focuses on a different aspect.
 1. Describe it. (What are its characteristics, definitions, or parameters?)
 2. Compare it. (What is it similar to or different from?)
 3. Associate it. (What does it make you think of? How does it connect to something you've experienced or learned about in the past?)
 4. Analyze it. (Tell how it is made. What are its parts? Can it be broken down into smaller pieces?)
 5. Apply it. (What can you do with it? How can it be used? Who uses it?)
 6. Argue for or against it. (Explain your reasoning.)



Pre-Writing – Cubing

Describe It

(What are its characteristics, definitions, or parameters?)

Compare It

(What is it similar to or different from?)

Argue For or Against It

(Explain your reasoning.)



Thesis

Associate It

(What does it make you think of?
How does it connect to your past learning or experience?)

Apply It

(What can you do with it? How can it be used? Who uses it?)

Analyze It

(Tell how it is made.
What are its parts?
Can it be broken down into smaller pieces?)

INSTRUCTIONAL PRACTICE: Gathering Information

Once students have generated ideas and developed a focus for their writing, they need to start gathering information. It is important for students to access their prior knowledge and experiences to bring personal connections to the writing and to deepen engagement in the writing process. Students can begin to gather information from a variety of sources. Chapter 6: Deepening Inquiry Through Research provides information about finding and evaluating sources for authenticity, validity, and reliability.

Instructional Goals

Students will:

- Gather information related to their thesis to develop a bank of resources and information to use as they begin the drafting and revision stages.
- Select strategies that are best suited to their style of learning and appropriate for addressing the prompt.

Preparation for Instruction

- Pre-assess to ensure students have had experience with different strategies used to gather information.
- Provide opportunities through writing-to-learn exercises or mini-lessons for students to interact with the different strategies.
- Be prepared to model for students how you gather information for your own writing.

Instructional Strategies

Have students use one or more of the following strategies to gather information supporting their thesis. Keep in mind that emerging writers may need scaffolding that includes direct instruction, collaboration, modeling, or organizational support before moving into free choice of strategies.

- **KWLA:** This graphic organizer allows students to access what they already may know about their thesis, discover what questions they may have related to their thesis, and to record and apply new information they learn. (See pages 57–59 for a detailed strategy description of KWLA.)
- **Accessing and Analyzing Notes:** Many writing assignments require students to interact more deeply with content. This allows for the authentic use of notes taken during class that relate to the thesis. Within the pre-writing stage, students should access their notes and analyze them for information and ideas that could be incorporated into their writing. Through use of a highlighter or by transferring relevant notes to their brainstorming page or a graphic organizer, students can pull usable information from their class notes.



- **Making Connections:** Accessing prior knowledge and personal experiences helps students make connections to their thesis. The ability to make personal connections lends authenticity and adds interest to the writing, while honoring the diversity of experiences students bring to the classroom. Students should consider the following questions:
 - Thesis-to-self connections:
 - What does this thesis remind me of?
 - How do I relate to this thesis or find it interesting?
 - Does anything about this thesis remind me of something in my own life?
 - Thesis-to-text connections:
 - Have I read about this thesis before? What do I remember about what I read?
 - How is what I am learning about this thesis similar to things I have read or studied before?
 - How is what I am learning different from things I have read or studied before?
 - Thesis-to-world connections:
 - How does this thesis relate to something that I have seen or heard about in the real world?
 - How is this thesis different from something that I have seen or heard about in the real world?
- **Focused Note-Taking:** Some writing tasks require that students read and gather research, evidence, or data that supports their main idea. Students should utilize the focused note-taking strategies outlined in Chapter 3 of this book to take notes as they read and gather new information.
- **Observing and Interviewing:** Performing an observation or conducting an interview is a strategy for collecting qualitative data that can be used to support points or claims made in writing. Students need to plan for both by developing questions they hope to have answered and ensuring they have access to what they will be observing or experts they will be interviewing. Students who are new to interviewing should role-play with other students before conducting the actual interview with an expert.

INSTRUCTIONAL PRACTICE: Goal Setting and Time Management

When approaching an assignment, it is important for students to analyze and determine the amount of effort and time it will take to produce quality work. Successful completion of a writing task requires the use of strategies such as goal setting, backward mapping, and calendaring. These skills not only contribute to academic success, but are also essential life skills. Sometimes educators assume students have these skills, but unfortunately many students have never received explicit instruction in these areas—a factor that may hinder their academic success and their employability. Instructors in all content areas can incorporate goal-setting and time-management strategies to help students build these valuable skills and become better process writers.

Instructional Goals

Students will:

- Analyze the writing task or prompt to develop a plan for completion.
- Select time-management strategies that are best suited to their style of learning and appropriate for addressing the task.

Resources

- *Pre-Writing – Backward Mapping Plan* (Student Resource)
- *Pre-Writing – SMART Goals* (Student Resource)

Preparation for Instruction

- Provide a rubric that outlines clear expectations for the writing assignment. Students must know what is expected and how they will be graded prior to beginning the process.
- Provide opportunities through writing-to-learn exercises or mini-lessons for students to interact with the different strategies.
- Be prepared to model for students how you plan for projects or deadlines.

Instructional Strategies

Guide students to plan for success through the time-management strategies that are most appropriate for addressing the expectations of a given assignment.

Rubric Analysis

- Share the assignment rubric with students and guide them through the expectations.
- Answer students' questions after providing time for them to read the rubric and identify what parts are unclear to them.
- Model for students how to break down the rubric into a task list they can then use to set goals and develop a timeline for completion of the project.



Backward Mapping

- This strategy is best used with extensive formal writing assignments. Through backward mapping, students analyze the assignment, breaking it down into smaller tasks needed to achieve the final product in a timely manner. Once tasks are determined, students then set dates for completion and enter them onto a project calendar or create a timeline for completion. Students need explicit instruction and modeling to fully understand this process. To make backward mapping accessible to students, model this strategy for them, thinking aloud through all the decisions, action steps, and chunking of component parts of the task.
 - Number the task to identify and delineate the component parts.
 - Complete *Student Resource: Pre-Writing – Backward Mapping Plan* with the identified component parts.
 - Either model or use a collaborative structure for a discussion between students determining which strategies to employ for each part of the task.
 - For younger students or students in need of additional scaffolding, maintaining a visible list of strategies that have been utilized is helpful.
 - Add the identified strategies to the corresponding components in the *Backward Mapping Plan*.
 - Develop a time frame for when each component part needs to be completed. Have students think about, discuss, and decide how much time is needed for each component part.
 - Working backward from the completion deadline, add due dates for each component task to the *Backward Mapping Plan*.

SMART goals are goals that are specific, measurable, action-oriented, reasonable, and timely.

..... Setting Long-Term and Short-Term SMART Goals

- Depending on the length and expectations of the writing assignment, students may need to set short-term goals, long-term goals, or both. For example, writing a journal entry or summary, although valuable in developing content knowledge, does not require as much planning and goal setting as a more formal academic paper. It is important to discuss writing quality with students while encouraging them to identify areas for improvement and set explicit goals to guide their writing. Setting goals is just the first step. For goals to be effective and relevant, students must be held accountable for developing an action plan, tracking their goals, and reflecting on their progress.
 - When setting goals, students should be directed to consider the following questions.
 - What is my purpose in writing this? How will it impact my audience?
 - What steps will I need to take to be successful with this assignment?
 - What will it take for me to meet the expectations set forth in the rubric?
 - What learning or content knowledge do I personally expect to gain from completing this writing assignment?
 - What components of writing do I need to work on as a writer?
 - *Student Resource: Pre-Writing – SMART Goals* on page 240 may be utilized to guide students through the process of goal setting.

- Goal setting means identifying the steps needed to complete the task with a conscious awareness of the points in the task that will be difficult. Identifying what will make a task difficult and setting goals to move through the task is an essential skill for students to learn. For goals to be set and accomplished, they must be intentionally thought through and written down. The educator’s role in supporting students’ goal setting includes the following tasks.
 - Model the process of goal setting during the writing process.
 - Highlight strategies and tools to use when breaking a writing goal into component parts.
- When introducing a writing task or prompt, integrate the following instructional steps into the assignment.
 - Provide time for students to think about and write their goals for the writing task. Setting SMART goals is an effective way to approach the initial part of the writing process.
 - Refer to *Student Resource: Pre-Writing – SMART Goals*, and instruct students to use this resource to write a long-term SMART goal regarding their writing task.
 - Then, encourage students to write short-term SMART goals that lead into the long-term goal for their writing task.



Pre-Writing – Backward Mapping Plan

Writing Project Components	Due Date	Strategies to Use to Complete Components	Completed
1.			<input type="checkbox"/>
2.			<input type="checkbox"/>
3.			<input type="checkbox"/>
4.			<input type="checkbox"/>
5.			<input type="checkbox"/>

Pre-Writing – SMART Goals

<p>Specific</p>	<ul style="list-style-type: none"> • Goals should be specific. Vague, ambiguous goals are difficult to accomplish. • What writing task would you like to accomplish? • What steps in the process are needed to get there? • What are the necessary short-term milestones?
<p>Measurable</p>	<ul style="list-style-type: none"> • What concrete, distinct steps will you accomplish?
<p>Action-oriented</p>	<ul style="list-style-type: none"> • What action steps will you take to accomplish your goal?
<p>Reasonable</p>	<ul style="list-style-type: none"> • Is the goal attainable given your skills and time constraints?
<p>Timely</p>	<ul style="list-style-type: none"> • Within what time frame would you like to accomplish your steps and the goal regarding the writing task?

THE WRITING PROCESS: Phase 2 – DRAFTING

A **recursive** process uses the same operation or step to create the next result, or repeatedly returns to the same point.

Drafting is the stage of the writing process in which a writer organizes information and ideas gathered during pre-writing and develops sentences and paragraphs. First drafts lay the foundation for writing, but these are just the start. It is important to keep in mind that a first or rough draft may not require a lot of time, but the drafting stage is **recursive** as writers move between the drafting and revising stages, analyzing and scrutinizing what they have written and finding ways to improve, expand, and clarify their initial thoughts and word choice. As students receive feedback and work through the revision stage, they should respond to and utilize feedback by writing multiple drafts before arriving at a final product.

“ I think it helps to consider a first draft a discovery draft. Assume that you're writing it to organize your ideas and discover what you want to say; when you do that, you can turn off that self monitor that criticizes as you write and just get something down. Often a first draft is little more than an exploration. You can trim, focus, and develop it later. ”

Maxine C. Hairston,
Successful Writing



INSTRUCTIONAL PRACTICE: Guiding Drafting

The main strategy for drafting is to “just get started” as students begin the process of organizing and processing their ideas by capturing them in writing. Included here are suggested guidelines instructors can follow to ensure that students produce viable first drafts that articulate the writing purpose, explain and support the topic, and address the audience.

Instructional Goals

Students will:

- Compose first drafts using ideas and information gathered during pre-writing.
- Focus on establishing a clear purpose through their first draft.
- Write multiple drafts based on feedback and observations from the revision phase.

Preparation for Instruction

- Provide time for drafting and gathering feedback.
- Create and provide sentence stems and/or templates to provide support for emerging writers within a specific content area.

Instructional Strategies

The following suggestions outline strategies and procedures to guide students through a successful drafting phase. Select and use those that provide support for your students and work well with the assignment.

- **Guiding Questions for Students:** Share the following questions with students to guide their thinking as they compose their drafts. Questions could be used as quickwrite prompts or to initiate a discussion through a Think–Pair–Share protocol.
 - How will I use my work from pre-writing to guide me as I write my draft?
 - Am I focusing on my thesis as I write by stating the main idea and providing supporting evidence throughout?
 - Am I focusing on engaging my audience by writing in a clear voice that connects my thoughts to sources that further define, explain, and support my thesis?



- **Review of Pre-Writing:** It is vital that students make the connection between the work they did in the pre-writing stage and what they will now write. Ways to connect students to their pre-writing work include:
 - **Review and Reflection:** Connect students' review of their work from pre-writing to what they do when they review notes in the focused note-taking process. As they review the work, they need to prioritize and organize their ideas, focusing on the information they will use.
 - **Peer or Educator Conference:** Use a conferencing format so students can review their pre-writing work and share their plan for how they will use the information they have gathered in the drafting stage of the writing process.
 - **To Keep or Not to Keep:** Be sure students understand that it is okay not to use everything from the pre-writing stage. In fact, determining what to discard requires as much thought as deciding what to keep. This is where students decide on the importance and relevance of anything they keep to ensure that their writing stays focused on the thesis and that the information kept enhances and supports the main idea(s).
 - **Reflective Writing:** Have students review their pre-writing work and then write a reflection on how they plan to use the work as they start their draft. Reflections can be shared with a partner. Instructors can use the reflections as a formative assessment to determine how well students are connecting to and utilizing the work done in the pre-writing stage.
- **Start It, Capture It, Finish It:** Students may use these guidelines as they write.
 - **Start it** with an introductory paragraph that connects to the audience and clearly states the thesis and addresses the prompt.
 - **Capture It** by writing ideas in paragraphs that explain, connect to, and expand on the thesis. Focus on content, not mechanics, at this point.
 - **Finish it** by summarizing, synthesizing, and drawing conclusions related to the thesis and addressing the prompt.
- **Scaffolding During Drafting:** This stage of the writing process is where students might require a variety of scaffolds and supports as they take the work and ideas generated in the pre-writing stage to form a written work. Be sure to visit Chapter 1 for strategies and scaffolds to utilize during this stage.

THE WRITING PROCESS: Phase 3 – Revising

“ *The best way to learn to write is to rewrite.* ”

Revision: Cultivating a Critical Eye (Dartmouth College)

After pre-writing, revising is the stage where students should spend the most time. The goal of revising is to improve the first draft by making changes in content, style, and form based on feedback through peer and instructor conferencing, collaboration, sharing, self-analysis, and reflection. Changes should enhance the writing by ensuring the prompt is being fully addressed with supporting details, a clear voice that speaks to the intended audience, and a format that communicates organized thought. Revision goes hand-in-hand with drafting and is revisited as often as necessary—think of the drafting and revision stages as occurring almost simultaneously.

Regie Routman (2005, p. 156) defines revision as “to see again.” She says, “We revisit, revalue, reconsider, and look again at our writing. Revision involves rereading to clear up confusions, reorganize text, rewrite for clarity and interest, and rethink word choices. Revision takes place even when we’re not writing; it’s part of our thinking process around the writing.”

Revision is a difficult, contemplative process that holds much of the rigor of writing. When students ask, “Why do I have to revise what I wrote?” respond by telling them:

- Revision teaches you to be a better writer and better communicator.
- Revision develops your ability to see strengths and weaknesses within your writing.
- Revision develops your reading and analytical skills.
- You learn to challenge ideas and not take everything at face value.
- Revision leads to a deeper understanding of the content.
- You begin to see new thoughts and ideas beyond your original thoughts.

Revision should not be viewed as an evaluative process. It should not send a message of failed work that needs to be redone. It is an opportunity to grow as a learner and writer by developing, analyzing, and improving ideas that result in communicating through a stronger, clearer voice, while deepening content knowledge.

The revision process is a collaborative endeavor. To revise, students must get input and gather feedback from others on their writing. The use of collaborative structures, as outlined in Chapter 1, pages 11–12, is essential to the revision phase. Additional strategies for purposeful revision are provided on the following pages.



INSTRUCTIONAL PRACTICE: Developing “Revision Consciousness” Through the 3 R’s – Reread, Rethink, and Rewrite

The revision process begins with the writer practicing self-analysis and reflection. Routman (2005, p. 156) stated, “I write, reread, and rewrite with a revision consciousness. That is, I value revision, strive to revise where and when doing so makes sense, and take responsibility for revision because I care about the writing.” As educators, we need to help students develop a revision consciousness by focusing on growth mindset thinking as they work through the 3 R’s of revision: reread, rethink, and rewrite.

Instructional Goals

Students will:

- Articulate a purpose for revising.
- Develop independence with the revision process through the 3 R’s.

Resource

- *Revising – The 3 R’s of Revision* (Student Resource)

Preparation for Instruction

- Write a rough draft about the topic, “Developing a Revision Consciousness.” Include your own thoughts about the revision process—how you reread, rethink, and rewrite, and why revising is important as a writer within your content area.
- Be prepared to share your own revision processes with students through a Think-Aloud using your rough draft.
- Determine how writing will be modeled and displayed (chart paper, projector, digital whiteboard, etc.).
- Provide students with *Student Resource: Revising – The 3 R’s of Revision* (page 247).
- Establish a classroom environment that fosters growth mindset thinking.

Instructional Strategies

- Ask students what they think it means to “think like a writer.” Record responses. (Optional: As a follow-up question, ask, “What does it mean to write like a fill in with your content-area expert?” {scientist, mathematician, historian, author, sociologist, etc.}.)
- Conduct a Think–Pair–Share. Ask, “Why is revision an important part of the writing process?” Give think time, then ask students to share their thoughts with a partner, and finally lead a group discussion by having students share thoughts with the whole group.
- Share your own thoughts about how you see yourself as a writer and explain how you write with a “revision consciousness”—always aware of how you can make your writing better by thinking about the audience, identifying problems and opportunities for improvement, and considering evaluation criteria.

- Explain that you have internal conversations with yourself while you write and then share your rough draft on “Developing a Revision Consciousness.” Begin a Think-Aloud by reading it aloud and revising as you go. Make your thinking visible as you show the process of the 3 R’s—reread, rethink, rewrite. This is not a sequential process, but rather, all three are done simultaneously.
- Direct students to work on developing their own revision consciousness by following the process of the 3 R’s with their own rough draft. Use *Student Resource: Revising – The 3 R’s of Revision*, to guide students through this process.
 - **Reread:** Encourage students to read aloud, as this allows them to hear how their writing sounds. Students can also use narration software to listen to their own writing being read aloud.
 - **Rethink:** As students reread aloud they should constantly be thinking about what they wrote, considering feedback they received, and asking themselves questions.
 - **Rewrite:** As students reread and rethink, they should constantly be stopping to rewrite by taking notes or capturing questions that come to mind, changing words, crossing out information, adding information, and clarifying parts. The intention is not to rewrite the entire paper. Revision is messy, and a final polished rewrite will come during the polishing and publishing stages.
- Provide an opportunity for students to pair up with a writing buddy to share the results of their 3 R’s work.
- It is important to note that individual processing of revision through the 3 R’s structure is a first step. Students should also begin the process of gathering feedback and returning to the 3 R’s structure to process the feedback. Revision is a recursive process that bounces back and forth between the drafting and revising stages as students receive feedback and make changes to their writing.



Revising – The 3 R's of Revision

Revision involves making changes to a written draft for the purpose of improving what was written. Follow the steps of rereading, rethinking, and rewriting to revise your work. Repeat the steps as often as needed based on your own thinking and on feedback you receive from others. Track your changes, either by hand or using word processing software.

Ask yourself the following questions to reflect on the revision process:

- Did I read my writing out loud?
- As I reread, did I listen for clarity and voice?
- Did I gather and review feedback about my writing from others?
- Did I keep an open mind about making changes to my draft?
- What did I learn about myself and about my topic as I worked through the revision process?

Rethink – As you **reread**, you should constantly be thinking about your writing and asking yourself the following questions:

- Does what I wrote address the assignment and the intended audience?
- Does my voice come through in my writing?
- Does anything not sound right?
- Does my writing flow?
- Will my writing make sense to my readers?
- Is what I wrote engaging?
- Is my purpose clear?
- Is my main idea or thesis clearly stated?
- Do I have strong support for my main idea or thesis?
- Did I say what I meant to say?
- Are any parts confusing or awkward?
- Are there any gaps in my writing?
- What did I do well?

Rewrite – As you **reread** and **rethink**, you should also be stopping to rewrite by taking notes or capturing questions that come to mind, changing words, crossing out information, adding information, or clarifying. Make it messy! Use different colors to show your thinking. While *rewriting* does not mean you have to rewrite the entire piece, it does mean you are making changes to improve what you have to say.

INSTRUCTIONAL PRACTICE: Gathering Feedback

Writing is communication between the writer and the intended audience. Gathering feedback about writing is a way to get a feel for how the writing is developing and to see what readers might think about it. Feedback is a type of formative assessment and should be ongoing throughout the writing process, but is critical that it occur during the revision stage. Feedback can come from peers or instructors, either face-to-face or through an online forum.

Gathering feedback is only a first step in the revision process. The writer must then consider the feedback and make decisions about what changes to make to their writing based on the feedback.

Instructional Goals

Students will:

- Gather and analyze feedback from peers and instructors.
- Develop a plan for using feedback related to their writing.

Resources

- *Revising – Peer Revision Conferencing Guidelines* (Student Resource)
- *Revising – What to Say During a Revision Conference* (Student Resource)
- *Revising – Trash or Treasure* (Student Resource)
- *Revising – Trash or Treasure Organizer* (Student Resource)

Preparation for Instruction

- Review the instructional practice for *Ongoing Feedback and Formative Assessment* toward the end of this chapter on pages 275–276.
- Set up clear expectations and protocols for both the writer and the reviewer during student conferencing.
- Allow time for students to meet in pairs or small groups.
- Plan for one-on-one conferences with students.
- Ensure that students will have the following materials: colored pens, pencils, and/or highlighters, highlighting/inking tools on a digital device; a list of guiding questions; technology for viewing writing within a group setting.

Instructional Strategies

The protocols on pages 249–250 will help students gather effective feedback to improve their writing.



Peer Revision Conferences

- The purpose of a revision conference is for both the writer and the reviewer to become better writers. They learn from one another as they work through the revision phase. Peer revision conferencing can be structured as a one-on-one experience or a small group setting. Establishing “writing buddies” or writing partners for different assignments works well, as does providing time for students to meet in an Author’s Circle, which is where students share their writing within a group setting. Both structures require the writer to put their work on display for feedback, which can be intimidating to many students. It is crucial to set up protocols for the reviewers so they provide feedback that is positive, constructive, specific, and timely. The student resources, *Peer Revision Conferencing Guidelines* on page 251 and *What to Say During a Revision Conference* on page 252 provide guidelines for students as they participate in conferences. Additional information about using mentor texts to provide specific feedback can be found in Chapter 7 on page 394.
- Successful peer conferencing requires that students:
 - Receive explicit instruction and modeling in how to respond to writing. (See *Instructional Practice: Ongoing Feedback and Formative Assessment* on pages 275–276.)
 - Understand that the focus is on revision of content, not editing of language conventions.
 - Recognize peer conferencing as an established routine within the classroom.
 - Be held accountable as both a writer and a reviewer.
 - Reflect on their experiences with conferencing. How did the experience impact their growth as a writer? How did it support the learning of content?
- Successful peer conferencing requires that instructors:
 - Model and provide instruction in giving effective feedback.
 - Convey the purpose of the conference.
 - Determine what grouping will work best (one-on-one or small groups) for this assignment or group of students.
 - Plan time for conferencing to occur.
 - Determine how or if the performances of the writer and reviewer will be evaluated and convey that information to students.
 - Monitor the conferences, providing guidance where needed.

Instructor Revision Conferences

- An instructor revision conference involves talking one-on-one with a student about their writing.
- These conferences are flexible in order to meet the needs of students and the time constraints of instructors. Some conferences may be highly structured and last 10–15 minutes, while others may be more informal and last 2–5 minutes. Instructors do not have to meet with every student for every writing assignment, nor does the entire draft need to be read and reviewed during a conference.
- Conferences can be initiated by the instructor or requested by the students. Many instructors develop a method by which students may sign up for revision conferences.

- This type of conferencing is an excellent protocol for providing scaffolding for emerging writers and for differentiating to meet the varying learning needs of students in the classroom.
- Revision conferences should be held prior to the evaluation of a final product so students can work through the revision process and produce revised drafts before finalizing their writing.
- The instructor should serve as a coach or guide and ask probing questions or make comments that prompt students to talk about their writing.
- Utilize open-ended questions to guide students to focus the conversation on the content and organization of the writing rather than the conventions, which will be addressed in the polishing phase.

Use of Technology

- Technology can be an essential tool for gathering feedback during the revision process. Take advantage of online forums approved by your institution that allow students to post and share work for feedback asynchronously. Many students need time to digest information and can provide additional feedback after having time to reflect, possibly outside of the school day.
- Writing partners and instructors can also use technology to share and give feedback to one another through email, instant messaging, video conferencing, or cloud-based word processing tools that allow for collaboration.
- Utilize digital devices for round-robin-type feedback. Students can display their writing on the monitor or share it with other group members. Assign students to move around to different computers to read and give feedback or open shared documents to view other students' work. Feedback should be typed in either a different color or all capital letters, or added as comments to stay visually separate from the text being reviewed. Allow 2–4 moves as time allows so students get feedback from more than one perspective.

Responding to Feedback

- Students have spent time gathering feedback, but so what? If they are not held accountable for addressing the feedback, then the process has been a waste of time. It is important to hold students accountable for taking action with the feedback they received. They should:
 - Analyze the feedback, keeping in mind that feedback consists of suggestions that may or may not be used.
 - Determine what feedback can enhance their writing and discard feedback that will have low impact or is no longer useful based on other revisions or ideas.
 - Make changes to their draft based on feedback and be able to justify how those changes improve the writing.
 - Track changes made to drafts using a word processing program or a different color ink or font so both the instructor and student can see the thinking process as changes occur.
 - Use *Student Resource: Revising – Trash or Treasure* on page 253 to guide students through the process of utilizing feedback to improve their writing.

Revising – Peer Revision Conferencing Guidelines

My Role as a Writer

- Be willing to share my writing and any revisions I have made based on my own review of my writing.
- Be open to suggestions given and questions asked by my reviewer.
- Consider how I will use the feedback I receive.
- Prepare questions I can ask based on self-reflection on my writing.

Questions to Ask Myself as a Writer

- Where might my reader become lost?
- What changes can I make that would clarify my ideas for my reader?
- How do each of my paragraphs directly connect and support my main idea and thesis statement?
- Do I need to create new paragraphs or add information to existing ones?
- Would a different introduction or conclusion strengthen my writing?

My Role as a Reviewer

- Remember that I am critiquing the writing, not the person.
- Give feedback that is positive, constructive, and specific.
- Focus on improving what the writing says, not on the mechanics—think big ideas, not periods.
- Ask open-ended questions to get the writer talking about their writing.
- Make suggestions, but remember it is the writer’s choice as to how they will use the feedback I give.

Questions to Ask Myself as a Reviewer

- What do I like best about what I read?
- Does the writing engage me? Why or why not?
- Can I verbalize the main idea or thesis statement?
- Are there any places where I become confused or lost?
- Does each paragraph expand and support the main idea or thesis statement?
- Does the conclusion bring closure to the writing?
- What parts of the writing work well?

What to Say as a Reviewer

- Start by sharing something positive about the writing.
- Ask questions to clarify anything that is confusing or doesn’t flow.
- Ask the writer how they could clarify my points of confusion, or suggest revisions that would help with clarity.
- Suggest possible improvements for revisions that will make the paper more engaging, such as refinements to the introduction or conclusion, or the addition of descriptive language.

Revising – What to Say During a Revision Conference

The table below provides examples of comments that a reviewer might use during a peer conference to offer positive feedback, questions, and suggestions. These examples are a guide, but space has been provided to jot your own thoughts as you provide positive, constructive, and specific feedback for your writer. Remember, the purpose of a revision conference is for all participants to become better writers.

Possible Comments	Possible Questions	Possible Suggestions
Your introduction really grabbed my attention.	How do you think a reader might react to your introduction?	You might want to rethink your introduction and maybe start with a quote or interesting fact related to your topic to grab your reader's attention.
Each paragraph is well developed and provides information that supports and explains your main idea or thesis statement.	Can you explain the purpose of the fourth paragraph? I am having trouble seeing how it connects to your thesis.	The fourth paragraph seems out of place. You might consider rewriting it, moving it, or discarding it.
Your main idea or thesis statement is clear. I understand exactly what you are trying to say.	What is your main idea or thesis statement?	I am a little confused about your thesis statement. It seems to go in several directions. I think if you choose one idea and focus on developing it, your paper will be more effective.
I can see a clear beginning, middle, and end as I read your work. It was easy to follow and understand.	Do you think you are missing any information? Is there a different order in which you could present your findings?	I was following your thought processes until I reached the fifth paragraph. These points seem out of order and break the flow of your writing. I would suggest rethinking where this might fit.
This is so interesting to me because . . .	Are there any parts of your writing you think we should look at?	I could use a much clearer picture of . . .

Revising – Trash or Treasure

You have gathered feedback on your writing, so what do you do with it? Feedback can be valuable as you work through the revising phase. The feedback you received involved suggestions for revision or made you think about possible ways to improve what you are saying, but it is now up to you to decide if you will “treasure it” or “trash it.” Follow the steps below to guide your decisions.

1. Analyze It

- Review all the feedback you received, keeping in mind that it consists of suggestions you may or may not use.
- Decide what you will treasure and what you will trash. The feedback you treasure should enhance your writing, while the feedback you trash may have low impact or not be useful based on other revisions or new ideas you have. Be able to justify the decisions you make and how they improve your writing.

2. Plan It

What are at least three things I will use from the feedback I treasure? (You may add more on the back of this page.)

- a.
- b.
- c.

3. Use It

Make changes to your draft using a different color pen or pencil to track your thinking process as changes occur. If using word processing software, use a tracking changes tool, highlight changes, or use a different color or different font.

4. Reflect on It

Answer the following questions as you reflect on your experience with responding to feedback.

- a. What impact has the use of feedback had on me as a writer?

- b. What have I learned about receiving feedback that I can apply when I am asked to give feedback to a peer?

Revising – Trash or Treasure Organizer

As you review and think about the feedback you received about your writing, decide if you will...

<p>Trash It</p>  <p>(Discard or recycle for later)</p>	<p>Treasure It</p>  <p>(Keep and use)</p>

INSTRUCTIONAL PRACTICE: Mini-Lessons

The revision phase focuses on content and organization to ensure clarity and attention to purpose and audience. The use of mini-lessons to address certain aspects of writing is both beneficial and relevant while students are working to improve their writing. Mini-lessons last about 5–15 minutes and focus on one specific concept. They can be taught to the whole group or to small groups or individuals, allowing for scaffolding and differentiation. For example, if you notice that several students consistently struggle to get started with writing, you might pull those students together for a mini-lesson on writing an introduction. Or if you realize that your students have very little experience with developing a thesis statement, you can design a mini-lesson that targets the entire class. The beauty of mini-lessons during the revision phase is that students can immediately apply their learning in a relevant and timely manner.

Instructional Goal

- Students will apply skills learned through mini-lessons to improve their writing.

Preparation for Instruction

- Use formative assessments and pre-assessments to determine skills that may need to be addressed through a mini-lesson.
- Provide mentor texts and exemplars that model topics covered in mini-lessons.

Instructional Strategies

The following mini-lessons target skills that will benefit students during the revision phase of the writing process.

Writing an Interesting Introduction

- Writers want to engage their readers in the first few moments of reading, but many students struggle to get started. The following tips can be taught through a mini-lesson format to assist students with this task.
- Provide mentor texts or exemplars of introductions related to the type of writing students are being asked to produce.
- List the things the writers of the mentor texts did to hook their readers, such as:
 - Start with a quote, question, example, or interesting statistic.
 - Explain why the reader should want to read the text.
 - Provide a clearly stated, intriguing thesis with points to be discussed.
 - Appeal to the senses with description and powerful words.
 - Tell an anecdote or story related to the thesis.
- Ask students to work with a partner to revisit and rethink their introduction.
- Another strategy is to tell students to quickly write an introduction, or skip it entirely and come back to it later. Many authors find that the introduction forms as they begin to discover exactly what they want to say by writing the rest of the paper. When students stall on the introduction, it can slow down their progress with delving into the rest of what they have to say.

For more information on ways to use mentor texts, see Chapter 7: Mentor Texts and Teacher Modeling.

Writing an Effective Conclusion

- Students may tend to make their conclusion a simple restatement of their introduction. While a conclusion should bring closure to their thinking, a powerful conclusion needs to do more than merely restate the introduction. The following tasks can be shared through a mini-lesson:
 - Provide mentor texts or exemplars of conclusions related to the type of writing students are being asked to produce.
 - List the things that writers did to conclude their thinking, such as:
 - Restate the thesis in a different way to reinforce it.
 - End with a question that leaves the reader intrigued and wondering.
 - Suggest a plan of action or next steps the author or reader can take.
 - Summarize the main points.
 - Ask students to work with a partner to revisit and rethink their conclusion.

Say/Do Table

- This critical reading strategy can be effectively used with students to analyze the structure of their writing. Students create a two-column chart or table with the left column labeled, “What my writing says” and the right column labeled, “What my writing does.” Students then go paragraph by paragraph through their writing. In the Says column they summarize what each paragraph is *saying*, for example, “Overfishing of sharks is leading to a possible decline in the worldwide shark population.” In the *Does* column students explain what the text *does*, for example, “Defines overfishing and provides statistical information about the rate of overfishing in different parts of the world.” If students are unable to clearly verbalize what each paragraph is saying and doing, then they need to consider how it can be revised to be more effective. The sample below is a Say/Do table related to writing about school dress codes.

Paragraph	What my writing says	What my writing does
1	I believe dress codes are beneficial for schools to adopt.	States my opinion and outlines the main points that support my opinion.
2	Dress codes create a better learning environment.	Explains how inappropriate dress causes distractions and interrupts learning
3	Dress codes teach students to dress properly for different events, places, and purposes.	Gives examples of how people dress differently based on where they are going, where they work, or what they do.
4	Dress codes help all students fit in.	Explains how dress codes create less focus on how you look
5	There are many reasons to adopt a dress code.	Restates the reasons why a dress code is a good thing.

My reflections:

1. I believe I have a clear thesis statement and support my opinion with reasons that show the benefits to learning and students.
2. I didn't include data or hard facts, so I need to add some evidence to further support my reasons.
3. I need to work on my conclusion. It just restates everything. I need to rewrite this so it is more powerful.



THE WRITING PROCESS: Phase 4 – Polishing (Editing and Proofreading)

Polishing is refining writing by editing and proofreading, often while using feedback provided by a reviewer such as a peer or instructor.

Editing and proofreading are essential components of the writing process and the last steps before moving toward publication. This stage allows students to internalize feedback and analysis from the drafting and revision stages and make changes to content that provide for increased flow and clarity. Students can also see the application of writing mechanics and the importance of spelling and word choice as they produce professional, polished academic writing—the type of writing needed as students move on to higher education and into the workplace. **Polishing** is the chance to check in the mirror one last time before stepping out and to avoid letting mistakes distract from what is being said. It is important to note that when students are thorough with pre-writing, drafting, and revising, the polishing stage becomes much easier.

There is a fine line between revising and editing, but both work toward the same purpose of improving written communication. According to Catharine Wright (2011), when students revise they are looking at the big picture to “re-vision” their writing. Revision involves self-analysis and gathering feedback that can lead to adding or taking away material, changing the order of paragraphs, and rewriting introductions or conclusions. Editing takes place after revising and involves looking at the details of the writing by considering each part of the paper. Editing includes checking for a clear tone and confident voice, concise language, rhythm and flow with well-constructed sentences, and strong word choice, as well as a logical organizational structure, accurate references and works cited pages, and a title that connects to the work. When editing, the writer fine-tunes revisions and transitions to proofreading. Proofreading gets to the nuts and bolts of the mechanics of writing by checking for errors in sentence structure, grammar, punctuation, capitalization, and spelling. Finding and correcting any errors or typos is the final step in creating a polished product that is ready for publication.

As with the previous stages in the writing process, collaboration plays an important role in polishing writing as students work with others to refine their writing through editing and proofreading. Through self-analysis and conferencing, students should gather feedback that focuses on polishing the work so that errors or poor word choice do not impede meaning.

As students transition from revising to polishing and editing, various strategies can provide support. Many of these strategies can be taught through a mini-lesson format and can also offer direction for editing conferences.

INSTRUCTIONAL PRACTICE: Editing – Looking at Organization

Many developing writers do not know how to organize their writing so it is clear and easy to understand. The following strategies, explored through a mini-lesson format, can be quick reminders for students to double-check the organizational patterns of their writing.

Instructional Goals

Students will:

- Analyze the organizational structure of their writing.
- Edit their writing by making changes that provide clear and logical organization.

Preparation for Instruction

- Provide mentor texts and exemplars related to the writing assignment.
- Be prepared to conduct a Think-Aloud to share your editing practices.

Instructional Strategies

The following strategies can be used to support students in editing their work as they focus on organization.

- **Read Aloud:** Reading one’s own writing out loud slowly and precisely, sentence by sentence, highlights portions that seem awkward or lack flow. Students can also listen to their own writing being read aloud through narration software. Model this process for students to show where meaning might break down and editing is needed.
- **Transitions:** Use an exemplar text to work with students to mark the transition words used to connect ideas and provide fluency. Have students ask themselves, “Can my reader follow the movement of thought through my paragraphs?” and highlight transition words used to guide the reader. If transition words are lacking, then students need to add them into their writing. Creating a word wall or word bank of transition words during a mini-lesson is an excellent scaffold for students.
- **Identify the Organizational Style:** Provide models of organizational styles that work well with the type of writing students are being asked to do. Chapter 4: Using Modes of Writing to Build Disciplinary Literacy contains templates of the commonly used organizational styles in academic writing. Such styles might include sequential, cause/effect, and compare/contrast. Provide guiding questions related to organization:
 - Does your piece have a clear beginning, middle, and end?
 - Are the ideas, evidence, and actions connected to each other?
 - Can your reader follow the piece logically from beginning to end?



INSTRUCTIONAL PRACTICE: Editing – Sentence Combining

Many inexperienced writers tend to write with a pattern of short, choppy sentences, which can become repetitive and boring for the reader. Teaching students to combine two or more sentences into more complex thoughts increases the effectiveness of their writing and is more interesting for the reader.

Instructional Goals

Students will:

- Analyze the sentence structure of their writing.
- Edit their writing by combining sentences to create interest and complexity.

Preparation for Instruction

- Provide mentor texts and exemplars related to the writing assignment.
- Be prepared to model the practice of sentence combining.
- Ensure that all students can view the two sample paragraphs provided on this page, or use a paragraph related to your content and deconstruct it into short, choppy sentences.

Instructional Strategies

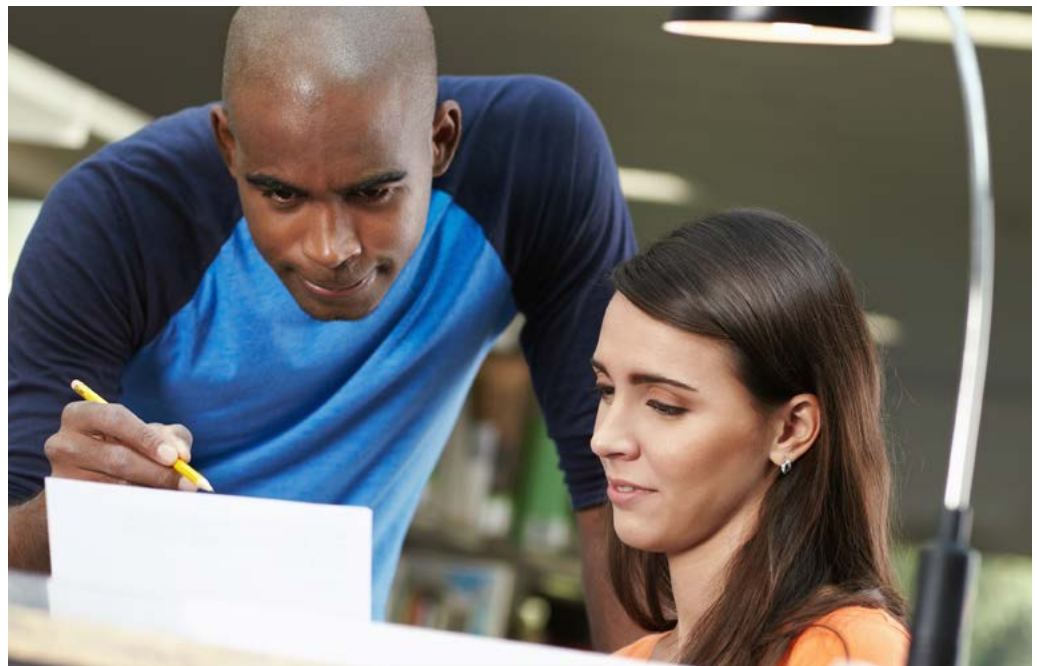
The following steps provide direction in sentence combining for students and can be utilized in a mini-lesson format.

- Read aloud, project, or distribute the following two paragraphs (or use your own paragraphs) for independent reading. Ask students which one they prefer and why.

1. *The blue whale is a mammal. It is the biggest whale. It is the largest animal to have ever lived on Earth. Some can be the size of a Boeing 737 plane or double-decker bus. It can weigh up to 144 tons. That is about 2,000 men. Its tongue weighs as much as an elephant. They are pregnant for 10–12 months. Newborn blue whales can weigh up to 7.3 tons. They can drink enough of their mother’s milk at one time to fill a bathtub. They gain about 3.7 kilograms a day for 8 months.*

2. *Blue whales are gigantic mammals! They are not just the biggest of all the whales, but the largest animal to have ever lived on Earth. Some blue whales grow as big as a Boeing 737 plane or double-decker bus and can weigh up to 144 tons, which is the weight of about 2,000 men combined. A blue whale’s tongue alone weighs as much as an elephant. After 10–12 months of pregnancy, female blue whales give birth to newborns that can weigh up to 7.3 tons. For about 8 months baby blue whales gain around 8 pounds per day, which isn’t surprising since they can drink a bathtub-size amount of their mother’s milk at one time. Blue whales are truly the giants of the animal kingdom.*

- Point out that the use of short, choppy sentences results in boring writing. Ask students to analyze how the writer changed their sentence structure from Paragraph 1 to Paragraph 2. This may be done with students working in pairs or sharing their observations within a large or small group setting.
- Direct students to take their current rough draft and, using a different color pen, pencil, or highlighter, draw a line between their sentences. If using word processing software, students can press Enter in between each sentence. They can do this for the entire paper or just a few paragraphs depending on time and purpose. Be sure to model this with your own writing or the sample paragraph.
- Ask students to analyze their sentences and look for places where sentences could be combined into more complex, interesting sentences. It is recommended that students work with partners to do this.
- Another option for students who need more modeling is to show a piece of writing to the class by sharing it digitally or displaying it on chart paper and work together as a whole group to combine sentences.



INSTRUCTIONAL PRACTICE: Polishing – Word Choice and Bringing Writing to Life

Mark Twain, a master with the written word, stated, “The difference between the *almost right* word and the *right* word is really a large matter. ‘Tis the difference between the lightning bug and the lightning.” Word choice is crucial to writing that is alive and engaging. Words that speak to the senses bring to life what a writer is trying to communicate and appeal to the audience. The following strategies will help students become masters of word choice as they bring their writing to life.

Instructional Goals

Students will:

- Develop an awareness of the impact word choice has on their writing.
- Analyze and edit their writing focusing on word choices that add clarity and interest.

Preparation for Instruction

- Provide mentor texts and exemplars related to the writing assignment.
- Be prepared to model the practice of word choice.
- Provide space in the classroom for word walls.

Instructional Strategies

The following strategies that explore word choice may be used in a mini-lesson format or assigned as tasks for classwork or homework. Consider capturing the charts, word banks, and other resources in a digital format and sharing the resources with students so they can access them from anywhere.

Mentor Texts

- Provide mentor texts related to the content and writing assignment. Ask students to point out or highlight the language the author used that they found most interesting. Record responses on a word choice anchor chart.
Ask:
 - What made the writing interesting?
 - Did the author use vivid descriptions or powerful words that helped you see what they were writing about?
 - Did they use a format, like a story or metaphor, that helped you connect to the topic?
- Direct students to practice on their own by finding one place in their own writing that they could edit with better word or phrase choices.

Word Detectives – Word Walls

- Challenge students to become word detectives and bring to class samples of powerful or vivid writing that they find at home, in the library, in other classes, or online.
- Start a word choice wall and add examples to it.
- Word walls might include the following themes: Misused Words; Vivid Verbs; Transition Words; Strong vs. Weak; Instead of [insert word like *good, said, went, etc.*], Use Super Synonyms; Our Academic Vocabulary, etc.

GIST

- Give students a topic related to your content area (vector, desalination, colony, metaphor, etc.).
- Ask students to explain the topic in vivid detail using exactly 20 words (a range of 10–15 words may be given to younger students, emerging writers, or English language learners). Having to write within a confined number of words delivers the message of the importance of word choice as students grapple with how and what to say with a concise, yet engaging voice.

No Repetition

- This strategy is similar to GIST in that students write about a specific topic or idea, but in this format, they will use a specific number of sentences.
- Ask students to write about their topic using 5–10 sentences (depending on their ability and experience levels). The catch is that they may not repeat any words at all, including common small words, so they must come up with a unique way to write each sentence. This strategy also helps students explore various sentence structures.

From Good to Better

- Create a chart or table like the sample below on chart paper or in a collaborative digital space, but leave the *Why* column blank. Use the examples provided or add examples pulled from student writing.
- Tell students that they are going to learn how to take good words or phrases that are sometimes too abstract or overused and turn them into better words or phrases that are more specific and vivid.
- Ask students to look at the good and better versions and determine why the changes were made.
- Continue with additional examples from student writing or writing specific to your content area.
- Ask students to recreate the chart or table and find at least five words or phrases in their own writing that they can edit to make them better. They should be able to justify why these changes improve their writing.

Good	Better	Why
He was sad .	He wept .	Wept conveys a specific action that shows the depth of sadness.
Regardless of the fact that...	Although...	Wordiness is not always good. It is sometimes better to be concise.
The results of the experiment were good . We learned a lot .	The results of the experiment provided valuable information that confirmed our prediction.	“Good” and “a lot” can be ambiguous.
<i>Add your own examples from students’ writing.</i>		



INSTRUCTIONAL PRACTICE: Polishing – Ratiocination

Ratiocination is a process of exact thinking. In the polishing phase, ratiocination may be used for both editing and proofreading. The process provides a system for isolating and marking different concepts related to word choice or writing mechanics so each part can be analyzed. Changes made through this process can improve the effectiveness and impact of the writing.

Instructional Goal

- Students will understand and use the process of ratiocination to polish their writing.

Preparation for Instruction

- Ensure that students have colored pencils and/or highlighters, or highlighting/inking tools on a digital device.
- Be prepared to model the process of ratiocination by using a projection device or shared workspace to show the writing sample(s).
- Determine what writing concepts should be targeted.

Instructional Strategies

- Model the process of ratiocination by using either students' writing or your own writing. (If using students' writing, be sure to get their permission first and keep the samples anonymous.) As you model with a sample, have students repeat each step with their own writing, either with a partner or individually.
 - Mentor texts may also be used with this process so students can see examples of effective writing techniques as they analyze and break down the writing.
- Determine which of the following concepts you will target, and walk students through the process, focusing on one at a time. Utilize gradual release of responsibility and practice "I Do, We Do, You Do" as students learn this process.
 1. Underline or highlight each sentence using two alternating colors. Begin with the first word in each sentence and end with the punctuation mark (period, question mark, or exclamation mark). What do you notice about the length of your sentences? Are they too long? Too short? Does each one make sense? Do you need to combine or rewrite any sentences?
 2. Circle or bold the first word of each sentence. Look at the words you circled or bolded. Are they all capitalized? Did you repeat any words within the same paragraph? If so, can you change some of the words to add more interest to the paragraph by varying your sentence beginnings?
 3. Draw an arrow from subject to verbs or highlight these parts of speech within each sentence. Does each sentence have a subject and verb? Do the subject and verb agree? Do you need to make any changes?

4. Draw a triangle or use a different color highlighter around all the “to be” verbs, such as *am, is, are, was, were, be, being, been*. Can you try to eliminate at least half of them by using verbs that convey more action? For example, instead of “Tobacco use is deadly,” say, “An estimated 450,000 Americans die each year from diseases related to tobacco use.” Try to avoid use of passive voice. For example, instead of “He was angered by the outcome of the trial,” say, “The outcome of the trial angered him.”
 5. Draw a wavy line under words or phrases that are repeated more than 3 times. Is there a way to change or eliminate some of these words or phrases? Is the thesaurus a tool you could use?
 6. Draw an X over or strike through words that are vague or overused, like *good, bad, nice, very, really, a lot, wonderful, thing*. Can these be replaced with better words?
 7. Draw a box around pronouns (*he, she, it, them, they, him, her, I*, etc.). Draw an arrow back to the noun each pronoun is renaming. If the connection is not there or is not clear, eliminate the pronoun and use the noun.
- Once students have had practice with these procedures, they can begin to do them on their own or through peer conferencing. Guide students with the writing concepts they need to focus on by providing a resource or poster with steps.



INSTRUCTIONAL PRACTICE: Polishing – Systematic Proofreading

It can be difficult for students to proofread an entire piece of writing. Helping students develop a system for proofreading helps break the process into manageable tasks and promotes more focused thinking.

Instructional Goal

- Students will follow a system for proofreading and correcting their writing.

Resource

- *Polishing – Top 10 Tips for Proofreading* (Student Resource)

Preparation for Instruction

- Provide mentor texts and exemplars related to the writing assignment.
- Be prepared to model the practices of editing and proofreading with your own writing.

Instructional Strategies

- Share with students the *Student Resource: Polishing – Top 10 Tips for Proofreading* (on the following page).
- Divide students into pairs or triads to form ten groups.
- Assign one tip to each group. Their job is to analyze the tip; determining its purpose, the impact it could have on writing, and why they think it is important to them as a writer. After 10–15 minutes, the groups should be prepared to share their thinking and “teach” their classmates about their assigned tip through a 2-minute presentation. They may use props, a skit, a song, or other materials to enhance their presentation.
- Have each small group “teach” their tip to the large group.
- Ask each student to produce a written reflection in response to the prompt: *How can these proofreading tips help me grow as a writer?*

Polishing – Top 10 Tips for Proofreading

- 1. Take a break.** Don't proofread until all revising and editing are completed. Don't proofread immediately after revising and editing. Instead, wait a day and then look at the writing with fresh eyes.
- 2. Use an interactive version of your work.** Ensure that you have space to make notes and corrections in between lines or in the margins. Either print a double-spaced copy or use features of your word processing software to format, annotate, and track changes.
- 3. Read aloud.** This involves more senses, and the ears can hear something the eyes might have missed. If it doesn't "sound right," something probably needs attention. Listen to your piece being read through narration software if that works better for you.
- 4. Read backward.** The brain automatically tends to correct "wrong" words in sentences as we read. Reading backward, word by word, helps focus attention on each word and makes it easier to find spelling errors or typos.
- 5. Edit line by line.** Focus on a small portion of the text at a time by using a tool as a place-marker (e.g., a blank piece of paper, a cursor, digital selection tools, a ruler, or a sticky note). This enables the reviewer to move through the writing one line at a time to find mistakes.
- 6. Check for one error at a time.** This will require several readings of the writing. Read once to check capitalization of proper nouns and titles, as well as capital letters at the beginning of sentences. Read again looking at punctuation—end punctuation, commas, apostrophes, quotation marks, etc. Conduct another read-through to look at grammar, subject-verb agreement, pronoun use, etc.
- 7. Highlight homonyms.** Homonyms are words that have the same pronunciation, but are spelled differently and have different meanings. Be on the lookout for the correct use of *their*, *they're*, and *there*; *your* and *you're*; *to*, *too*, and *two*; *its* and *it's*; *insure* and *ensure*; *accept* and *except*; *principal* and *principle*; and so on. If using word processing software, look for underlined homonyms and check the definitions to ensure you used the correct word.
- 8. Check for accuracy.** Misquoting someone or incorrectly using numbers can detract from the validity of the writing. Check to ensure that quotes and statistical data are copied and cited correctly. Also check to be sure numbers are written properly—for example, 1.2 billion is very different from 1,200,000.
- 9. Share the work.** Ask a classmate to serve as your editor. Another set of eyes can often catch mistakes that went unnoticed.
- 10. Use digital tools.** Many digital tools can be used to aid in proofreading. Use the spell-check and grammar-check features, but remember that these tools do not check style and are not always correct. Consult the thesaurus tool for synonyms to replace weak or overused words.

INSTRUCTIONAL PRACTICE: Editing and Proofreading – Peer Review Conferences

During peer revision conferences, students serve as writers and reviewers, with both roles learning about themselves as writers. That experience continues through conferencing that focuses on editing and proofreading. Since these two actions are different, it is recommended that students engage in more than one conference, with one focusing on editing of language and the other focusing on proofreading for errors within the mechanics of writing. Students should understand that the protocols and routines established during revision conferences also apply during editing and proofreading conferences, though the purpose or focus is different.

Instructional Goals

Students will:

- Participate in a peer editing conference to analyze the language of their writing and edit for voice, flow, and clarity.
- Participate in a peer proofreading conference to detect and correct errors related to the mechanics of writing.

Resource

- *Polishing – Guiding Questions for Peer Conferences* (Student Resource)

Preparation for Instruction

- Provide mentor texts and exemplars related to the writing assignment.
- Be prepared to model the practices of editing and proofreading with your own writing.
- Ensure that all students have a clear understanding of the purpose of each type of conference.

Instructional Strategies

The following instructional strategies ensure that students understand the difference between the two types of conferences for editing and proofreading. If your students already have a well-developed understanding of editing and proofreading, skip to the guiding questions that students can use during these two types of conferences.

- Explain to students that at this point in the writing process, they have had the opportunity to plan, draft, and revise their writing. Some of them may have made extensive revisions with many drafts, while others may have made minimal changes.
- Explain that as students move into the polishing stage, this will be the last chance to put the finishing touches on their writing to prepare it for publishing.

- Ask students what they think the difference is between editing and proofreading. Allow time for them to share their thoughts with a partner through a Think–Pair–Share format. Ask for volunteers to share some responses with the large group.
- Provide students with a definition of each action.
 - **Editing:** Reviewing and making changes to writing that focus on the structure and rhythm of the language, the organization of the writing, and the accuracy of content.
 - **Proofreading:** Checking for and correcting errors related to the mechanics of writing.
- Ask students to form groups of four by partnering with another pair from the Think–Pair–Share.
- Direct groups to create a two-column chart or table and brainstorm. Say, “Based on these definitions, brainstorm things you think you might do, say, or ask during these types of conferences.” Examples may include:
 - **Editing:**
 - Read the writing aloud or listen to it being read.
 - Listen for voice.
 - Look at each sentence and paragraph. Should they stand alone or be combined?
 - Look for descriptive language and strong word choice, or identify where these elements are missing. Look for strong transition words and assess the flow of the writing.
 - Look for a clear beginning, middle, and end.
 - Check the accuracy of evidence.
 - Check the list of works cited.
 - Think about the title. Is it interesting and connected to the subject of the paper?
 - Determine how previous revisions impacted the writing.
 - **Proofreading:**
 - Check for mistakes or typos in sentence construction, grammar, punctuation, capitalization, and spelling.
 - Use a system for proofing the writing.
- Ask groups to share out some of their thoughts and record them on chart paper or in a collaborative digital space. Be sure to guide a discussion to ensure students are on the right track and have a clear understanding of the difference between the two types of conferences.
- Schedule time for students to pair up and conduct editing and proofreading conferences.
- Provide students with a printed or digital copy of their writing and the list of guiding questions (located on the following page) to focus their thinking while conferencing.
- Guide students in using feedback received during conferences to polish their writing as they move into the publishing phase.



Polishing – Guiding Questions for Peer Conferences












Questions to guide your thinking during an EDITING conference:

- What did you notice when you read your writing out loud?
- Does your writing stay focused on one important main idea or thesis?
- Did you provide enough evidence to support your main idea or thesis?
- Do your ideas flow logically and make sense?
- Did you use transition words to guide your reader?
- Does your title fit the writing and interest the reader?
- Have you replaced weak words like *very* or *nice* with strong, specific words?
- Have you deleted overused words like *then*, *so*, and *that*?
- Did you find words you have used too often? Can you use a thesaurus to find alternatives?
- Have you used sentence combining to create more complex thoughts?
- Are you sure that your references are accurate and correctly cited?

Questions to guide your thinking during a PROOFREADING conference:

- Do I have any run-on or incomplete sentences?
- Do I have subject-verb agreement in each sentence?
- Did I use pronouns, adjectives, and adverbs correctly?
- Did I indent the first line of each paragraph?
- Does each sentence begin with a capital letter and end with the correct punctuation?
- Did I capitalize all proper nouns and titles?
- Did I use commas, semicolons, apostrophes, and quotation marks correctly?
- Did I use spell check if I used a word processing program?
- Did I double-check the spelling of names of people and places and technical vocabulary?
- Did I use the correct form of words that sound alike, but have different spellings and meanings, like *to*, *two*, and *too* or *their*, *they're*, and *there*?

As you respond to the questions about sentence structure and grammar, consider using the proofreading marks on the chart to mark your draft.

 insert letter or word here.	 insert a space here.
 switch the order of two letters or words.	 Begin a new paragraph.
 Make this letter lowercase.	 Capitalize this letter.
 Link inserted material.	 Add a comma.
 Add quotation marks.	 Add a period.
 Take out a word, sentence, or punctuation mark.	

THE WRITING PROCESS: Phase 5 – Publishing

Publishing involves distributing polished writing to an audience. It is the chance for students to share their efforts and lends relevance to the work they have done. Sharing their work with real-world audiences motivates students to perform well as they engage in all stages of the writing process. However, publishing is sometimes the most underutilized phase of the writing process in education. Students often see this stage as something they are doing for the instructor or for a grade, when in fact it should provide them with a relevant, practical experience. As educators, our quest is to make writing and publishing about more than a grade. When we design opportunities for students to write things that matter and when we create assignments that connect the content we teach to real-world problems, we are instilling the belief in students that their voice matters.

Publishing can occur through various avenues, such as a formal written paper, an oral presentation, or publication in an online forum. Publication often includes the addition of illustrations, style sets, media, or other graphic elements to enhance the writing and make it more appealing to an audience. Allowing students choice in how they publish is significantly motivating and increases their ownership of the writing.

As students prepare to publish their writing, they benefit from having a publishing partner to advise and assist with the design and formatting of the writing and the addition of any graphic elements. The publishing partner can also serve as a “first audience” for an oral presentation, offering critiques on oral presentation style related to voice volume, eye contact, body language, and the level of preparation and organization.



INSTRUCTIONAL PRACTICE: Guiding Students Through the Publishing Phase

Students will need guidance through the publishing phase as they prepare their writing to share with an audience.

Instructional Goals

Students will:

- Prepare their writing for publication.
- Share their final work with an audience.

Resource

- *Publishing – A Checklist for Oral Presentations* (Student Resource)

Preparation for Instruction

- Assess students' experience with publishing by asking them to share the experiences they have had with publishing in the past.
- Allow time for students to work through the publishing phase in class and as homework, keeping in mind that not all students may have access to materials and technology at home.
- Provide opportunities for students to share their work with a real-world audience.

Instructional Strategies

The following strategies can aid in guiding students through the publishing phase.

- **Provide guiding questions:** Ask students to think about the following questions.
 - How will I share my work with my audience?
 - How will I ensure that my work is ready for publication?
 - How does the publication method I chose enhance my initial purpose and convey my message?
- **Prepare for an oral presentation:** Students should be given expectations for delivering a polished oral presentation. Give students time to practice and receive feedback before presenting to their intended audience. Provide students with *Student Resource: Publishing – A Checklist for Oral Presentations* (page 273) prior to planning for their presentation so they will know the expectations in advance. Discuss and model the following criteria for oral presentations.
 - **Eye contact:** Did the presenter connect with their audience visually? Were the presenter's eyes focused on the audience and not on notes or other materials?
 - **Voice projection:** Did the presenter speak at a reasonable volume so all members of the audience could hear? Did the presenter speak with expression? Was the presenter's voice clear and easy to understand?

- **Body language:** Did the presenter stand up straight and face the audience? Did the presenter use gestures or body movements that enhanced or distracted from the presentation? Did the presenter convey a confident attitude?
- **Organization:** Was the presenter well prepared? Were all materials ready and easily accessible? Did the presentation flow in a logical order?
- **Visuals:** Did the presenter use materials that were visually pleasing? Did the visuals add to the information presented or did they distract from it?
- **Allow for choice by providing different publishing options:** Giving students some choice as they work through the publishing phase is motivational, allows for differentiation, and develops metacognitive skills as they select options that appeal to their abilities and learning styles. The instructor may determine that all students will produce a formal written paper, but students might then be given the option as to what style, format, or graphic additions will be used. Or the instructor might decide that all students will create an oral presentation around their writing, but students could be given choice in how they present—a slideshow presentation, speech, skit, poster presentation, or other format. The following list includes some options for publication, but is not all-inclusive. Add your own ideas to the list, as well as ideas from students. There are also many online publishing tools available to assist students with publishing.

Publication Options

- academic essay or paper
- letter
- brochure
- business plan
- editorial
- speech
- slideshow presentation
- poster presentation
- illustrated book
- blog
- cartoons or comic book
- story
- song
- poem
- journal
- opinion paper
- directions
- online forum
- class magazine or newspaper
- newsletter
- student website
- class bulletin board/writing wall
- family writing night
- author's circle
- publishing party
- social networking post
- marketing campaign
- podcast
- video script



Publishing – A Checklist for Oral Presentations

Use this checklist to reflect on the oral presentation.

<p>Eye Contact</p>	<p><input type="checkbox"/> Did the presenter connect with their audience visually?</p> <p><input type="checkbox"/> Were the presenter's eyes focused mostly on the audience and not on notes or other materials?</p>	<p><i>Comments:</i></p>
<p>Voice Projection</p>	<p><input type="checkbox"/> Did the presenter speak at a reasonable volume so all members of the audience could hear?</p> <p><input type="checkbox"/> Did the presenter speak with expression?</p> <p><input type="checkbox"/> Was the presenter's voice clear and easy to understand?</p>	<p><i>Comments:</i></p>
<p>Body Language</p>	<p><input type="checkbox"/> Did the presenter stand up straight and face the audience?</p> <p><input type="checkbox"/> Did the presenter use gestures or body movements that enhanced the presentation, rather than distracted from it?</p> <p><input type="checkbox"/> Did the presenter convey a confident attitude?</p>	<p><i>Comments:</i></p>
<p>Organization</p>	<p><input type="checkbox"/> Was the presenter well prepared?</p> <p><input type="checkbox"/> Were all materials ready and easily accessible?</p> <p><input type="checkbox"/> Did the presentation flow in a logical order?</p>	<p><i>Comments:</i></p>
<p>Visuals</p>	<p><input type="checkbox"/> Did the presenter use materials that were visually pleasing?</p> <p><input type="checkbox"/> Did the visuals add to the information presented, rather than distract from it?</p>	<p><i>Comments:</i></p>

THE WRITING PROCESS: Evaluation and Reflection

Evaluation during and after the writing process involves formative assessment through specific feedback at each phase of the process, as well as summative assessment of both the product and the process. Waiting to provide any feedback or grades until the completion of a final product bypasses the opportunity for deep learning to occur.

According to Hattie and Timperley (2007), “feedback is among the most critical influences on student learning.” Feedback is most effective when it is experienced in a classroom climate that promotes growth mindset thinking, develops metacognitive strategies, and fosters critical thinking through rich learning opportunities. Ongoing evaluation through thoughtful and explicit feedback from peers and instructors throughout the writing process not only provides support, but also helps students become more successful with the process of writing and the understanding of content. It is important for instructors to avoid confusing feedback with praise. Praise is often non-specific and directed at the learner (*Nice job!*), while feedback is specific to the task and performance and is designed to propel the student toward continued task commitment and deeper learning (*You have clearly stated your thesis and outlined your supporting arguments. Continue to look for and include additional information that supports your arguments*). Ongoing feedback also supports instruction when teachers use information gained through feedback to impact instructional decisions.

There are two types of rubrics: assessment rubrics, which are typically used as a summative assessment and provide purposeful evaluation criteria to grade student work, and instructional rubrics, which not only provide formative assessment, but also serve as a teaching and learning tool. The use of instructional rubrics is essential for guiding and supporting students in the development of the self-regulation skills needed to be successful throughout the writing process. Rubrics enable instructors to focus their evaluations effectively, while allowing students to identify and understand the expectations before the process of writing begins.

Reflection throughout the writing process allows time for students to give careful thought and consideration to their experiences within each phase, the strategies they used, and the learning that occurred. Students should be guided through self-reflection as they examine their learning processes and make connections to how these opportunities improve not just their ability as a writer, but also their interactions with and knowledge of the content.

Through a combination of specific, ongoing feedback, targeted evaluation of both content and process, and thoughtful self-reflection, students begin to internalize the stages of the writing process as tools that can aid them throughout their educational experiences and in their future careers.



INSTRUCTIONAL PRACTICE: Ongoing Feedback and Formative Assessment

Effective writing requires good feedback and assessment. However, feedback and assessment are often addressed at the completion of a task as a summative event. With the writing process, timing is critical. If students are to develop new learning and understandings, feedback must be ongoing throughout the process, and evaluation must be formative in nature. Formative assessment, like writing, is a process that takes place during instruction and throughout a project or task. Formative assessments should provide feedback that allows both teachers and students to make adjustments that will ultimately improve student achievement. Holding students accountable for responding to and using feedback strengthens their metacognitive awareness of the writing process and their commitment to improving their writing.

Instructional Goal

- Students will respond to peer and instructor feedback by making adjustments to their writing.

Preparation for Instruction

- Develop writing assignments that have purpose and relevance.
- Plan for checkpoints to provide feedback as formative assessment throughout the writing process.
- Use results of formative assessments to inform instructional decisions in meeting the needs of diverse learners.
- Gather samples of feedback to share with students.

Instructional Strategies

- Ask students to participate in a 2-minute quickwrite by responding to the following prompt: *When writing, what type of feedback do you find most helpful to receive from your peers and your instructor?*
- Direct students to pair up with an elbow partner and share their quickwrite responses.
- Lead a class discussion as students share their ideas for effective feedback.
- Record ideas on chart paper or in a shared collaborative digital space.
- Explain to students that ongoing feedback will be provided to them as they work through the writing process. This feedback will come from both their peers and their instructor.
- Discuss the parameters for effective feedback with students and how these parameters connect to their ideas from the quickwrite exercise.

- After receiving feedback, students should know what they have done well and what they need to change. To be most effective, feedback should be:
 - **Positive:** Encourage with words that describe rather than judge. (Don't say, "Nice job." Instead say, "The planning you did really helped you organize your thoughts.")
 - **Constructive:** Focus on improving meaning, clarity of thought, and voice; not on error correction, which will be addressed through proofreading. (Don't say, "You have a lot of run-on sentences." Instead say, "In paragraph four, I had trouble understanding the point you were trying to make. Is there a way you could reorganize this paragraph so it gives the reader a clear message?")
 - **Specific:** Avoid generalizations and relate feedback to the assessment criteria. (Don't say, "Great introduction!" Instead say, "Your thesis statement is very clear. When I read it, I could understand your intent.")
 - **Suggestive, but not prescriptive:** Students may or may not choose to use all suggestions, but should be able to justify the changes they choose to make or not make based on feedback they receive.
 - **Timely:** Feedback should be ongoing throughout each phase of the writing process.
- Display one or more samples of feedback that have been given on previous or current student work. Be sure to obtain students' permission before displaying their work. Walk students through the feedback, highlighting the purpose and asking students how they might use or respond to this feedback. Also explore whether or not the feedback meets the parameters for effective feedback. If it does not seem effective, discuss with students how it might be improved.
- Provide opportunities for students to conference with peers to receive feedback, or provide instructor feedback to each student on a current writing assignment.
- Direct students to do one of the following tasks to show how they will use or respond to the feedback:
 - Through reflective writing, explain their interpretation of the feedback received and speculate on what they might do based on the feedback.
 - Write and submit a letter explaining how the feedback was addressed, including justification for any feedback that was disregarded.



INSTRUCTIONAL PRACTICE: Planning for Evaluation Using Rubrics

As instructors plan writing assignments, the first question should be, “What learning should occur for my students?” The answer should include two things—increased knowledge of the content and development of skills as a writer. Effective evaluation analyzes both the student’s content knowledge and the processes used by the student. This occurs through formative evaluation in the form of specific feedback and use of instructional rubrics related to the content and process, as well as summative assessment using rubrics that target expectations related to both the content and process. Following are some examples of when grading might occur throughout the writing process:

- The planning completed during the pre-writing phase by evaluating whether or not the student is addressing the task and has a clear plan that focuses on the content.
- The final revisions made to content based on feedback received.
- Participation as a reviewer during peer conferencing.
- The final product—graded for content and for process.

Instructional Goals

Students will:

- Identify and understand expectations outlined in the assessment rubric.
- Provide, receive, and respond to feedback that connects to the expectations set forth in the instructional rubric.

Resources

- *Writing Process General Assessment Rubric* (Student Resource)
- *Writing Process General Instructional Rubric* (Student Resource)

Preparation for Instruction

- Develop writing assignments that have purpose and relevance.
- Determine the criteria and checkpoints for grading throughout the process.
- Provide students with rubrics at the time the writing task is assigned.
- Ensure that students understand the expectations contained in the rubrics.

Instructional Strategies

- When planning for evaluation, consider the following questions:
 - What criteria will I evaluate to determine students’ content knowledge?
 - What criteria will I use to evaluate students’ skill development through interaction with the writing process?
 - Will I evaluate and grade each phase of the process?
- Provide students with a rubric from this chapter or an original one related to the task and content.

- Allow time for students to review the rubric and ask questions about anything for which they need clarification. Students might first work with a partner to review the rubric, then share their findings with the large group.
- Ask a few students to verbalize what they understand as the intent of the rubric.
- Ask students to set goals for the writing assignment based on the expectations outlined in the rubric.
- Remind students to refer to the rubric throughout the writing process, especially during the pre-writing phase and whenever they are involved in peer conferencing.
- An excellent way to involve students in the writing and evaluation process is to create a rubric with the class using a shared digital space or projection from the computer, while having a structured class discussion. Be sure to allow students think time around the purpose of the writing assignment, how students will be evaluated, and areas of focus within the assignment.



Writing Process General Assessment Rubric

	Emerging Writer	Developing Writer	Proficient Writer	Advanced Writer
Organization of Content	<ul style="list-style-type: none"> Attempts to respond to the prompt; response is not complete. Does not maintain focus. Does not organize ideas logically. Includes no introduction. Includes no conclusion. Lacks awareness of audience. Does not use transition words. 	<ul style="list-style-type: none"> Responds somewhat to the prompt; response seems incomplete. Shows some focus, though focus is not consistent. Does not organize all ideas logically. Includes inadequate or no introduction. Includes inadequate or no conclusion. May not address the audience appropriately. Uses few transition words. 	<ul style="list-style-type: none"> Responds to the prompt. Mostly maintains clear focus. Organizes most ideas logically; some ideas may be out of order. Includes clear introduction. Includes adequate conclusion. Addresses the audience appropriately. Uses some transition words. 	<ul style="list-style-type: none"> Responds to the prompt. Maintains a clear focus. Uses logical flow of ideas or events. Includes compelling introduction. Includes effective closing. Addresses the audience appropriately. Uses effective transition words.
Elaboration of Content	<ul style="list-style-type: none"> Includes many details that are not clear or are irrelevant. Does not support main ideas with details. Uses random and choppy sentence style. Uses limited word choice. 	<ul style="list-style-type: none"> Uses some irrelevant details; does not clearly connect all details to main ideas. Supports some main ideas with details. Uses random and choppy sentence style. Uses adequate word choice. 	<ul style="list-style-type: none"> Relates all details to the topic. Includes supporting details for all main ideas, but not all details are effective. Uses varied sentence styles. Uses adequate word choice. 	<ul style="list-style-type: none"> Relates all details to the topic. Effectively supports all main ideas with details. Uses varied sentence styles. Uses interesting, vivid word choice.
Mechanics of Writing	<ul style="list-style-type: none"> Makes many errors in spelling, capitalization, punctuation, or usage; errors inhibit meaning. 	<ul style="list-style-type: none"> Makes some errors in spelling, capitalization, punctuation, or usage; errors may inhibit meaning. 	<ul style="list-style-type: none"> Makes few errors in spelling, capitalization, punctuation, or usage; errors do not inhibit meaning. 	<ul style="list-style-type: none"> Makes no errors in spelling, capitalization, or usage. Makes few punctuation errors.
Engagement in the Writing Process	<ul style="list-style-type: none"> Does not make a pre-writing plan. Does not set writing goals. Does not use feedback from conferencing. Makes few or no draft revisions. Provides little or ineffective feedback to peers. Makes no attempt to correct errors when polishing the final draft. 	<ul style="list-style-type: none"> Develops some ideas through pre-writing. Sets targeted writing goals. Uses some feedback from conferencing to revise drafts. Provides some feedback to peers. Attempts to correct errors when polishing the final draft. 	<ul style="list-style-type: none"> Creates an adequate pre-writing plan. Sets and monitors targeted writing goals. Uses some feedback from conferencing to revise drafts. Provides effective feedback to peers through questioning and suggestions. Corrects most errors when polishing the final draft. 	<ul style="list-style-type: none"> Creates a detailed pre-writing plan. Sets and monitors targeted writing goals. Uses feedback from conferencing to revise drafts. Provides effective feedback to peers through a variety of questions and suggestions. Polishes a final draft that is ready for publication.

INSTRUCTIONAL PRACTICE: Planning for Reflection

Ongoing reflection by students throughout the writing process develops metacognitive thinking as they reflect on their growth as writers and their understanding of the content related to the writing assignment.

Instructional Goals

Students will:

- Complete written reflections on their interactions within the writing process and how these interactions affect their ability as a writer.
- Complete written reflections related to their understanding of the content of their writing.

Resources

- *Student Reflection on the Writing Process* (Student Resource)
- *Prompts and Formats for Student Reflection* (Educator Resource)

Preparation for Instruction

- Develop writing assignments that have purpose and relevance.
- Plan for checkpoints for students to reflect on their learning.
- Analyze reflections as a type of formative assessment to inform instructional decisions for meeting the needs of diverse learners.
- Select or create sentence stems or prompts that can be used for reflection.

Instructional Strategies

- Explain to students the value in reflecting on their learning throughout the writing process. Tell them they will be reflecting on their growth as writers, as well as their understanding of the content.
- Review with students the format they will use for their written reflection. Refer to *Student Resource: Student Reflection on the Writing Process* on page 282, as well as *Educator Resource: Prompts and Formats for Student Reflection* on page 283 for examples.
 - Formats such as a quickwrite, Exit Ticket, D-L-I-Q, or 3-2-1 Summary may be used.
 - Daily writing journals allow for daily reflection on both the process and the content of writing assignments.
 - Sentence stems or prompts may be used to guide students' reflections.
- Allow time for students to respond in writing.
- If applicable, allow students to share their reflections with peers.

Student Reflection on the Writing Process

Think about the writing task you just finished and reflect on the process by sharing your thoughts in the boxes below.

What I think I did well during the writing task is:

The stage of the writing process that benefited me the most was (include how it was of benefit to you):

The most difficult part of working on this writing task was:

This writing task affected my understanding of the content by:

One thing I learned about myself as a writer is:

One thing I might do differently for my next writing task is:

One goal I will focus on during my next writing task is:

Prompts and Formats for Student Reflection

The following prompts and formats may be used to elicit student reflection during the writing process. Instructors may assign a specific reflective writing exercise or allow for student choice. Reflecting in a daily writing journal allows students to think each day about the progress they are making with their writing task, as well as how they are growing as writers.

- Prompts and sentence stems for journal entries, quickwrites, or Exit Tickets.
 - Something I found out about myself as a writer is...
 - The pre-writing stage helped me...
 - Today I used the feedback I received by...
 - I participated in a peer conference today by...
 - I know I need to change the way I...
 - As I revised my work, I realized I am really good with...
 - As I revised my work, I realized a need to ask for help with...
 - As I write, I am making connections about the content to...
 - This writing task makes me wonder about...
- D-L-I-Q – This format may be used daily or weekly. Students write one thing they **did** related to the writing task, one thing they **learned** as a writer or about the content on which they are writing, one thing they found **interesting** about the writing process or the content, and one **question** they have related to their writing.
- 3-2-1 Summary – This format is best used as a summary and may be employed at the end of each phase of the writing process or at the completion of the writing task.

Pre-Writing Phase:

- What are **3** things I plan to use in my writing?
- What are **2** goals I have set?
- What is **1** main purpose for my writing?

Drafting and Revising Phase:

- What are **3** things I learned through participating in a peer conference?
- What are **2** revisions I will make to my draft?
- What is **1** question or suggestion I offered during a peer conference?

Polishing Phase:

- What are **3** corrections I made during proofreading?
- What are **2** changes I made during editing?
- What is **1** skill I need to work on as a writer?

Final Summary:

- What are **3** things I learned related to the content of my writing?
- What are **2** things I learned about myself as a writer?
- What is **1** question I still have about the writing process?

Timed Writing or On-Demand Writing

Successfully responding to a prompt in a timed or on-demand writing situation is a common way for students to be evaluated for high-stakes assessments like state testing, AP® exams, placement tests, job applications, and final exams. Timed writing assessments test students' proficiency with both the writing process and the content they are expected to write about. It is not unlike a cooking show where contestants are expected to be capable of chopping, dicing, sautéing, broiling, and incorporating a variety of ingredients to create a recipe under pressure. The day of the cooking show is not the time to learn how to chop onions. Success with timed writing requires that students are confident with the writing process, manage time well, and can pull together the information needed to sufficiently answer the writing prompt within the time limit. To master these skills, students must be taught how to adapt the writing process to the content area in which they are writing and then write often.

This chapter provides a variety of instructional practices that educators can use to teach students how to successfully work through the writing process. It is crucial for educators to be diagnostic in examining how successful students are likely to be in an on-demand writing assessment and then use the appropriate instructional practices to strengthen students' skills. For example, if students are diving straight into writing without taking time to brainstorm or pre-write in a timed writing situation, then using the instructional practices in the pre-writing section (pages 225–240) can benefit the students by teaching them how to take a few moments to read and deconstruct the prompt, and then brainstorm appropriate responses.

In addition to the process-writing instructional practices, which can be scaffolded and modified to prepare students to write proficiently in on-demand settings, there are some additional skills students need to master in order to successfully approach a timed writing situation. The following five skills should be practiced repeatedly, and can be incorporated in **bell work**, Exit Tickets, or checks for understanding during class.

Bell work comprises the short lesson routine a teacher prepares in advance of a class session in such a way that students engage in the work the moment the bell rings. Bell work provides an opportunity to review, practice, or introduce subject matter, content, or specific skills.

1. Read and mark the prompt.
2. Unpack or deconstruct the prompt.
3. Pull the thesis from the prompt.
4. Determine evidence.
5. Manage time.

INSTRUCTIONAL PRACTICE: Academic Vocabulary in Writing Prompts

Proficient writers analyze the use of specific vocabulary words commonly found in writing prompts and associate the required skills and actions needed to produce the essay. If students are not clear on the difference between *defending* their position and *describing* their position, they will not be able to successfully write to the prompt.

Instructional Goal

- Students will understand academic verbs commonly used in on-demand writing prompts.

Resource

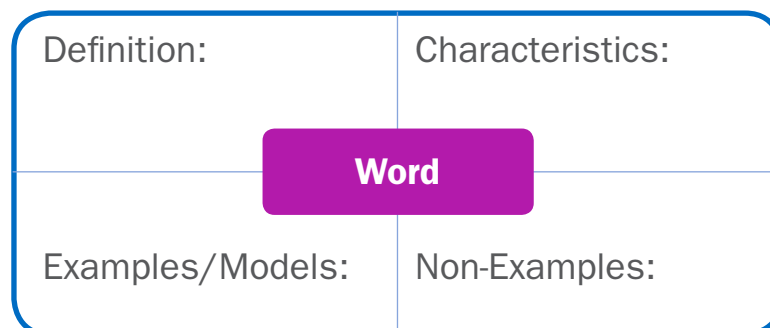
- *Academic Vocabulary in Writing Prompts* (Student Resource – Refer to page 179 in Chapter 4)

Preparation for Instruction

- Gather sample writing prompts appropriate to the course content and the grade level of the students.
- Decide whether students will work in pairs, in small groups, or as a whole class, and determine how much teacher modeling will be needed.

Instructional Strategies

- Distribute or project a sample writing prompt, and have students deconstruct the prompt by closely reading and analyzing it. They will need to circle, underline, or highlight the actions or verbs in the prompt, such as *discuss*, *evaluate*, *explain*, *justify*, or *summarize*.
- Use *Student Resource: Academic Vocabulary in Writing Prompts* (on page 179) as a reference to teach students how to identify the action(s) required for successful response to the writing prompt.
- Conduct a Think-Aloud to model the meaning of the word and the action that will be required. Use a Frayer Model graphic organizer to capture the definition of a word and its critical characteristics.
- Have students work with a partner or small group to complete their own Frayer Model on one of the verbs from the prompt.



- Students should add the words to their notes or word logs, or post the Frayer Model they develop in a shared digital space or on a class academic vocabulary word wall.

INSTRUCTIONAL PRACTICE: Critical Read of a Writing Prompt

Proficiency on a timed writing task requires that students read and analyze the writing prompt well and address all parts of the prompt in their essay. When working under pressure, students need a system for reading and analyzing a prompt thoroughly and quickly in order to respond accurately. Many students believe that an on-demand writing task is accomplished by rapidly writing one draft, ignoring the writing process. However, spending a few minutes of time deconstructing the prompt ensures students have a clear understanding of what they are being asked to do, as well as the evidence that will need to be included. This critical read of the writing prompt gives them an opportunity to organize their thinking.

Instructional Goals

Students will:

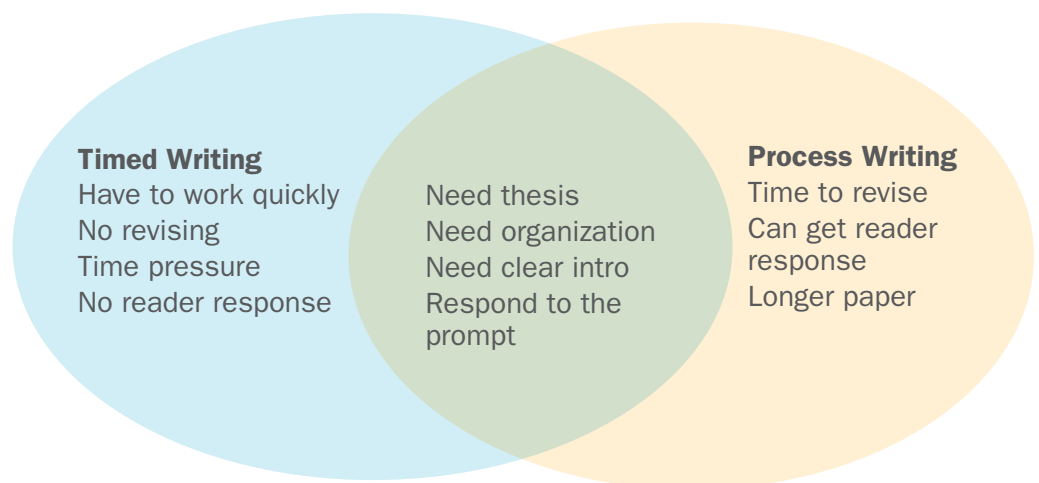
- Examine sample writing prompts.
- Determine what each prompt is asking of the writer.
- Brainstorm ways in which each prompt can be addressed.

Preparation for Instruction

- Collect sample timed writing prompts appropriate to the content area and the grade level of the students.
- Determine the amount of teacher modeling, whole-group instruction, and small-group or partner work needed before students can work independently.

Instructional Strategies

- Have students brainstorm a list of timed writing situations, and record the ideas on an anchor chart, whiteboard, or shared digital space. Examples may include SAT, ACT, state assessments, AP exams, and in-class writing assignments.
- Draw a Venn diagram or compare-and-contrast graphic organizer on the board. Title one circle “Timed Writing” and the other “Process Writing.” Have students brainstorm how the two writing situations are different and how they are similar.



- Ask students how they can transfer what they know about how to process essays to a timed writing situation. How do their skills as writers help them regardless of the writing situation? Discuss, focusing on students' strengths as writers.
- Put a sample writing prompt on the whiteboard or share a sample prompt in a collaborative digital space.
- Read the prompt two times, asking students to follow along. Ask students to identify the main words/phrases in the prompt that tell them what should be addressed in the essay. Circle or underline the words/phrases.
- Discuss students' suggestions and arrive at a consensus about the key words.
- Have students circle or underline the action verbs and write the actions that will be required in the margin. For example, if "discuss" is a verb, then that word would be circled and in the margin students would write "give reasons; provide details."
- Using the student-identified key words and action verbs, have students rewrite or rephrase the prompt in their own words. This can be done with partners or small groups. While students are working together, monitor to hear whether they are understanding what the prompt is asking. Have a couple of students volunteer to share their rephrased prompt with the whole class.

Extension

- Have students brainstorm a plan for responding to the prompt by doing the following:
 - Identify additional information needed to write to the prompt successfully.
 - Craft a thesis statement.
 - Identify the information needed to support the thesis statement.

INSTRUCTIONAL PRACTICE: Deconstructing Timed Writing Prompts

It is important that students encounter a variety of timed writing tasks ranging from in-class essay exams to college admission and placement exams. For many students, these situations create anxiety, especially if they lack writing confidence. Unfortunately, many students think that an on-demand writing task is accomplished by hurriedly writing one draft and completely ignoring the writing process. One way to curb this frenetic race to the finish line is to have students practice deconstructing prompts, creating a brief outline, and developing a writing plan. Another benefit to having students practice planning their essays is that rather than grading this work for style, the instructor can instead coach students on their planning.

Instructional Goal

- Students will deconstruct writing prompts quickly for timed writing situations.

Preparation for Instruction

- Collect sample writing prompts appropriate for the course content and the grade level of the students.
- Determine the amount of teacher modeling needed, and decide whether students should work independently, in partners, or in small groups.

Instructional Strategies

- Write or project the following “to-do” list for students:
 1. Read the prompt once with no markings.
 2. Circle action words/verbs.
 3. Number the tasks.
 4. Create a cluster, outline, or graphic organizer of key points and evidence to include in the essay.
- Explain that many students struggle with timed writing assignments because they misunderstand or misread the prompt. For this instructional practice, students will have a limited amount of time to get to know the writing prompts by working through the to-do list.
- Determine how much time students need in order to do this practice. It should be long enough that they can work through the prompt deconstruction and short enough that they feel pressure. A good starting point would be 5 minutes per prompt. Adjust this timing as needed. Note that when students start this process, they might need to work with a partner and not have a time limit.
- Give each student or partner group a packet of two prompts.
- Tell students to begin with the first prompt, and set the timer for the allotted time.



- When time is up for exploring the first prompt, instruct students to move on to the second prompt.
- Have students compare their deconstruction for each prompt.
- Have students complete a quickwrite reflection that addresses the following questions.
 1. Which step was most difficult for you in this process?
 2. How did your prompt deconstruction compare to your partner's?
 3. What is one goal you will work on the next time we practice deconstructing prompts?



INSTRUCTIONAL PRACTICE: Time Management

Successful completion of a timed writing task or assignment requires knowing how to organize and use the allotted time to fully complete the writing task. Though students may feel stress because of the timed writing constraints, learning how to plan for the timed writing assignment ensures they complete all parts of the task. Having a plan to follow takes students from staring at a blank page, while precious minutes disappear off the clock, to taking one step after another in a practiced method that results in a completed essay.

Instructional Goal

- Students will develop and practice a time-management plan for writing an on-demand essay.

Preparation for Instruction

- Identify appropriate timed or on-demand writing prompts that include all the necessary directions and time constraints.
- Determine the amount of teacher modeling needed by students, and decide whether this instructional practice will be done with the whole group or with students working independently, in pairs, or in small groups to develop their personalized plans.

Instructional Strategies

- Have students brainstorm a list of challenges or obstacles faced in on-demand writing situations. Capture their thinking on the whiteboard, an anchor chart, or shared digital space.
- Distribute the timed or on-demand writing prompt and guide students through the following steps (plan, pre-write, write the essay, and revise and polish). It is important to stop after each step and review what is challenging about the particular step.
- After working through the plan, revisit the brainstorm list of challenges connected to timed or on-demand writing and cross out ones that were addressed by the on-demand writing plan.
- Have students practice the plan periodically until they are able to complete a timed or on-demand writing task from start to finish working independently.

1. Plan

- Write down the amount of time you have to complete the essay.
- Look at the clock and quickly determine the time needed for each step. Note specifically when you should move to the next step. Write this somewhere you can see as you are crafting your essay.
 - Pre-writing: $\frac{1}{6}$ of allotted time (10 minutes for a 60-minute essay, 5 minutes for a 30-minute essay)
 - Writing: $\frac{4}{6}$ ($\frac{2}{3}$) of allotted time (40 minutes for a 60-minute essay, 20 minutes for a 30-minute essay)
 - Revising and polishing: $\frac{1}{6}$ of allotted time (10 minutes for a 60-minute essay, 5 minutes for a 30-minute essay)
- Glance at the clock periodically, moving to next step of the process when it is time to do so.



2. Pre-Write

- Deconstruct the prompt.
 - Read the prompt and circle action words and verbs.
 - Number the tasks listed in the prompt.
- Create a plan.
 - Identify your thesis statement.
 - Brainstorm a graphic organizer, list, outline, or notes detailing key points and evidence that will be included.
 - Review the prompt and check that the outline or brainstormed list addresses all parts of the task.

3. Write the Essay

- Introduce the thesis by rephrasing the question/prompt or repeating key words from the prompt in the first sentence. Get right to the heart of the essay with a clear thesis statement. Do not write a lengthy introduction, and do not repeat information.
- Explain each point completely before moving on to the next point. Skipping around between points will make the essay confusing to read. Each topic sentence should relate to the thesis statement.
- Support general statements with details, examples, and facts. Use specific people and events to demonstrate content knowledge and to help the audience follow the thinking and reasoning. It is important to use examples, even with a short essay. If the answer is two sentences long, the first sentence should be the thesis statement and the second sentence should be an example.
- It is okay to “think on the paper.” Some of the best ideas will develop as the essay is being written, and if things get muddy or start to feel unclear, it is acceptable to cross out a sentence or section of the essay.
- Use transition words like *in addition*, *next*, *however*, and *although*.
- Conclude with a sentence or two when the prompt has been fully answered. Do not simply repeat the opening sentence, but revisit and use some of the main ideas brought up in the essay.
- Stay aware of time during this stage.

4. Revise and Polish

- Reread the completed essay and look for the following:
 - Was the question or prompt answered completely?
 - Are there mistakes related to facts? Are dates, names, and places all written correctly?
 - Check for complete ideas, clear thoughts, and details/explanations.
 - Proofread for spelling, punctuation, and capitalization errors.
- Make any needed corrections neatly and legibly. Where corrections need to be made, draw a single line through the old information and write the new information just above it. There is no need to scribble out old information.

AVID Site Team Connection: Applying *Use of the Writing Process* Schoolwide

Educators need opportunities for collaboration and input from colleagues. The AVID Site Team is one of the key elements in taking high leverage strategies and core beliefs across a campus. When a Site Team unites around a core belief like that of having students engage in the writing process across grade levels and content areas, builds collaboration opportunities into scheduled meeting times, and supports one another in seeing the value of the writing process taking place within each discipline, students across the campus will benefit.



INSTRUCTIONAL PRACTICE: Schoolwide Commitment to the Writing Process

An excellent way for an instructional team to commit to incorporating the writing process into every content area and grade level is through identification and planning for authentic opportunities for writing; where students engage in each stage of the writing process, from pre-writing to publishing.

Instructional Goal

- Educators will work together to identify authentic opportunities for students to engage in the writing process.

Preparation for Instruction

- Determine whether participants will work in grade level teams, departments, mixed small groups, or pairs.
- Have the resource showing the writing process (page 223) ready to project or share digitally, or have handouts copied.

Instructional Strategies

- Have participants brainstorm ways in which being a confident and competent writer contributes to students' academic success in elementary, middle school, high school, and college, as well as their career success after college. They might come up with ideas like receiving high scores on district writing assessments, passing state testing requirements involving writing, doing well on college final exams and papers, and conveying professional email communication as an employee.
 - Provide time for partner or small-group discussion after participants have had time to quietly brainstorm. Ask partners or small groups to look for commonalities and new ideas as they share.
 - Have the whole group share out, with ideas being added to a chart that is projected or displayed on chart paper.
- Project or distribute the resource on the stages of the writing process and have participants identify existing opportunities for students to practice any of these stages within their classroom or content area.
 - This does not mean going through the entire writing process, but it could include all of the learning-through-writing opportunities that fit into the brainstorming stage, or when students go from pre-writing to revising as they brainstorm, collaborate, draft a quickwrite, rehearse and revise with a partner to embed words from a communal word bank, or make their quickwrite stronger and turn it in as an Exit Ticket.

“*Those who write have tremendous intellectual advantages over those who don't.*”

Mike Schmoker

- Participants can add these opportunities to their copy of the writing process graphic, or write the opportunities on sticky notes and place them on the projected graphic of the writing process or recreated chart of the writing process.
- Facilitate a discussion around the opportunities for students to engage in the writing process across the campus by engaging in a couple of the following questions:
 - Are students doing lots of pre-writing and never going any further?
 - Are students not asked to practice revision?
 - How are students connecting their ideas, thinking, learning, and wondering about content to creating something that can be shared with a larger audience?
 - What barriers exist to students engaging in the writing process on a more frequent basis?
 - What are solutions to these barriers?
- Have educators identify how they will provide more frequent opportunities for the writing process to be part of their teaching and learning environment through a commitment statement or by adding what they will do to a schoolwide document or Site Plan tracking writing opportunities.



Post-Reading Reflection Questions

Teaching about the writing process is an integral step to learning and developing skills that can be used in all disciplines. The writing process promotes inquiry and collaboration as students engage in critical literacy and academic discourse through writing experiences. Learning content through the writing process enables students to critically think and dive deeply into subject areas. When reflecting about using the writing process to convey information and knowledge to students, consider the following.

- What is my understanding of the writing process and how to integrate authentic writing assignments with content?
- Am I providing opportunities for students to make content meaningful through the writing process?
- Am I using the writing process effectively to help achieve the purpose of my lesson/assignment?
- How do I set up or assign writing assignments/tasks for my students?
- Am I scaffolding the assignments/tasks so students understand the purpose of each assignment and what success looks like?
- How do I model the different stages of the writing process when I write?
- What digital resources do I include in my lessons to enhance my students' experience with the writing process?

K-2 Post-Reading Reflection Questions

- How will I model or use each stage of the writing process with my students?
- Is there a stage, or multiple stages, of the writing process where my instruction has room for growth? If so, which areas can be improved?
- What steps will I take to break down barriers that impede my students using stages of the writing process?

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CHAPTER SIX

Deepening Inquiry Through Research



Visit the *AVID Writing for Disciplinary Literacy* webpage on MyAVID for additional materials and resources.



CHAPTER Introduction

“ *Research is to see what everybody else has seen, and to think what nobody else has thought.* ”

Albert Szent-Györgyi

Today’s students live in an “information age” where the amount of available information and data is growing exponentially. Students are inundated with a massive amount of information from a multitude of sources. As 21st century learners, their task becomes not only one of finding information, but also being able to dig into the mountain of available information to find sources that are reliable, credible, accurate, and relevant to the task at hand. This immense task requires the ability to access, analyze, evaluate, record, synthesize, and communicate information, as well as utilize available technology as a resource and a tool to navigate the wealth of information. Educating students about the research process develops and strengthens these skills as they investigate and write about a topic to produce a scholarly research paper. Research does not involve simply creating a summary of information, but requires the writer to think critically, explore and analyze sources, synthesize and organize information, and compose a product that presents a distinct interpretation of information. Baker, Brizee, and Velázquez (2011) described how research paper writing is an avenue for students to contribute their perspectives as scholars:

It is a genre that requires one to spend time investigating and evaluating sources with the intent to offer interpretations of the texts, and not unconscious regurgitations of those sources. The goal of a research paper is not to inform the reader what others have to say about a topic, but to draw on what others have to say about a topic and engage the sources in order to thoughtfully offer a unique perspective on the issue at hand.

Success with academic research requires explicit instruction in the process across all content areas to enable students to develop the ability to access, record, analyze, evaluate, communicate, and distribute information through discipline-specific writing. By engaging in the research process students are entrenched in rigorous thinking and discourse that deepen their understanding of knowledge within a field of study. The National Commission on Writing stated: “If students are to make knowledge their own, they must struggle with the details, wrestle with the facts, and rework raw information and dimly understood concepts into language they can communicate to someone else. In short, if students are to learn, they must write.”

Working through the research process provides students in all grade levels with a meaningful way to increase their knowledge within a discipline. Research is synchronous with inquiry as students discover



and analyze new information and share synthesized ideas with others while also developing an understanding of the relevance of baseline knowledge. Through research, students are able to pursue their passions and explore topics that spark their curiosity. This passionate inquiry motivates students as their learning becomes relevant and propels them to deepen their understanding of content.

Taking a research assignment through all the stages, from planning to publishing, is not only good for students' motivation and understanding of content, but is also an important skill for students on the journey to becoming college and career ready. Baker, Brizee, and Velázquez (2011) noted:

Writing a research paper is an essential aspect of academics and should not be avoided... In fact, the process of writing a research paper can be one of the more rewarding experiences one may encounter in academics. What is more, many students will continue to do research throughout their careers.

The research process encompasses three main types of research projects:

- **Informative research projects** introduce students to the research process and are often used with elementary students, as well as with students at any level who have had no prior exposure to research. Informative research focuses students on the process, format, and tools as a scaffolded entry point into research and allows skills to be developed and internalized before students move into more involved types of research.
- **Argumentative research projects** require students to take a position and defend that position through their research findings. This style of research project is introduced in the intermediate elementary years as opinion writing. In this type of writing, a clear thesis statement should introduce the topic and state the researcher's position. The goal is for the audience to be persuaded to accept and understand the position and findings presented in the research.
- **Analytical research projects** involve exploration and evaluation of a topic. The purpose is not to persuade the audience but instead to offer a critical analysis of both primary and secondary sources that support the researcher's findings. The foundation laid for this type of writing in the elementary years takes the form of analyzing misconceptions or writing to explain various problem-solving strategies and their effectiveness.

Examples of Types of Research Papers

	Informative	Argumentative	Analytical
Grades 3–5	Choose a state or country and inform the reader about its characteristics.	Should schools purchase ebooks or textbooks?	Explain where a mistake was made in a long division problem.
Grades 6–8	Discuss the impact of social media on the amount of physical exercise kids participate in.	Should teachers be allowed to assign homework?	Analyze whether the information conveyed in infomercials is true.
Grades 9–12	Discuss the impact of caffeine addiction.	Should high school students be allowed to get tattoos?	Analyze the Supreme Court justice nomination system from a political standpoint.
Higher Education	Discuss the role of inquiry in writing across the curriculum.	When is military force justified?	Analyze which international relations theories support the prisoner's dilemma.

The ability to successfully navigate the research process requires a wide and varied set of skills. Students who become adept at the recursive and reflective nature of the stages can be flexible, adaptive academic thinkers and researchers. Once students have selected and narrowed their topic through planning, most of their time is spent in information processing. During this stage, students gather and synthesize information through focused note-taking. Critical thinking and inquiry are paramount as students assess the validity and reliability of their sources and information. Revision, based on self-reflection and ongoing feedback, involves critical thought around the purpose and content as students analyze why and how information was selected and integrated. The polishing and publishing stages allow students to put the finishing touches on their work as they prepare to share it with the intended audience. Taking the time for students to experience the research process does not detract from teaching content; rather, the entirety of the process enhances students' ability to dive more deeply into content.

Formal research, like formal writing, is a process. These processes mirror one another, giving students the opportunity to apply the knowledge and skills they have obtained through the writing process as they tackle a research project.

“ *The day our students lose touch with the joy of inquiry and their sense of intellectual curiosity is the day I want to stop teaching. If we are to develop our students' sense of curiosity, we must be mindful to carve out time to allow our students to inquire and explore.* ”

Kelly Gallagher, author of *Write Like This*

Writing Process	Research Process
<p>Phase 1 – Pre-Writing Determine the topic. Build on the topic. Plan and structure the writing based on the mode. Gather information needed for expository and argumentative writing.</p>	<p>Phase 1 – Planning Determine the topic. Develop questions. Narrow the topic. Create subtopics.</p> <p>Phase 2 – Information Processing Gather information. Evaluate sources for value. Read and take notes to determine importance. Synthesize information. Develop a detailed outline.</p>
<p>Phase 2 – Drafting Draft initial writing.</p>	<p>Phase 3 – Drafting Draft initial writing. Integrate sources.</p>
<p>Phase 3 – Revising Engage in self-reflection. Gather feedback. Revise by adding, rearranging, removing, and/or replacing to achieve clarity and depth focused on the topic and writing purpose.</p>	<p>Phase 4 – Revising Engage in self-reflection. Gather feedback. Revise by adding, rearranging, removing, and/or replacing to achieve clarity and depth focused on the topic and writing purpose. Ensure the work is original with no plagiarism.</p>
<p>Phase 4 – Polishing Edit to refine the writing. Proofread to eliminate errors in grammar, punctuation, spelling, etc.</p>	<p>Phase 5 – Polishing Edit to refine the writing. Proofread to eliminate errors in grammar, punctuation, spelling, etc.</p>
<p>Phase 5 – Publishing Share a final copy of the writing with the intended audience. Create visuals to enhance the writing for oral presentations.</p>	<p>Phase 6 – Publishing Share a final copy of the writing with the intended audience. Create visuals to enhance the writing for oral presentations.</p>

Another aspect of the writing process that should be embedded throughout the research process is the use of collaborative structures. As noted in Chapter 5: Understanding and Using the Writing Process, writing is a collaborative process that is central to both instruction and the research process itself. The Dartmouth Institute for Writing and Rhetoric (2016) stated: “Educators widely recognize that students do not learn well when they are isolated ‘receivers’ of knowledge. Indeed, students must overcome isolation in order to learn to write.” Collaborative research projects encourage topic exploration, division of labor, experimentation with different research strategies, cooperative drafting and presentation, as well as partner reflection. Students are empowered to become more engaged with their writing and each other as they work together to refine their research, increase critical thinking skills, bolster confidence, and provide each other with moral support.

Chapter 6 Objectives

As a result of interacting with this chapter, educators will be able to:

- Use collaborative strategies and structures to encourage students to work together as they move through the research process in order to deepen learning and thinking.
- Utilize the research process to engage students in higher levels of thinking and inquiry in order to deepen the understanding of content.
- Explicitly teach skills and tools that guide students through the research process, from planning to publishing.
- Incorporate WICOR strategies, focused note-taking, inquiry techniques, and stages of the writing process into the research process.
- Scaffold research as appropriate for various ages and experiences.

Pre-Reading Reflection Questions

- What collaborative strategies do I engage students with to encourage them to be collaborative researchers and writers?
- What skills do I teach students that enable them to be successful with research projects?
- How do I use inquiry along with the research process to deepen understanding of content?
- How do I encourage students to critically think through the research process to ensure that they utilize sources that are reliable, accurate, credible, and relevant?
- How do I scaffold the research process for my content area?
- What components of the writing process, WICOR, focused note-taking, and inquiry do I incorporate into the research process?
- What sources can students access with digital tools that can enhance their body of research?
- How can digital tools build students' ownership and engagement throughout the research process?

K-2 Pre-Reading Reflection Questions

- What strategies do I currently use when facilitating research in the classroom?
- In what stage(s) of the research process might I have room for growth, knowledge, and/or instructional strategies?
- What types of shared experiences can I create in my classroom, and which are necessary to help my students gather knowledge in order to answer questions?



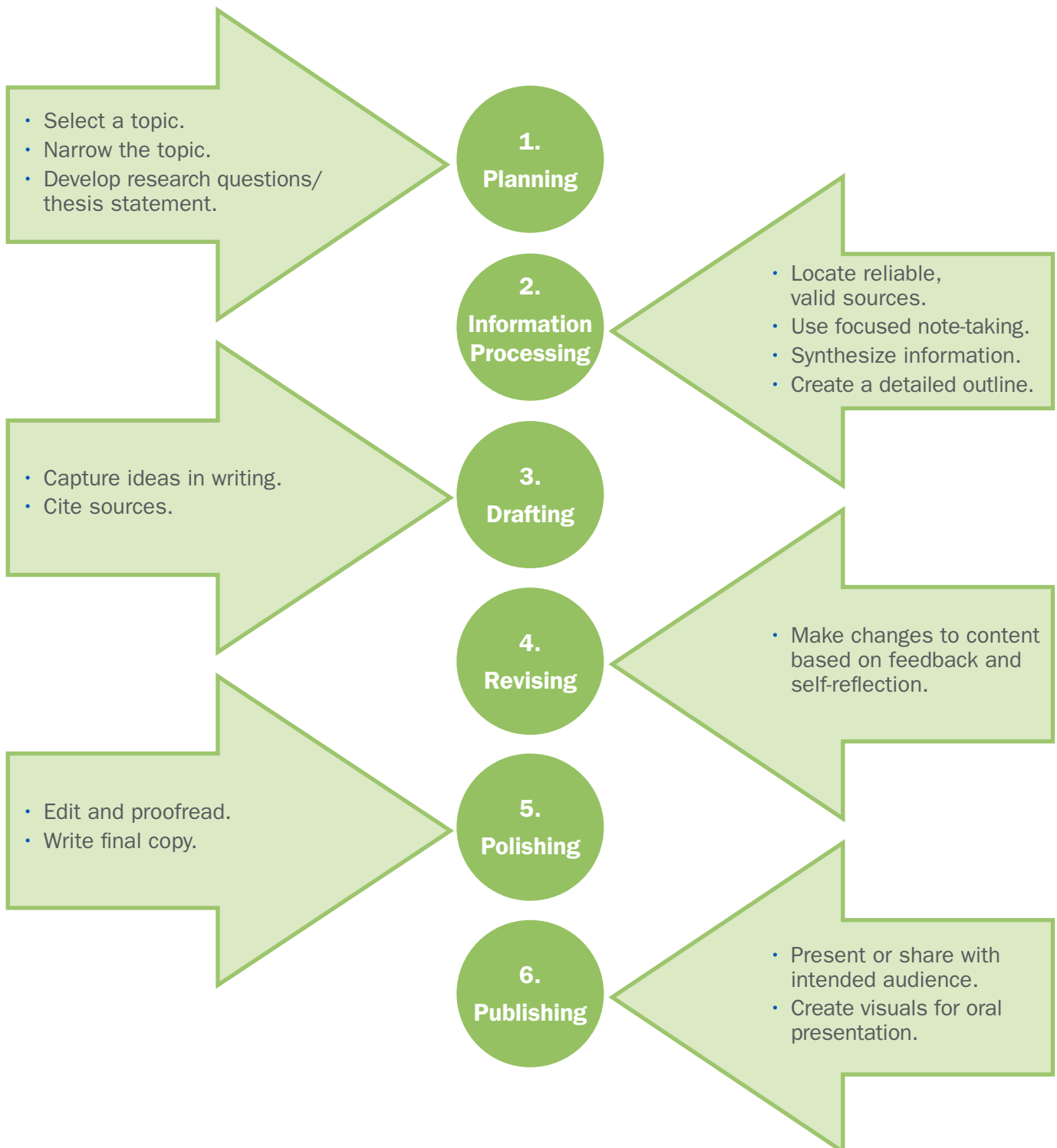
Guiding Principles

- Inquiry is at the core of the research process. Understanding and utilizing inquiry in conjunction with the research process engages students in multiple levels of critical thinking to deepen learning.
- Today's students live in an "information age." The research and inquiry process helps them decipher which information is relevant and which sources are reliable, credible, and accurate, rather than just uncovering the information.
- The research process leads to a form of academic writing that must be scaffolded through varying levels of education and within many content areas. The process allows students to interact with information and deepen learning.
- The research process motivates students to engage with topics of interest and share their learning with an audience.
- Explicit instruction in each phase of the research process helps students develop skills needed for college and career readiness, and prepare them for life beyond school.



The Research Process

Developing a research project is a dynamic process that encompasses several distinct stages. It is important to note that while the phases are delineated, the research process is most effective when the phases are fluid and flexible, giving students the freedom to move between the phases and repeat and revisit them as needed.



INSTRUCTIONAL PRACTICE: Pre-Assessment

Pre-assessment is a critical first step in the research process to determine the writer's pre-existing knowledge about the topic, as well as experiences the writer has had working within the writing and the research processes. Through self-evaluation, the writer begins to question what they know about themselves as a writer and a researcher. Knowing what skills and abilities they already possess helps students plan strategies to use during the process and informs instructors about the amount of scaffolding necessary to ensure students' success with the research process.

Instructional Goals

Students will:

- Engage in self-reflective exercises to activate prior knowledge about the topic and their experiences with the research process.
- Identify strategies they have successfully utilized in previous writing tasks.
- Reflect on strengths and abilities they bring to the assignment.

Preparation for Instruction

- Prepare writing prompts that engage students in self-reflection about the research process.
- Encourage students to think about the skills and abilities they bring to the process.
- Encourage students to think about prior knowledge they bring to the research topic and overall writing process.
- Determine how to utilize the formative data collected through pre-assessment to plan appropriate scaffolding that may be needed for student success.
- Review Chapter 8: Metacognition and Writing, for additional information on self-evaluation.
- Consider using an online survey tool or form to collect reflections from students.

Instructional Strategies

The following strategies provide a variety of methods for conducting pre-assessments.

Reflective Brainstorming

- The following exercise may be done within a large group setting or with smaller collaborative groups or pairs.
 - Share the research assignment with students.
 - Ask them to brainstorm all the tasks they think will be necessary to achieve a final product.
 - With younger students or emerging writers and researchers, the brainstorming may be divided into smaller chunks:
 - Tasks to prepare to do research
 - Tasks needed for information gathering
 - Writing skills that need to be utilized

- Items that might appear on a brainstormed list include:
 - Focused note-taking
 - Locating resources
 - Developing questions
 - Figuring out what I already know
 - Figuring out what I want to know
 - Creating a plan
 - Making an outline
 - Reading using the internet
 - Reading using the library
 - Paraphrasing
 - Citing sources
- Once a list of tasks has been generated, ask students to respond in writing to the following prompt:

Look at the list of all the things you need to do to be an effective researcher. What are two things on the list that you think are your areas of strength—things you will be good at completing? Explain why you chose these areas of strength. What are two things on the list that you think might be a little challenging for you? Explain what you could do to grow in these challenging areas.
- Ask students to pair up and share their reflective writing with each other.
- Collect the writing to inform instruction and planning as students work through the process.

For more information on KWLA, see Chapter 2: Learning Through Writing, pages 57–59.

.....KWLA

- This writing-to-learn strategy encourages students to activate prior knowledge as they individually brainstorm. After the task, students reflect on their learning by answering follow-up questions. The following questions can be used to have students reflect on their responses within each column.
 - What do I *know* about the topic?
 - Is this knowledge relevant to the project requirements and the instructor’s expectations?
 - What support can I seek regarding researching this topic?
 - How can I ensure that what I know is accurate?
 - What do I *want to know* about the topic?
 - Why do I want to gain knowledge about this topic?
 - What do I hope to learn from performing this research?
 - What resources will I need to help me answer these questions?
 - What did I *learn* about the topic and the task? (After the learning, ask students what they learned about the topic and task.)
 - Were all my questions answered?
 - What new questions do I have to continue to explore this topic?
 - What do I think my audience learned?



- What can I *apply*? (After the learning, ask students what they can apply from the research writing lesson.)
 - How will I use the information I learned?
 - In what way(s) can the information from my research have an impact on others?

Graphic Organizers

- Graphic organizers or concept maps are an important tool to help students organize their thinking about content, relationships between concepts, and components or research to include. For more information on graphic organizers, see Chapter 2: Learning Through Writing, pages 63–65.



THE RESEARCH PROCESS: Phase 1 - Planning

Planning is an essential first step in the research process, as it delineates the component parts, frames the issues, and provides a roadmap to follow toward task completion. In the planning stage, students will set goals, select and narrow their topic, and develop research questions and/or thesis statements. Planning in collaboration with others can help students stay on track, hone their ideas, and vocalize their thoughts.



INSTRUCTIONAL PRACTICE: Analyzing the Research Assignment

A well-written research task provides steps that guide students as they seek to understand the purpose and expectations of the assignment. Crafting a research task requires that educators explicitly outline *what* students are expected to do for successful completion of a research project, as well as *how* they should approach the research process.

Refer to page 140 of *AVID Academic Language and Literacy: A Schoolwide Approach*, “Developing a Writing Task,” for additional information about the development of writing tasks that can be adapted for the research process.

Instructional Goal

- Students will employ strategies and tools to understand and deconstruct a research task into component parts.

Resource

- *Research Task Analysis* (Student Resource)

Preparation for Instruction

- Have an example research task in a format that can be projected during a Think-Aloud, either using a document camera or projecting from the computer to the screen.
- Plan authentic research assignments for students’ analysis.
- Prepare a copy of *Student Resource: Research Task Analysis* for each student.

Instructional Strategies

- Scaffold learning for students who do not have much experience with the research process by projecting a sample research task assignment.
- Deconstruct the assignment with students. Use the sample assignments provided or use one of your own for modeling.
 - **Sample 1 – Elementary:** You have just been hired by the local zoo to design a habitat for a new animal that will soon be arriving at the zoo. Choose the animal you are most interested in from the list. As you research and gather information about your animal’s habitat you must use at least three different resources. Be sure to use at least one print and one online resource. You will need to write a proposal that describes the habitat you plan to build and explains why this habitat is best for your animal. You must also create either a poster-sized design of the habitat or a diorama of the habitat.
 - **Sample 2 – Secondary:** Select a specific topic from the list that has a “provable” component to it. Do not create a report that only gives information about the topic. Your research paper must also prove something specific in regard to its impact and/or significance or offer an argument that inspires your audience to take a stand. (Sample items from list: Fuel Alternatives for the Future; Fast Food and our Society; Procrastination and Technology; Impact of Trains and Railroads on American Life; Celebrity Idols as Role Models; The Great Depression vs. The Great Recession, etc.) You will present your findings by submitting a research paper and providing an oral presentation for your classmates. You must use a minimum of five different resources and create visuals to enhance your oral presentation.

- **Sample 3 – Higher Education:** The nation is facing a variety of ecological problems that have the following general form: an established practice, whether on the part of business and industry or on the part of the public, is contributing to serious health problems for a large number of people. At the same time, it would be costly to modify the practice so as to reduce the health problem. People often say that the answer is one of achieving a “balance” between the amount of money we spend to correct the problem and the number of lives we would save by that expenditure. Develop a point of view and some plausible criteria for telling how one would determine this “balance.” Make sure you address any dilemmas inherent in your strategy for solving such problems (from Paul & Elder, 2000).
- Provide students with a research task and *Student Resource: Research Task Analysis*.
- Have students read the research prompt, following the steps on the resource page:
 - Highlight key words that identify the topic/purpose.
 - Circle or color-code verbs that give directions for what the writer will do.
 - Cross out or strike through unnecessary words.
 - Underline important information about the task.

You have just been hired by the local zoo to design a habitat for a new animal that will soon be arriving at the zoo. Choose the animal you are most interested in from the list. As you research and gather information about your animal’s habitat you must use at least three different resources. Be sure to use at least one print and one online resource. You will need to write a proposal that describes the habitat you plan to build and explains why this habitat is best for your animal. You must also create either a poster-sized design of the habitat or a diorama of the habitat.

- Have students determine what is needed to accomplish the task and create a “to-do” list on their handout or in their notes.
- Ask students to reflect on their understanding by reviewing and responding to the questions in *Student Resource: Research Task Analysis*. This may be done individually or with a partner.
- Debrief by encouraging students to share thoughts and questions that resulted from their reflection to ensure they fully comprehend the purpose of the research task.



Research Task Analysis

As you read the research prompt:

- Highlight key words that identify the topic or purpose.
- Circle or color-code verbs that give directions for what the writer will do.
- Cross out or strike through unnecessary words.
- Underline important information about the task.

Create a “to-do” list by writing down the actions you will need to take to complete this task.

- 1.
- 2.
- 3.
- 4.
- 5.

Ask yourself the following questions and write notes to answer them. If some of this information is not part of the research prompt, how can you find the answers?

<p>What is the purpose of the assignment (to inform, analyze, argue, or persuade)?</p> <p>Do I understand the purpose?</p>	
<p>Who is my audience?</p> <p>How will my work be published?</p>	
<p>What resources will I need to get started?</p> <p>Where can I find these resources?</p> <p>How many sources are required?</p> <p>How will I cite my sources?</p>	

INSTRUCTIONAL PRACTICE: Topic Selection and Refinement

Topic selection and refinement are some of the most crucial components in the successful completion of a research assignment, as these steps are the integral underpinning of the entire research project. A poorly chosen topic, a topic that is too broad, or one that is too narrow can make successful completion of the research project virtually impossible.

Two options for topic selection are as follows:

1. The instructor provides a comprehensive list of topics along with the writing assignment.
2. The instructor provides only the writing assignment, leaving the research topic for the student to decide. Though the topic choice is left open for the student, oftentimes the topic must relate to the content of the course.

Allowing elements of choice within the topic selection process engages and motivates students. When a student has the opportunity to select the research topic, it is important for the topic to be interesting to the writer, appropriately challenging, and relevant to the instructor's purpose. By exploring a research topic in depth, students gain insight and hone their analytical skills because a well-chosen topic makes both the reader and writer think.

Instructional Goals

Students will:

- Employ strategies and tools to brainstorm, narrow, and refine their research topic.
- Collaborate with peers during topic selection and refinement.

Resources

- *Funneling My Topic* (Student Resource)
- *Planning My Research Project* (Student Resource)
- *Four-Square Planning* (Student Resource)

Preparation for Instruction

- Prepare a research assignment that allows for some level of topic choice—student choice within the umbrella topic, student choice from a topic list, student choice within set parameters, or free choice.
- Provide time for collaboration.



Instructional Strategies

To aid students in selecting a topic, utilize one or more of the following strategies.

Gaining Input from Others

As students plan for research, gathering input from their peers through collaborative structures helps the process of topic selection and refinement.

- **Carousel Brainstorm:** Use the Carousel Brainstorm strategy outlined in Chapter 2: Learning Through Writing (pages 60–61). As students move from chart to chart, they list what they know or questions they have about the topic. This provides the opportunity for students to see questions people have and what areas interest them the most as they determine the direction their research might take. For instance, if students are going to research rainforests, the charts might include such topics as:
 - Locations and Types of Rainforests
 - Rainforest Products
 - Indigenous People
 - Plants and Animals
 - Layers of the Rainforest
 - Rainforests and the Environment
- **Think–Ink–Pair–Share:** This strategy engages students in a quick burst of thinking and writing, followed by sharing ideas with a partner or small group. Instructors can guide students in their thinking as they ponder a topic and determine if the scope fits the expectations. Sentence frames to prompt thinking might include:
 - I am thinking about researching _____ because...
 - I think the topic of _____ will be interesting because...
 - I want to learn more about _____ because...
 - Some questions I have about _____ are...
 - My purpose in researching _____ is...
- **KWW (also called KW²):** Similar to a KWL three-column chart, students complete the first two columns by listing what they already know and what they want to know about their topic. Students then pair up and ask their partner, “What do you want to know about my topic?” and add those questions to the third column. This helps students see potential questions their readers might have about their topic.

Brainstorming Ideas

Brainstorming encourages rapid generation of ideas. There is no criticism or judgment during the brainstorming phase as there are no wrong answers. Creativity is encouraged as students think “outside the box” during idea production.

- Give students the research assignment and the parameters for selecting their topic.

- Provide a prompt or question to start the brainstorming process. Brainstorming may be done individually, with a partner, or in small or large group settings. (The Carousel Brainstorm strategy is also applicable here.) Possible prompts or questions might be:
 - Do you have any opinions about this content? If so, begin to brainstorm and think about topics and ideas stemming from your opinions.
 - Have you seen, heard, or read anything related to this content that interests you? If so, begin to brainstorm and think about those areas of interest to you.
 - Are there things you wonder about that are related to this content? If so, what topics can you generate from your wonderings?

Performing Preliminary Research

It is important to allow time for students to use library and internet resources to see what information exists that is related to the topic(s) they are considering. Findings may dictate topic changes because a topic is difficult to research if it is too broad or too narrow.

- Direct students to read general background information. Reading broad-based summaries gives the writer an overview of the topic, allowing them to determine if they like the topic and if the topic relates to course issues and aspects, as well as providing a backdrop of keywords and phrases to aid their research.
- Ask students to begin to delineate keywords and phrases related to their topic by starting a list. This will provide a springboard into information gathering.
- Remind students to consider the audience by asking, “Who would be interested in this topic? What questions might they have about the topic?”

Narrowing the Topic

Students often select topics that are too broad and cumbersome. Honing the topic narrows it to make the research task more targeted and manageable. The following example illustrates a progression from a broad topic to a more specific research question.

General topic	World War II
More narrow topic	Harry S. Truman’s decision to use atomic bombs.
Final topic choice	Was President Harry S. Truman justified in his decision to drop atomic bombs on Hiroshima and Nagasaki?



The following strategies may be used to support students as they narrow and refine their topic selection.

- **Graphic Organizers and Concept Maps:** Graphic organizers and concept maps help students think about relationships among concepts, and this organization of thought guides the refinement of topic selection. As students brainstorm and organize information around a broad topic, they start to see relationships and categories emerge that can help target the area of a topic they want to explore in depth. Organizing thinking with a graphic organizer might help a student exploring the research topic of World War II realize they are really interested in topics like the decision to drop the atomic bomb, the impact of Pearl Harbor, the role of Navajo code talkers, Hitler's rise to power, or the onset of the Cold War.
- **Student Conferences:** Students who are having difficulty narrowing their topic may need the support of a peer or instructor conference. The best way to help a student narrow their topic is by asking guiding questions, such as the following:
 - Why does this topic, concept, or research area intrigue you?
 - What about this topic is most interesting to you?
 - When you think about [topic], what do you wonder?
 - Is there a specific time period, event, person, or place that stands out or is particularly interesting?
- **Funneling:** Funneling uses a specific graphic organizer to encourage students to hone a general topic idea into a more specific one. Students become more focused in their thinking as they work through the graphic organizer. Use *Student Resource: Funneling My Topic* to model for students how to narrow and refine their topic. The example below may be used to help students understand the process.

Big Idea – World War II

Topic – Weapons used

Subtopic – Atomic bomb

Detail 1 – Harry S. Truman

Detail 2 – Hiroshima and Nagasaki

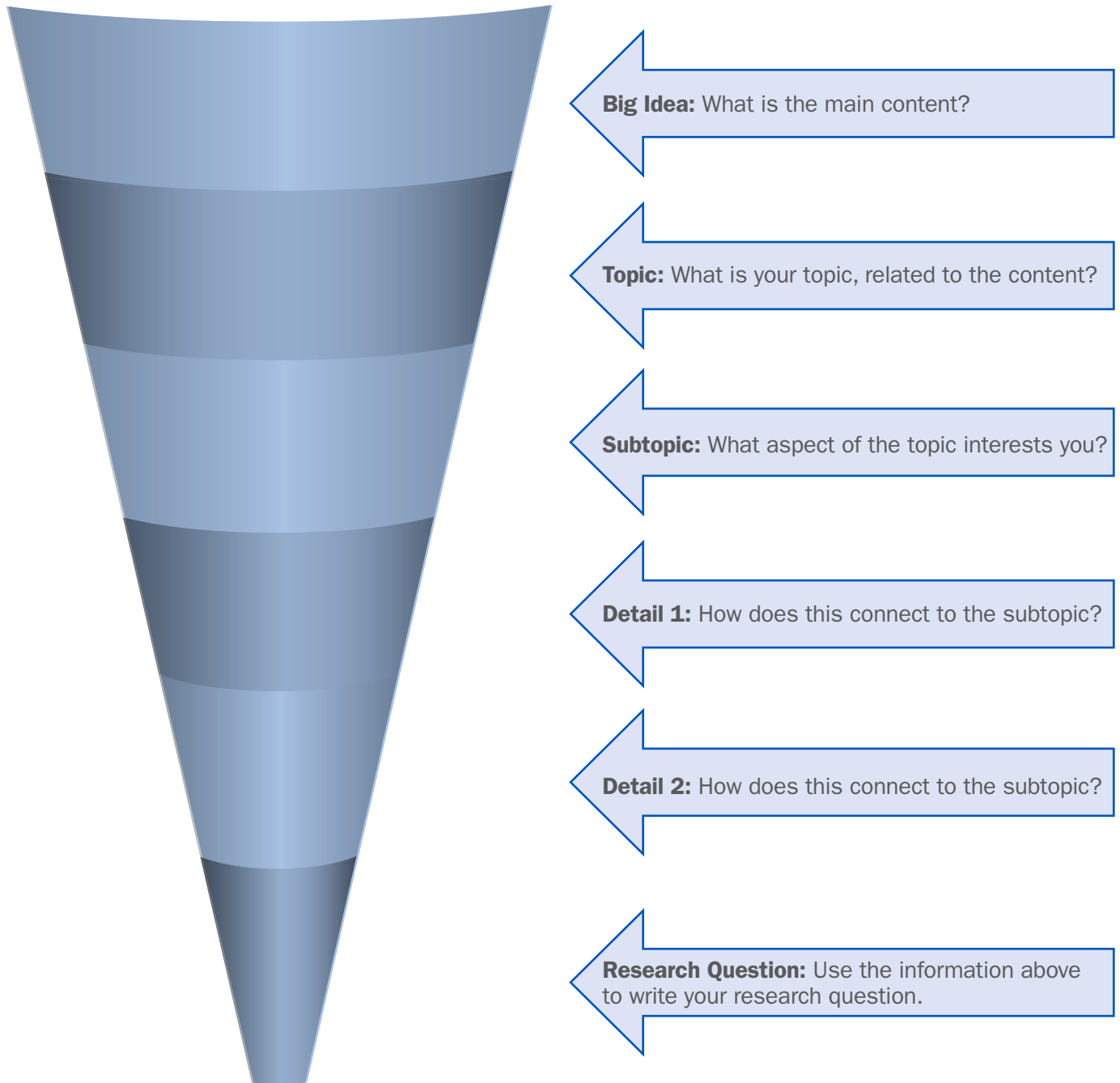
Research Question – Was President Harry S. Truman justified in his decision to drop atomic bombs on Hiroshima and Nagasaki?

Extensions

- The student resources, *Planning My Research Project* and *Four-Square Planning*, are designed for use with elementary students, as well as secondary students with limited research experience in need of additional scaffolding in planning their project.
- Model for students how to complete the selected student resource page, and conference with individual students who may struggle with the process.
- Provide structured time for students to work in pairs to share their completed plans with a partner or small group as an additional support during the process.

Funneling My Topic

Use the questions below to help you “funnel” your topic into a focused research question.



Planning My Research Project

Name: _____

Project Start Date: _____ Project Completion Date: _____

Topic:

Research Question:

Choose four subtopics and create at least two questions for each subtopic:

Subtopic 1:

Subtopic 2:

Question 1:

Question 1:

Question 2:

Question 2:

Subtopic 3:

Subtopic 4:

Question 1:

Question 1:

Question 2:

Question 2:

What sources and materials will I need for my project?

Where will I find the necessary sources and materials?

What ideas do I have for how to present my research project?

Four-Square Planning

<p>I chose my topic because:</p> <p>I believe my topic is important because:</p>	<p>Questions I have about my topic are:</p>
<p>I can get information about my topic from:</p> 	<p>After I learn about my topic, I will share my information by/through:</p>

INSTRUCTIONAL PRACTICE: Goal Setting and Attainment

When approaching a research task, it is important to set long- and short-term goals for the project. The Teaching Excellence in Adult Literacy (TEAL) Center's study on research-based writing instructional strategies indicated that "understanding the nature of goals for a written product, setting the goal in advance during planning, and then monitoring and editing one's work for adherence to the goal all result in higher quality final products." Goal setting also encourages students to persist with the work as they move toward goal attainment, especially when they are provided with tools to organize their priorities and their time.

Instructional Goals

Students will:

- Set short- and long-term goals pertaining to the research and writing process.
- Use backward mapping tools to plan for the research task.

Resource

- *Backward Mapping Plan* (Student Resource)

Preparation for Instruction

- Be prepared to share with students a SMART goal you have set for a project.
- Prepare backward mapping tools, schedules, and calendars to enable students to organize their thinking and time as they work toward goal completion.
- Prepare copies of the student resource pages, *Pre-Writing – SMART Goals* (on page 240 in Chapter 5) and *Backward Mapping Plan* (on page 321), for each student.

Instructional Strategies

It is recommended that students develop their goals and backward map after they have selected their topic and developed their research questions or thesis statements, as this will result in the development of more focused goals and timelines.

For more information on setting SMART goals for planning, see Chapter 5: Understanding and Using the Writing Process, pages 237-238 and page 240.

- **Goal Setting:** Setting specific goals is important as students approach the research process. SMART goals provide structure and guidance throughout the project.
- **Backward Mapping:** This strategy breaks the research writing task into component parts, allowing students to set short-term goals and timelines for completion.
 - Distribute *Student Resource: Backward Mapping Plan*.
 - Introduce backward mapping as a method to support time management for long-term assignments, tasks, or projects.

- Model breaking a task into component parts (milestones) and identifying due dates for each component. Students should refer to their task analysis and SMART goal to help guide this process, as well as consider the research and writing skills they will need to be successful.
- Direct students to incorporate other organizational tools, such as calendars or agendas, to record due dates and other important information.
- Allow time for students to reflect individually, in small groups, or in whole class discussions to clarify points of confusion and make connections to organizational systems.
- Encourage students to revisit their *Backward Mapping Plan* to check off items that have been accomplished.
- Remind students that a backward map is a living document and if the backward map needs to be revised, they may do so, keeping in mind that the deadline for completion will not shift.



Backward Mapping Plan

Complex assignments can be broken down into manageable chunks. Analyze your task using backward mapping and determine what tasks need to be completed. Once you have organized this information, periodically refer back to your *Backward Mapping Plan* in order to analyze your progress.

Name: _____ Project: _____

Major Project Components	Project Due Date:	
1. _____	5. <i>Tasks to Complete:</i>	<i>Complete Tasks By:</i>
2. _____	4. <i>Tasks to Complete:</i>	<i>Complete Tasks By:</i>
3. _____	3. <i>Tasks to Complete:</i>	<i>Complete Tasks By:</i>
4. _____	2. <i>Tasks to Complete:</i>	<i>Complete Tasks By:</i>
5. _____	1. <i>Tasks to Complete:</i>	<i>Complete Tasks By:</i>
Potential Calendar Conflicts		

Post-Submission Response: Upon submitting your project, reflect and comment on the strengths of your plan and what you would do differently next time.

INSTRUCTIONAL PRACTICE: Developing Research Questions and Thesis Statements

Elementary students and emerging writers and researchers develop and utilize research questions that guide their inquiry and research. Developing a thesis statement in addition to the research question is the expectation for students in high school and in higher education. Crafting a specific, focused, appropriately complex research question is a skill that should be taught and developed, as it lays a foundation for the writer to develop a strong thesis statement. A thesis statement should answer the research question and explain what the research writer is intending to show or affirm as the paper’s main point or central message. A well-written thesis statement contains the narrowed topic, a position or claim, and the reason for the claim. Like the research question, it is important for the thesis statement to be specific, focused, and complex.

Specificity	<p>Not specific: There are problems with today’s TV shows.</p> <p>Specific: The rise in violence on TV has affected society in many ways, including children becoming immune to violence, accepting violence as “normal,” imitating violent acts, and identifying with violent characters.</p>
Focus	<p>Unfocused: Drinking soda is bad for people.</p> <p>Focused: People should decrease the amount of soda they consume because it leads to obesity, unhealthy bodies, and poor dental hygiene.</p>
Complexity	<p>Not complex: Research papers are good.</p> <p>Complex: Writing research papers is beneficial to all students, in all grades and across all content areas, because it encourages students to collaborate, to dive deeply into a topic, to research and critically think about information, and to grow as writers and learners.</p>

Instructional Goals

Students will:

- Employ strategies and tools to develop a focused research question and thesis statement.
- Collaborate with peers during topic selection and refinement.

Resource

- *Developing My Thesis Statement* (Student Resource)



Preparation for Instruction

- Provide sample thesis statements as models.
- Be prepared to model and instruct how to draft and strengthen thesis statements.
- Make copies for students of the resource pages, *Developing My Thesis Statement*, *Planning My Research Project*, and *Four-Square Research*.

Instructional Strategies

Research Questions

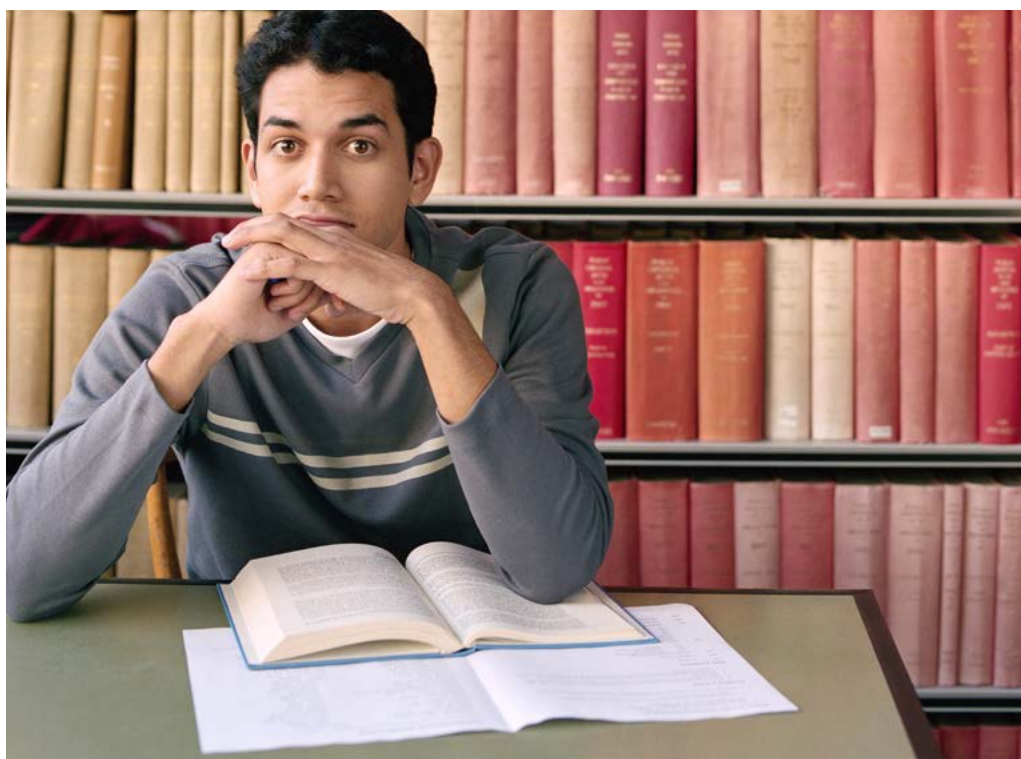
A research question should be clear, focused, and appropriately complex. Show students model examples of research questions. Refer back to the funneling strategy to aid in the development of a research question.

- **Explore:**
 - List “how” and “why” questions about the topic. Consider the reasons that make this topic matter to you and others.
 - Reflect on the questions listed. How can you group your questions? What subtopics do you see emerging? Are their questions related to big ideas?
 - Highlight possible research questions.
- **Evaluate:**
 - Think about which aspect(s) of the topic you would like to explore in greater depth and choose a related question.
 - Ensure that the research question is specific, focused, and appropriately complex (see samples in the chart below).
 - If the question can be answered with a simple “yes” or “no,” choose another question that requires research and analysis.
- **Consider:**
 - How will the research question be addressed (analysis, argument, etc.)?
 - What sources will be needed to address the question?
 - How might your audience respond?

Specificity	Not specific: Why is junk food harmful? Specific: What consequences does eating a diet that consists mainly of processed food have on the health of Americans?
Focus	Unfocused: What are the effects of chemical dumping? Focused: What is the impact of past chemical dumping by industry giants on groundwater contamination?
Complexity	Not complex: How is the changing environment affecting people with allergies? Complex: What are common effects of the changing environment on those affected by airborne allergens, and what can be done to alleviate the impact?

Thesis Statement Development

- Distribute *Student Resource: Developing My Thesis Statement* to students.
- Explain that there are three parts to a thesis statement and work with students to develop all three parts of their thesis statement (defining the topic; making a claim; and stating the reason[s] for the claim).
- An example of a strong research question and thesis statement is provided below and can be shared with students.
 - **Research Question:** Was President Harry S. Truman justified in his decision to drop atomic bombs on Hiroshima and Nagasaki?
 - **Thesis Statement:** Although there are those who disagree with President Truman's decision to use the atomic bomb, his decisions to bomb Hiroshima and Nagasaki were justified due to the casualties of Pearl Harbor, to maintain the safety of the United States troops and the nation, and to stop the Japanese empire from growing stronger.



Developing My Thesis Statement

A strong thesis statement:

- Defines the topic.
- Makes a claim.
- States a reason(s) for the claim.

Consider:

- Did I express one major idea?
- Is my position clearly stated?
- Have I considered opposing viewpoints?

1. My topic:

2. My research question:

3. My claim:

4. Reason or assertion that supports my claim:

5. Reason or assertion that supports my claim:

6. Reason or assertion that supports my claim:

7. Possible opposing viewpoint(s) to consider:

8. My thesis statement:

THE RESEARCH PROCESS: Phase 2 – Information Processing

Information processing involves critical thinking and inquiry as students gather information and read from a variety of sources, capture and organize information through focused note-taking, analyze data, and finally synthesize the information. Asking questions such as *who, what, when, where, why, and how* will help guide thinking. It is crucial that the writer remain focused on the purpose of the research assignment and the intent of the research question and/or thesis statement during this phase.

Gathering and processing valid, pertinent, and interesting information from a variety of sources sets students up for success as they work through the rest of the research process. In this information age, with a multitude of resources available, gathering information is more complex than ever. Students must learn to navigate through vast amounts of information to select valid, reliable, and relevant sources. Some sources will give basic information, while others may be more specific to the topic and offer more depth of thinking and analysis. Examples of possible sources are listed below.

Digital materials	Specialized databases Academic subject databases Videos												
Print materials	<table> <tbody> <tr> <td>Books</td> <td>Charts</td> </tr> <tr> <td>Magazines</td> <td>Graphs</td> </tr> <tr> <td>Journals</td> <td>Tables</td> </tr> <tr> <td>Newspapers</td> <td>Blogs</td> </tr> <tr> <td>Speeches</td> <td>Journals</td> </tr> <tr> <td>Websites</td> <td>Historical records</td> </tr> </tbody> </table>	Books	Charts	Magazines	Graphs	Journals	Tables	Newspapers	Blogs	Speeches	Journals	Websites	Historical records
Books	Charts												
Magazines	Graphs												
Journals	Tables												
Newspapers	Blogs												
Speeches	Journals												
Websites	Historical records												
Non-print materials	<table> <tbody> <tr> <td>Artwork</td> <td>Films</td> </tr> <tr> <td>Photographs</td> <td>Documentaries</td> </tr> </tbody> </table>	Artwork	Films	Photographs	Documentaries								
Artwork	Films												
Photographs	Documentaries												
Knowledgeable people	Interviews Historical documents												

Information processing involves using two kinds of sources: primary sources and secondary sources.

- **Primary sources** convey direct, first-hand evidence and contain raw data or information. These sources may be documents from an actual event or original literary or artistic works. Examples of primary sources include diaries, photographs, maps, letters, posters, mailings, official records, or unanalyzed statistical data.
- **Secondary sources** describe, analyze, summarize, or comment on primary sources or other secondary sources (e.g., historical interpretations of the photographs and maps).

Students will most likely use both primary and secondary sources at varying points in their academic careers. When and how they use these resources will depend on the focus of their research and the discipline for which they are writing.

	Humanities	Sciences
Primary Sources	<ul style="list-style-type: none"> • Original, first-hand account of an event or time period • Usually written or made during or close to the event or time period • Original, creative writing or works of art • Factual, not interpretive • Examples include diaries, journals, letters, factual newspaper and magazine articles, government records, photographs, maps, postcards, posters, speeches, interviews with eyewitnesses or participants in an event, songs, plays, novels, stories, paintings, drawings, sculptures 	<ul style="list-style-type: none"> • Report of scientific discoveries • Results of experiments • Results of clinical trials • Social and political science research results • Factual, not interpretive • Examples include published results of research studies, scientific experiments, or clinical trials; minutes from conferences or meetings
Secondary Sources	<ul style="list-style-type: none"> • Analyzes and interprets primary sources • Second-hand account of a historical event • Interprets creative work • Examples include biographies, histories, literary critiques, reviews of books, art or theater, newspaper or magazine articles that interpret works or events 	<ul style="list-style-type: none"> • Analyzes and interprets research results • Analyzes and interprets scientific discoveries • Examples include publications about the significance of research or experiments, analysis of clinical trials, reviews of results of experiments or trials

INSTRUCTIONAL PRACTICE: Locating and Gathering Sources

Success with the research process is dependent upon students knowing how to include more than one source to answer their research question or support their thesis. Using only one source results in a research paper that is simply a summary of the information included in that source, rather than a student's unique analysis and synthesis of information from multiple sources and perspectives. Sifting through information, identifying the resources that will be used, and then integrating the information from those sources into a well-developed research project are essential skills students need to master.

Instructional Goals

Students will:

- Understand the difference between primary and secondary sources and comprehend when and how to use them.
- Locate sources that are relevant to the topic and support the purpose of the research assignment.

Resource

- *Identifying and Exploring Primary and Secondary Sources* (Student Resource)

Preparation for Instruction

- Provide students with time and resources for locating valid, reliable, and relevant sources.
- Gather examples of primary and secondary sources.
- Schedule time in the campus library for students to research.
- Provide students with access to the internet.
- Coordinate with a campus librarian, who can be a valuable resource for planning and execution of a research project.

Instructional Strategies

Primary and Secondary Sources

(Note: If students already have a clear understanding of the distinction between primary and secondary sources, steps relating to that information may be skipped or quickly reviewed.)

- Provide students with definitions and examples of primary and secondary sources. Use the information on page 327 for talking points.
- Discuss which type of sources would be most appropriate for meeting the needs of the specific research assignment within the specific discipline.
- Use *Student Resource: Identifying and Exploring Primary and Secondary Sources* in one of the following ways:
 1. To practice developing an understanding of primary and secondary sources.
 - Provide a sample topic and possible sources as a model and work through the chart with students.
 - Extend to hands-on practice by gathering several sets of sample topics and possible sources (your campus librarian is an excellent resource).



- Have students form groups of 3–5.
 - Provide each group with a set of topics and sources, and have them work with their groups to complete the chart.
2. To review resources for students' own research projects.
 - Students complete the chart as they locate sources to use to support their topic.

Locating Sources

- **NKSL Chart:** Students can create and use an NKSL four-column chart in their notes to determine sources that are needed for gathering research and sources they already use.
 1. N: What I *need* to know?
 2. K: What do I already *know*?
 3. S: What are the *sources* of my prior knowledge? What *sources* are available for what I need to know?
 4. L: What did I *learn* from these sources?
- **Internet Search:** Allow time for students to conduct internet searches to determine which online sources have useful information to support their project. Provide students with the following tips for successful searching, and model the strategies.
 - Use the best search tools—search engines, subject dictionaries, metasearch engines, or specialty search engines. Search engines, such as Google or Bing, are online tools that use keywords to direct users to sources that may be useful, but they are not sources themselves.
 - Use keywords that are specific and descriptive. For example, *World War II* will generate thousands of sites with all kinds of information about the war, while *President Truman atomic bomb* will generate fewer sites, but the sites will contain information specific to this aspect of World War II.
 - If searching for a specific phrase, put quotation marks around it. This lets the search engine know to look for sites with that exact phrasing (e.g., “*Enola Gay drops atomic bomb*”).
 - Use a minus sign to exclude certain information (e.g., *atomic bomb Nagasaki –Hiroshima*).
 - Use the advanced search features found in most search engines to streamline a search.
 - Skim the search results and pay attention to the source of the domain. Sites ending in .edu, .org, .gov, or .mil are usually the most reliable and valid.
 - .com for commercial
 - .edu for educational
 - .org for other organizations
 - .gov for U.S. federal government
 - .mil for U.S. military
 - .net for internet service providers
 - .biz for business
 - .info for information

- Open a site that may be useful for locating information relevant to the research project.
- If the site is a possible source, bookmark it and/or add the link to your notes. Be sure to capture the URL so you can return to the site when needed.
- **Database Search:** Databases provide access to high quality, up-to-date information from reliable publishers and publications. They provide complex search capabilities that link the user to relevant articles. The following tips will help students use databases to locate information.
 - Select a database that connects to your topic. Search psychology databases for psychology topics or government databases for topics related to public health. A World War II database would have information about President Truman and the use of atomic bombs.
 - Select search terms related to key concepts.
 - Narrow your search if you retrieve too many articles and expand it if you have too few articles. Be flexible with your search terms and try different ones until you retrieve some useful articles.
 - Use the advanced search options available in most databases.
 - Use Boolean operators (*and, or, not*) to combine or exclude search terms.
 - If you locate an article you want to use, bookmark and/or print it for further exploration.
- **Library Search:** Libraries store information about the items they have available in a catalog, which is usually computerized. Consult the catalog by searching for a resource by title, author, or topic. The catalog will generate a list of available resources and their location in the library (call number), as well as indicate whether the item is currently checked out or sitting on the shelf. Use the call numbers to locate the books you need. Nonfiction books are usually grouped together using some type of classification system. Most libraries have signs to direct users to specific areas. Locate and skim through the related books and check out those that will provide relevant information for the research project.



Identifying and Exploring Primary and Secondary Sources

Complete the chart as you explore different sources.

My Topic: _____

Source Include the full citation.	Type Is this a primary or secondary source?	Genre	Evidence/Relevance What evidence is included that may be valuable for this topic?

Examples of **primary source genres** include diaries, memoirs, autobiographies, government records, organizational records, photographs, artifacts, interviews, and maps.

Examples of **secondary source genres** include biographies, literary critiques, reviews of books, art or theater, newspaper or magazine articles that interpret, publications about the significance of research or experiments, analysis of clinical trials, and reviews of results of experiments or trials.

INSTRUCTIONAL PRACTICE: Evaluating Sources

Learning how to determine whether or not sources are valid, reliable, and relevant is essential to the success of any academic research project. Providing students with strategies for investigating the validity and reliability of various sources is crucial as they strive to become competent and confident academic researchers. A reliable source is one that can be consistently depended on to provide accurate and trustworthy information. The following strategies provide students with guidelines for evaluating books, articles, and websites as possible sources for their research.

Instructional Goal

- Students will understand how to determine the validity and reliability of information found within sources by evaluating books, articles, and websites.

Resource

- *Evaluating Sources* (Student Resource)

Preparation for Instruction

- Model how you evaluate books, articles, and websites by gathering items together and preparing a Think-Aloud.
- Provide a copy of *Student Resource: Evaluating Sources* (pages 334–335) for each student.
- Provide sample resources, and pre-select websites for students to evaluate.

Instructional Strategies

- Define “sources” as encompassing books, articles, and websites. Share the following talking points with students.
 - Not all sources are good. Just because someone writes a book or article or creates a website does not always mean that the person is an expert in the subject or that he or she will have accurate information.
 - It is up to the researcher to determine whether possible sources are not simply related to the topic, but are also valid and reliable.
 - If they are valid and reliable, that means the sources can be depended on for information that is accurate, genuine, and believable.



- Start by having students explore how to evaluate books and articles.
- Divide the class into small groups of 4–6 students.
- Determine a class topic to be used as a model (e.g., World War II, rainforests, etc.) and share the research question (for emerging researchers) or the thesis statement (for experienced researchers).
- Give each group a book or article (or both) related to the topic and have them use the questions and tips in the *Evaluating Books* and *Evaluating Articles* sections of *Student Resource: Evaluating Sources* to determine whether or not they have a reliable and valid source.
- Ask each group to appoint a spokesperson who will share their group’s decision and how they arrived at that decision.
- Debrief with students about how they can apply these strategies to evaluating resources for their project.
- Next have students work on how to evaluate a website. This may be done with a large group led by the instructor, in a computer lab, or in a 1:1 setting.
- Direct students to a specific website (start with a site that is credible). Model as you navigate and explore the site using the questions on the *Evaluating Websites* section of *Student Resource: Evaluating Sources*. Have students determine whether or not this is a valid and reliable site to use as a source for the topic and state the reasons why.
- Explore an additional site (choose one that is not credible, perhaps through bias with no supporting evidence, or a site that is selling something.) Have students determine whether or not this is a valid and reliable site to use as a source for the topic and state the reasons why.
- Debrief with students about how they can apply these strategies to evaluating websites for their research projects.

Evaluating Sources

Evaluating Books

<p>Is there an inherent bias exhibited in the text? If so, why do you think that? What language suggests bias? Does the author look at both sides?</p>	<p>Check for the evidence and sources the author uses to support their claims. It is acceptable to use a source that is biased if the information is credible and you use additional sources to look at the other side of an argument.</p>
<p>Does the author cite sources? Are those sources credible?</p>	<p>Look for the bibliography or works cited pages.</p>

Evaluating Articles

<p>Who is the author of the article? What is the author's background?</p>	<p>Check for the evidence and sources the author uses to support their claims. It is acceptable to use a source that is biased if the information is credible and you use additional sources to look at the other side of an argument.</p>
<p>What is the publication date of the article?</p>	<p>Newspaper, magazine, and journal articles are published frequently, so they often provide the most current information on a topic.</p>
<p>What is the content of the article? Does it relate to your topic?</p>	<p>Often there is an abstract or introduction for the article that indicates the main points of the content. Reading the first and last paragraphs and skimming the rest of the article is also helpful.</p>
<p>What evidence is provided to support what the author is saying?</p>	<p>Look for citations, direct quotations, and references to studies, statistical information, experts, books, or other articles.</p>
<p>Is there an inherent bias exhibited in the text? Does the author look at both sides? Does the author cite sources? Are those sources credible?</p>	<p>Newspapers and magazines often publish opinion pieces. Check for the evidence and sources that the author uses to support their claims. It is acceptable to use a source that is biased if the information is credible and you use additional sources to look at the other side of an argument.</p>

Evaluating Websites

When exploring websites, it is important to look at the content, the source, and the structure. Use the questions below to assess the validity and reliability of a website. Record notes in the right-hand column.

Looking at the Source	
<ul style="list-style-type: none"> • Is the website credible? (Click on the “About...” link located at the top or bottom of the page to find out who owns the site and what objectives they have.) • Is there an individual, group, business, or organization sponsoring the webpage? • Who is the author of the webpage? • What is the background of the author? • What credentials does the author possess? • Is any bias suggested? • When was the information posted? • How recently has the information been updated? 	
Looking at the Content	
<ul style="list-style-type: none"> • What is the purpose of the webpage? • Who is the intended audience? • What information does the webpage contain? • How complete and accurate is the information? • Is the information based in fact or opinion? • Is there evidence of bias or propaganda? • Are citations included to support the information being presented? • How does the information connect to and support your research topic? 	
Looking at the Structure	
<ul style="list-style-type: none"> • Is the site easy to navigate—is it user-friendly? • Does the document follow the basic rules of grammar, spelling, and literary norms? • Does the site have viable links that take you to additional, relevant information? • Does the site have links that take you off-topic and off-site? • Does the site ask for payment when clicking on links or trying to access additional information? • Does the site have pop-up ads? Are you able to turn those off? 	

INSTRUCTIONAL PRACTICE: Source List

For research and citation resources and examples pertaining to MLA, APA, and Chicago style, the Purdue Online Writing Lab (OWL) is an excellent resource that provides up-to-date information. <https://owl.english.purdue.edu/owl/section/2/>

Creating and maintaining a list of valid, reliable sources consulted during the research process is vital to becoming an effective researcher. It is imperative that students record the citation information for all their selected sources so they can easily reference work when using direct quotations or paraphrasing or summarizing information. The creation of a bibliography page includes a final list of all sources used for direct citations, which are also cited in the body of the paper, as well as all sources that were used for research, but may not have been directly cited.

Instructional Goals

Students will:

- Create a source list to aid them in the creation of direct citations and a bibliography page.
- Understand the importance of citing sources.

Resource

- *Source List* (Student Resource)

Preparation for Instruction

- Ensure that students have had the opportunity to preview and gather sources.
- Provide a copy of *Student Resource: Source List* for each student.

Instructional Strategies

- Direct students to respond to the following quickwrite prompt: *Think about all the resources you have previewed and decide which ones will be most beneficial for your project. Take 3 minutes to respond to the following in writing: "I have decided to use the following resources for my research project because..."*
- Have students share their quickwrite response with an elbow partner.
- Using *Student Resource: Source List*, have students add all of the sources they plan to use to the source list, assigning each a source letter. They must add the citation information for each source as well. This includes:
 - The title of the source (book, article, encyclopedia, website, etc.)
 - Author information
 - The name and location of the company that published the source
 - The website address (URL), if the source was found online (Search engines are not sources!)
 - The date the copy was published
 - Page numbers used, if known (As students take notes, they can add the actual page numbers they use.)
- Explain to students that this list is a living document, which means that if they find another source, they can add it to the list, and if they determine a source on the list is no longer needed, they have the option to not use it. Their final list of used sources will be compiled into a bibliography list.
- Monitor and assist students to ensure they are locating and recording the correct information for their citations.

Source List

For each source that you use, assign it a source letter in the left column and add its citation information in the right column. Citation information includes:

- The title of the source (book, article, encyclopedia, etc.).
- Author information.
- The name and location of the company that published the source.
- The website address (URL), if the source was found online. (Search engines are not sources!)
- The date the copy was published.
- Page numbers used, if known. (As you use the source, page numbers can be added.)

INSTRUCTIONAL PRACTICE: Focused Note-Taking for a Research Project

Focused note-taking is an important aspect of the research process, as students take notes on ideas and concepts that are critical to writing an effective research paper. Focused note-taking helps students to do the following:

- Provide a record of the research.
- Organize thinking by grouping and organize notes visually and logically.
- Set up organization of the research paper.

When note-taking, there are different ways to record and reference another's work:

- **Direct Quotations:** Writers may choose to use the author's exact words from a passage; however, students should be advised to choose quotations carefully and avoid overusing them. Selected quotations should elevate the writing by providing an important, compelling, or unique perspective or to present statistics or technical data. When using a direct quotation, a writer must transcribe the passage exactly as it is written (even if there are grammatical errors), and place quotation marks around the passage. Recording the page number is critical for citation purposes.
- **Summarizing and Paraphrasing:** These concepts are similar to direct quotations in that they utilize another author's ideas. However, rather than using the exact words of the author, the writer taps into the ideas of the author by summarizing or paraphrasing in the writer's own words. In this case, the writer still needs to cite the author.
- **General Notes:** Writers may record information that is common knowledge in their own words rather than quoting, summarizing, or paraphrasing.

Note-taking can be done in various forms. The focus is not on a specific form of the notes, but is instead on the process of organizing notes in a way that provides clarity and ensures the validity of the information. A strong foundation in the practice of note-taking will enhance students' ability to take notes for a research project. The strategies outlined in this instructional practice arespecific to note-taking for a research project.

See Chapter 3: Focused Note-Taking for extensive information on the process of focused note-taking.

Instructional Goals

Students will:

- Understand strategies that can be used to gather and record information.
- Comprehend the difference between a direct quotation, a paraphrase, and a summary of information.

Resources

- *Focused Note-Taking From a Single Source* (Student Resource)
- *Structured Note Sheet: Order Number* (Student Resource)
- *Structured Note Sheet: Three-Column Notes* (Student Resource)



Preparation for Instruction

- Review Chapter 3: Focused Note-Taking.
- Ensure that students have practice with the process of focused note-taking.
- Ensure that students have completed *Student Resource: Source List* (on page 337).
- Prepare copies of selected student resources.
- Be prepared to share examples of direct quotations and information that has been paraphrased or summarized.

Instructional Strategies

The following strategies should be selected and used based on your students' experience level with the research process and with focused note-taking. For students new to the research process, scaffolding the note-taking process by teaching a specific format for taking and organizing the notes is recommended. As students become more proficient with this task, they will begin to develop a format that works best for them.

Read a Little, Think a Little, Write a Little

- As students begin the process of taking notes, younger students and students with little note-taking experience may benefit from this scaffolded approach.
- Model this process for students using a class topic, selected source, and note-taking format appropriate for the purpose (two- or three-column, Cornell, etc.).
- A projector or document camera is recommended. Notes can be recorded on chart paper as a source is displayed with a projection device or document camera.
- Display the source text and model for students using a Think-Aloud approach.
- **Read a little** of the text, breaking at a logical point when information starts to transition.
- **Think a little** by asking, "Is there anything in the information that I just read that answers one of my research questions or provides information that is relevant to and supports my topic or thesis statement?" If the answer is no, then keep reading. If the answer is yes, move to the next step.
- **Write a little** by determining whether you will take notes in your own words, copy a direct quotation or statistic, or summarize or paraphrase the information. (Note: This is an ideal time for the instructor to model these strategies, as well.)

Focused Note-Taking From a Single Source

- Distribute *Student Resource: Focused Note-Taking From a Single Source*.
- Ask students to review questions they have developed about their research project and write those questions in the left-hand column of the resource.
- Guide students who are in the process of looking for a source that could answer their questions by modeling where appropriate.
- Instruct students to read the information from the source and record information that answers their questions.

- Invite students to determine whether the information should be preserved as a direct quotation, a paraphrase of a section, or a summary of a section(s). Students can record this information in the middle column.
- In the last column of the resource, instruct students to analyze the information and record their analysis.

Structured Note Sheets

This strategy organizes notes by subtopic.

- A separate sheet is needed for each subtopic, which allows the writer to see if they have enough information for each subtopic and if they have used multiple sources for each subtopic.
- Students should create a page for each subtopic, and as they work with a source, record pieces of information on the appropriate page. Although they are juggling between multiple pages, their notes will already be grouped by subtopic. As a scaffold for younger students or emerging researchers, providing a different colored paper for each subtopic aids in organization. Using a research folder, such as a manila or pocket folder, or designating a research section in their binder helps students keep track of their notes.
- Distribute *Student Resource: Structured Note Sheet: Order Number*. Students will need one copy of this resource for each of their subtopics. Guide students as they fill in the following information:
 - **Topic/Subtopic:** Record the main topic and the subtopic.
 - **Order Number:** The order number column allows students to organize their notes by numbering the order of the information. This is typically done after the notes are completed and is useful as students create an outline.
 - **Information:** Note, quote, summarize, or paraphrase information. Writers should only capture one piece of information per line. Skipping lines between each piece of information helps younger students delineate each detail.
 - **Source Letter:** Record the letter of the source from *Student Resource: Source List*.
 - **Page Number:** Record the exact page number or numbers where the information is found.
- Another option for organizing notes by subtopic is to utilize a three-column note format. Provide students with *Student Resource: Structured Note Sheet: Three-Column Notes* (one copy per subtopic). The notes are organized by subtopic, and students analyze for connections and relevance.
 - **Topic/Subtopic:** Record the main topic and the subtopic.
 - **Column 1:** Record the source letter and page number.
 - **Column 2:** Record the notes, direct quotations, and summarized or paraphrased information.
 - **Column 3:** Record connections to convey the “so what.” Consider the questions: *How does this connect to my research? Why is this important? How will I use it? What questions do I have?*

Focused Note-Taking From a Single Source

Citation information:

Title:

Author(s):

Publisher:

Publisher City/State:

Publication Date:

Pages Referenced:

Question/Topic Related to Research	Direct Quotation? Paraphrase? Summary?	Analysis

Structured Note Sheet: Order Number

Topic/Subtopic: _____

Order Number	Notes, Direct Quotations, Summaries, Paraphrasing	Source Letter	Page Number

Structured Note Sheet: Three-Column Notes

Topic/Subtopic: _____

Source and page number	Notes	Connections: <ul style="list-style-type: none"> • How does this connect to my research? • Why is this important? • How will I use it? • What questions do I have?

INSTRUCTIONAL PRACTICE: Using Direct Quotations vs. Summarizing or Paraphrasing

When conducting research, students need to understand how to utilize and credit the ideas and findings of experts and scholars through direct quotations or by paraphrasing or summarizing the information.

When a writer decides to use information that is not common knowledge, they must cite their source(s). Common knowledge is defined as information that is generally widely known by everyone (or nearly everyone) and can be found in numerous sources. For example, the fact that the United States entered World War II after the bombing of Pearl Harbor is common knowledge, but using someone's theory about why the United States should or should not have entered the war would not be considered common knowledge. Citing sources is essential when using direct quotations or summarizing and/or paraphrasing another's work. This allows a reader to locate the source and retrieve additional information.

Plagiarism occurs when an author does not cite their sources. Merriam-Webster defines plagiarism as the act of using another person's words or ideas without giving credit to that person. It is representing that author's language as if it were one's own. Students may plagiarize for many reasons—poor time management skills, lack of confidence in their writing ability, and/or failure to prioritize the assignment. It should be noted that not all plagiarism is intentional—some students do not realize they are plagiarizing. To prevent deliberate or unintentional plagiarism, the teaching of note-taking, paraphrasing, summarizing, and citing sources is crucial. The following strategies will help students develop an understanding of these skills and how to correctly use them in a research paper.

Instructional Goals

Students will:

- Understand the importance of citing sources to avoid intentional and unintentional plagiarism.
- Correctly cite sources.

Preparation for Instruction

- Determine consequences for intentional plagiarism.
- Provide examples and models of cited work, including quoted, paraphrased, and summarized ideas. Select sample quotations for students to practice paraphrasing and summarizing.
- Locate resources to specifically address using original work responsibly.



Instructional Strategies

Using Direct Quotations

- Explain to students that using direct quotations means copying what an author says word for word. Share with them the following guidelines for use of direct quotations.
 - Use quotations sparingly, choosing those that add impact to the writing, cite compelling evidence, are stated in a unique way, or provide a clear definition.
 - Choose quotations that span three lines or fewer. Use paraphrasing or summarizing to include information from longer quotations.
 - Use quotation marks around the author's words.
 - Use a transition or identifying phrase that tells who is being quoted.
 - Add a parenthetical (in-text) citation at the end of the quotation.
 - Include reference information at the end of the paper.
- Guide students in using the Says, Means, Matters strategy outlined in Chapter 2: Learning Through Writing on page 74 to analyze their quotations and determine whether they will use each as a direct quotation or decide to paraphrase or summarize it.
- Share examples of direct quotations used in various writings, providing students with mentor text excerpts using direct quotations is an important way to demonstrate this writing skill in action.

Paraphrasing

- Ask students what they think it means to paraphrase something.
- Provide a definition of paraphrasing and ask students how this compares with what they thought it might be.
 - *Paraphrasing*: Using the words of an author in a way that changes the text, but retains the meaning that the author intended.
- Explain the following guidelines for paraphrasing.
 - Retain the author's ideas by changing the structure of the sentences, but not the meaning.
 - Use a transitional or identifying phrase that tells who is being paraphrased.
 - Add a parenthetical (in-text) citation at the end of the paraphrase.
 - Include reference information at the end of the paper.
- Share examples of paraphrasing used in various writings.
- Provide students with a direct quotation and allow them to work with a partner to paraphrase the quotation.
- Direct pairs to partner with another pair to form a quad and share the results of their paraphrasing. They should think about the following questions:
 - In what ways is our paraphrasing similar? Different?
 - Did we keep the original meaning and intent of the author's work?
 - How did we identify the source of the original text?
 - How do we know this a paraphrased piece and not a summary?

Summarization involves identifying, comprehending, and communicating the main idea of a source by paraphrasing or using different words.

Summarizing

- Ask students what they think it means to summarize something.
- Provide a definition of summarizing and ask students how this compares with what they thought it might be.
 - *Summarizing*: Shortening and condensing what the author is saying, using one’s own words.
- Explain the following guidelines for summarizing:
 - Rewrite the author’s ideas in your own words by condensing what the author is saying, while keeping the intent of the main ideas.
 - Write a quick description of the main points in your own words, avoiding use of the author’s exact wording.
 - Use a transition or identifying phrase that tells who or what is being summarized.
 - Add a parenthetical (in-text) citation at the end of the summary.
 - Include reference information at the end of the paper.
- Share examples of summarizing used in various writings.
- Provide students with a direct quotation and allow them to work with a partner to summarize the quotation.
- Direct pairs to partner with another pair to form a quad and share the results of their summarization. They should think about the following questions:
 - In what ways is our summarization similar? Different?
 - Did we condense the original text, while still conveying the intent of the author?
 - How did we identify the source of the original text?
 - How do we know this a summary and not a paraphrased piece?
- The following text excerpt about whether or not the second atomic bomb should have been used shows the use of a direct quotation and paraphrasing. The text was written by science historian, Alex Wellerstein, in The Nuclear Secrecy Blog on August 8, 2013.

There are, unsurprisingly, a number of theories about this amongst historians. Some think Nagasaki was justified and necessary. Meanwhile, many agree with the historian Barton Bernstein, who argued that: “Whatever one thinks about the necessity of the first A-bomb, the second—dropped on Nagasaki on August 9—was almost certainly unnecessary” (p. 150). And there are those, like Tsuyoshi Hasegawa, who don’t think either of the atomic bombings had much effect on the final Japanese decision to unconditionally surrender when they did.

Bernstein, B. J. (1995). The atomic bombings reconsidered. *Foreign Affairs*, 74(1), 135–152.

Hasegawa, T. (2006). *Racing the enemy: Stalin, Truman, and the surrender of Japan*. Cambridge, MA: Belknap Press.



- Following is an example of how Alex Wellerstein’s text might be summarized:
 - In The Nuclear Secrecy Blog, Alex Wellerstein presented opposing views among some historians as to the necessity of dropping the second atomic bomb. Some historians believe it was justified, while others argue that the second bomb was not necessary. Still other historians contend that neither of the bombs was necessary and did not have an impact on Japan’s final decision to surrender.

Understanding Plagiarism

- Ask students what they think plagiarism is.
- Provide a definition of plagiarism and ask students how this compares with what they thought it might be.
 - *Plagiarism:* Using the intellectual property of another person without permission or without giving credit. It is considered an act of fraud under the laws of the United States.
- Discuss with students the seriousness of plagiarism and possible consequences for committing an act of plagiarism.
- Explain the following considerations related to plagiarism:
 - The original work, ideas, and inventions of people are protected under U.S. copyright laws, whether the work is in printed form or online.
 - Plagiarism occurs when someone else’s work is turned in as your own, when words or ideas are copied without giving credit, and when work is cited incorrectly or lacks quotation marks.
 - Avoid plagiarism by correctly citing sources when using ideas or quotes from other texts.
 - Obtain permission when using images, videos, or music.
- Consider using online resources on copyright law, such as www.copyright.gov, to provide students with additional context for thinking about the appropriate ways to use original work responsibly.

INSTRUCTIONAL PRACTICE: Outlining

As the information processing phase comes to an end, students must begin to organize their thoughts, ideas, and information into an outline that provides a roadmap for presenting points in a logical sequence, transitioning between topics, and showing relationships among ideas. Students should use their focused notes containing information gathered from a variety of sources to organize ideas and information into subtopics and related details as they develop their outlines. If students used a note-taking format that allowed them to group notes by subtopic, the outlining process has already begun.

Instructional Goal

- Students will use information gathered to develop a detailed outline for their research task.

Resources

- *Suggested Outline for Writing a Research Project (Elementary)* (Educator Resource)
- *Suggested Outline for Writing a Research Project (Secondary and Higher Education)* (Educator Resource)

Preparation for Instruction

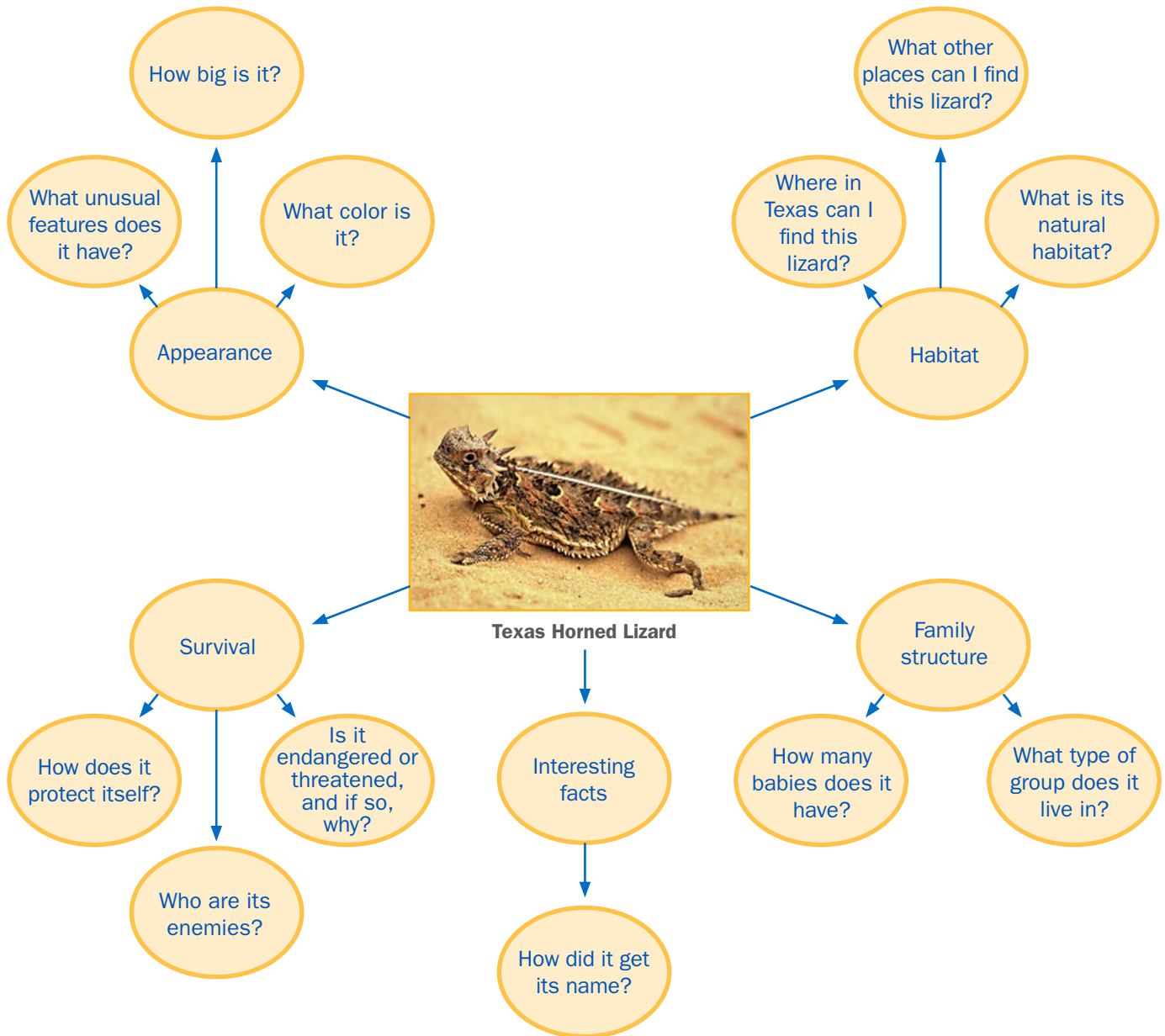
- Prepare sample outlines to use as models.

Instructional Strategies

- Share one or more sample outlines with students.
- Explain to students the purpose of creating an outline. Outlines serve the following functions.
 - Serve as a guide for writing a research paper.
 - Help to organize ideas and thinking.
 - Develop a logical sequence.
 - Help to connect ideas and show relationships.
 - Give an overview of the information gathered.
- Remind students to keep the following questions in mind as they begin to create an outline.
 - What is the purpose of the project?
 - Who is my audience?
 - What information best supports my thesis or answers my research questions?
- Direct students to:
 - Brainstorm by listing all the ideas they want to include in their project.
 - Organize their ideas by grouping related items together into subtopics. Using a graphic organizer helps students with this process.
 - Determine the order in which subtopics and related details will appear from general to specific.
- Guide students in transferring their information into the selected format. An example is shown on the following page.



Sample Outline



Suggested Outline for Writing a Research Project (Elementary)

Note: This outline is an example. Additional main topics, opposing topics, subtopics, supporting evidence, and details may be encompassed within the framework.

- I. Introduction
 - A. Attention grabber (Use interesting facts or a question about the topic.)
 - B. Research question
- II. Body
 - A. Subtopic 1
 1. Supporting detail or evidence.
 2. Supporting detail or evidence.
 3. Supporting detail or evidence.
 4. Transition to subtopic 2
 - B. Subtopic 2
 1. Supporting detail or evidence.
 2. Supporting detail or evidence.
 3. Supporting detail or evidence.
 4. Transition to subtopic 3
 - C. Subtopic 3
 1. Supporting detail or evidence.
 2. Supporting detail or evidence.
 3. Supporting detail or evidence.
 4. Transition to conclusion
- III. Conclusion (Revisit research question, using interesting facts about the topic.)
- IV. Bibliography

Suggested Outline for Writing a Research Project (Secondary and Higher Education)

Note: This outline is an example. Additional main topics, opposing topics, subtopics, supporting evidence, and details may be encompassed within the framework.

- I. Introduction
 - A. Attention grabber
 - B. Thesis statement (stating main topics 1, 2, 3)
- II. Body
 - A. Main topic 1
 - 1. Main topic 1's main idea
 - 2. Subtopic 1
 - a) Supporting evidence
 - b) Supporting detail
 - c) Application/analysis
 - d) Transition to subtopic 2
 - 3. Subtopic 2
 - a) Supporting evidence
 - b) Supporting detail
 - c) Application/analysis
 - d) Transition to subtopic 3
 - 4. Subtopic 3
 - a) Supporting evidence
 - b) Supporting detail
 - c) Application/analysis
 - d) Transition to main topic 2
 - B. Main topic 2
 - 1. Main topic 2's main idea
 - 2. Subtopic 1
 - a) Supporting evidence
 - b) Supporting detail
 - c) Application/analysis
 - d) Transition to subtopic 2
 - 3. Subtopic 2
 - a) Supporting evidence
 - b) Supporting detail
 - c) Application/analysis
 - d) Transition to opposing topic
 - C. Opposing side topic
 - 1. Opposing side's thesis
 - 2. Rebuttal of opposing side's thesis
 - a) Supporting evidence
 - b) Supporting detail
 - c) Transition
- III. Conclusion
- IV. Bibliography

THE RESEARCH PROCESS: Phases 3–6 – Drafting, Revising, Polishing, and Publishing

The remaining stages of the research process correspond to the strategies and expectations detailed in Chapter 5: Understanding and Using the Writing Process. Embedding the writing process strategies in the research process guides students in writing and finalizing their research project. Following are guiding questions directly related to the research process for students to respond to as they utilize the writing process to work through the final phases of a research project.

Drafting: The goal of drafting is to get ideas on paper in a logical order.

- How will my outline help me with writing my draft?
- How will I grab my reader's attention in my introduction?
- Is my perspective clearly introduced in the first paragraph?
- How will I integrate the information I gathered from my sources?
- How will I use direct quotations?
- When would it be best to paraphrase or summarize, instead of using a direct quotation?
- How am I ensuring that I correctly cite my sources?
- Does my conclusion summarize my main points?

Revising: The goal of revising is to improve the content of the first draft through collaboration and feedback while ensuring there is no plagiarism.

- How will I collaborate with others to gather feedback on my writing?
- How will I use any feedback I receive?
- How will reading my writing out loud help me revise my paper?
- How closely does my paper follow my outline?
- How will I ensure that my sources are reliable and valid and that I have cited them correctly?
- When using direct quotations, did I copy them accurately and integrate them in an effective and appropriate context?
- When I share my writing with others, do they understand my perspective and believe that I have provided enough support and evidence?
- What will my audience learn from what I have written?



Polishing: The goal of polishing is to use editing and proofreading to prepare the paper or project for publishing. Polishing ensures that the content and the mechanics give the reader a clear and authentic presentation of the writer's perspective, supported by accurate sources.

- How will I collaborate with others to gather feedback on my writing?
- How will I use any feedback I receive?
- Is my bibliography complete, with all sources cited accurately?

Publishing: The goal of publishing is to share the research findings with the intended audience and to celebrate the successful accomplishment of reaching the research writing goal.

- How will I share my research findings? (research paper, journal article, lab report, magazine or newspaper article, poster presentation, oral presentation, online blog, etc.)
- Have I obtained approval from my instructor if I have a choice in how I present my work?
- If I will be doing an oral presentation, have I practiced what I will say? Should I use visual aids that will enhance my findings?
- For a written final product, do I need to include any charts, graphs, or images that would add to my content?
- How can I use technology to enhance my final product?
- Does my final product look and sound professional?

Mini-Lessons for Phases 3–6 of the Research Process

The following mini-lessons provide additional strategies to guide students through Phases 3–6 of the research process.



MINI-LESSON: Synthesizing Information

A thorough research project is based on information from multiple sources. It is up to students to determine the relevance of the information they have gathered from different sources. Synthesizing involves extracting and utilizing the most relevant information from multiple sources, combining it with the writer's knowledge, and then conveying the relationships that exist among the sources to explain a concept in a unique manner. Guide students in synthesizing information using the following steps.

- Direct students to select a subtopic and develop questions they would like to have answered in relation to that subtopic.
- Guide students in reviewing their notes and highlighting or marking those that relate to the subtopic and answer the research question. Students should note the source(s) of the information they are highlighting.
- As students determine the relevance of the information they find, they should analyze the information by asking the following questions.
 - Does each piece of information help answer the question?
 - Does each piece of information provide a different or similar perspective?
 - Is there any conflicting information? If so, how can I determine which information is correct?
 - Do I only have information from one source? If so, do I need to look at other sources to help confirm the validity of this information?
- Use *Student Resource: Determining Relevance and Synthesizing Information* (on page 356) to summarize the most important points from each source that relate to the subtopic and answer the question.
- Use sentence-combining techniques to develop a final response to the question, which can then be used in writing the draft.
- Modeling these steps for students provides scaffolding that some students may need.

For more information on sentence combining, see Chapter 5: Understanding and Using the Writing Process, pages 259–260.

Resource

- *Determining Relevance and Synthesizing Information* (Student Resource)

Determining Relevance and Synthesizing Information

Select a subtopic and develop a question you want answered about your subtopic. The question and answer should support the overall research question or thesis.

Subtopic/Question:

Review your notes, highlighting information that is relevant to the question. Summarize the most important points from each source in the boxes below. Continue on a separate sheet of paper if you have information from more than three sources or need additional space.

Source 1	Summarize the most relevant points.
Source 2	Summarize the most relevant points.
Source 3	Summarize the most relevant points.

Analyze the information from each source by asking the following questions:

- Does each piece of information help answer the question?
- Does each piece of information provide a different or similar perspective?
- Is there any conflicting information? If so, how can I determine which information is correct?
- Do I only have information from one source? If so, do I need to look at other sources to help confirm the validity of this information?

Use sentence-combining techniques to develop several sentences that synthesize the answer to your question.

Original Synthesis: Develop an answer to the question by combining the supporting information from each source.

MINI-LESSON: Integrating Sources

Integrating sources into research by using a quotation, paraphrase, or summary should be smooth and seamless and allow the reader to understand the importance of the information. When integrating sources, a writer should introduce and weave the source into the writing, rather than letting it stand alone. Introducing the source creates a context for the information, while integration blends the ideas into a cohesive thought. Assist students with introducing and integrating sources by using a 3-Part Source Integration format.

Part 1: Introduce the source, state the author's name, and provide background information.	
Part 2: State the direct quotation, paraphrase, or summary.	
Part 3: Integrate the quotation, paraphrase, or summary by commenting on its relevance.	
Combine the three parts into one or more sentences and integrate the sentence(s) into the research writing.	

Students can also use this format to synthesize information from multiple sources that have related information. Have students create a 3-Part Source Integration for each source, and then have them consider the following questions:

- What is the relationship between the sources? How do they interact?
- How can I combine the information from these sources in a seamless manner?
- What information do I have access to that relates to the integrated sources?
- What new meaning can be gleaned by combining the integrated sources with my prior knowledge?

MINI-LESSON: Drafting in Chunks

Chunking is a scaffolding strategy that helps younger students or emerging researchers break large amounts of information into smaller chunks so they can focus on one part at a time and not become overwhelmed with the amount of information involved in a research project. To assist students in chunking their information as they begin the drafting process, follow these steps:

- Create a three-column note format.
- At the top of each column, write the topic/subtopic of each paragraph that will be in the body of the research paper.
- For each column, brainstorm a list of the main points and evidence that will support the topic.
- Use the information in each column, along with related details gathered during note-taking, to compose each paragraph.

Topic/Subtopic	Topic/Subtopic	Topic/Subtopic



MINI-LESSON: Using Sentence Frames and Templates

Sometimes getting started with writing is the most difficult part of a writing assignment. Many students benefit from the use of sentence frames to jump-start their thinking. The following sentence frames and templates can be used to scaffold the writing for students in need of this support.

Integrating and citing one source:

- (Author) (argues, maintains, insists) _____.
- According to (Author), _____.
- (Author) points out that _____.
- The text by (Author) is focused on _____.
- In (title of text), (Author) indicates that _____.
- The principal claim that (Author) makes is _____.
- As (Author) notes, _____.
- It can be argued that _____ as (Author) stated.

Synthesizing and integrating information from more than one source:

- The authors, _____ and _____, agree that _____.
- Though (Author 1) points out that _____, (Author 2) argues that _____.
- (Author 1) and (Author 2) agree that _____, which contrasts with the point made by (Author 3).

Argument Template

(Author), in the article, (article title), (verb) that (claim). In the article, (author's last name) (verb that describes the collection of evidence). (Discuss the evidence and why it is used). For example, (indicate what the author is doing) because (indicate the purpose of the author's action). This evidence suggests (analyze the evidence). (Indicate your thoughts about the evidence).

MINI-LESSON: Helping Trios

As students move into the revising and polishing phases of their research process, gathering input from peers is critical. Strategies for collaborating and gathering input during these phases are included in Chapter 5: Understanding and Using the Writing Process. The Helping Trios strategy is an additional strategy to aid students in working through self-identified problems or questions they may have with their research. This strategy develops students' active listening and speaking skills, while also providing feedback students can use to advance their learning. The following steps outline the strategy and may be used with all students or only with students who are struggling with an element of the research or writing process. For students who need additional help, the following steps can be used to scaffold their learning.

- Direct students to verbalize their problem by doing a quickwrite that explains what the problem is, what they have done to solve it, and what questions they have.
- Divide students into groups of three. All three members of the trio might have a problem to share, or if only a few students need the support of a Helping Trio, they might be paired with two students who are not bringing a problem to the group, but will be able to provide feedback to those who do have questions.
- Instruct groups to assign the letter A, B, and C to each member respectively.
- Student A begins by sharing the information from their quickwrite for about 2–3 minutes.
- Students B and C actively listen, but do not talk or interrupt.
- When Student A finishes, then Students B and C provide feedback for 2–3 minutes while Student A listens without speaking or interrupting.
- Finally, all three students engage in open dialogue for 2–3 minutes by asking and responding to questions or giving additional feedback.
- The process continues until each student in the group who has a problem to present has had the opportunity to do so.
- Students should then return to their quickwrite, record the feedback they received, and reflect on how they will use it as they work through their research project.



MINI-LESSON:

Glitter Pen Syndrome Avoidance

Have you ever viewed a multimedia presentation or student diorama that looked amazing on the surface, but upon closer inspection lacked substance? If so, you have experienced the “Glitter Pen Syndrome.” Many students are adept at putting together a presentation that is visually appealing and receives an impressed response from instructors and peers. However, sometimes what looks nice on the surface lacks the content and the evidence to support the intent of the project. Students must learn to look beyond the appearance of a product and focus on the substance of the content. Following are some tips to avoid Glitter Pen Syndrome:

- Develop and show students a multimedia presentation (using PowerPoint or other presentation software) that breaks all the rules, such as:
 - multiple types of animations and sounds on a page/slide
 - images that serve no purpose or do not connect to the content
 - backgrounds that are bright and loud, making it difficult to read text
 - fonts that are too small to read
 - font styles that are busy, rather than crisp and professional
 - font colors that do not stand out clearly against the selected background
 - slides or pages that are covered with line after line of text
- Guide students in a discussion of all that is wrong with the example and how to avoid distractions to create a professional quality presentation.
- Provide students with presentation rubrics to ensure expectations are clear, and give them checklists so they can reflect on their work. Following are items that could appear on a self-evaluation checklist:
 - I practiced my report with a peer before presenting it to my audience.
 - My topic was presented in a way that was interesting for my audience.
 - I was able to clearly explain what I learned to others.
 - My presentation was well organized.
 - I used images and other visuals that enhanced my presentation.
 - I spoke with a clear tone that everyone could hear and understand.
 - I spoke with expression.
 - I made frequent eye contact with my audience.
 - I used body language in a way that did not detract from my presentation.
 - I was able to answer questions asked by my audience.
- Stress accuracy and validity of content and professionalism over the “look” of a final product. Although appearances are important, students may be inclined to spend more time on making something look good rather than doing it well and ensuring correctness. Students should not think, “I don’t care if it’s right; I just want it to look good. Then it will look like I worked hard.” Develop growth mindset thinking and a professional, persistent work ethic by acknowledging students’ hard work and the accuracy and depth of their content rather than focusing on how the product looks.

Evaluation and Reflection

Evaluation and resulting feedback help students deepen understanding of content, learn how to improve their writing, and improve their confidence and self-awareness about the overall writing and research processes. Formal evaluation guides students in identifying the learning targets they accomplished and the areas in which they need to continue to improve.

Reflecting is a time for students to practice metacognition, thinking about what went well and what challenges were encountered. Thinking through the information learned, the strategies utilized (and the ones that were not), and the entire process is a critical learning tool. By taking time to reflect, the writer will be able to apply the learned tools and strategies to the next research writing task.

For more in-depth and comprehensive discussion on evaluating and reflecting, please refer to Chapter 5: Understanding and Using the Writing Process, as well as Chapter 8: Metacognition and Writing.

Resources

- *Research Writing Process General Assessment Rubric* (Student Resource)
- *Research Writing Process With Feedback Rubric* (Student Resource)
- *Building and Presenting Information* (Educator Resource)



Research Writing Process General Assessment Rubric

	Emerging Research Writer	Developing Research Writer	Proficient Research Writer	Advanced Research Writer
Engagement in the Writing Process	<ul style="list-style-type: none"> • Makes no pre-writing plan. • Sets no goals or backward mapping benchmarks. • Does not use feedback. • Makes no attempt to correct errors when creating the final draft. 	<ul style="list-style-type: none"> • Develops some ideas through pre-writing. • Sets targeted goals and backward mapping benchmarks. • Uses some feedback. • Attempts to correct errors when polishing the final draft. 	<ul style="list-style-type: none"> • Creates an adequate pre-writing plan. • Sets and monitors targeted goals and backward mapping benchmarks. • Uses some feedback. • Corrects most errors when polishing the final draft. 	<ul style="list-style-type: none"> • Creates a detailed pre-writing plan. • Sets and monitors targeted goals and backward mapping benchmarks. • Uses feedback thoughtfully. • Polishes a final draft that is ready for publication.
Thesis Statement	<ul style="list-style-type: none"> • Includes a weak thesis statement or does not include any thesis statement. 	<ul style="list-style-type: none"> • Includes a somewhat clear and arguable thesis statement. 	<ul style="list-style-type: none"> • Includes a clear and arguable thesis statement. 	<ul style="list-style-type: none"> • Includes a clear and well-developed thesis statement.
Information Gathering	<ul style="list-style-type: none"> • Paper is scarcely researched and not detailed or accurate. • Does not relate source information to the thesis. 	<ul style="list-style-type: none"> • Paper is moderately researched and somewhat detailed and accurate. • Weakly relates source information to the thesis. 	<ul style="list-style-type: none"> • Paper is mostly well researched, detailed, and accurate. • Relates source information to the thesis. 	<ul style="list-style-type: none"> • Paper is well researched, detailed, and accurate. • Strongly relates source information to the thesis.
Analysis	<ul style="list-style-type: none"> • Shows limited or no analysis and integration of source information. • Makes few or no connections between the thesis and supporting evidence. 	<ul style="list-style-type: none"> • Shows moderate analysis and integration of source information. • Makes few connections between the thesis and supporting evidence. 	<ul style="list-style-type: none"> • Shows good analysis and integration of source information. • Makes connections between the thesis and supporting evidence. 	<ul style="list-style-type: none"> • Shows exceptional analysis and integration of source information. • Consistently makes connections between the thesis and supporting evidence.
Mechanics of Information Gathering	<ul style="list-style-type: none"> • Does not cite sources. • Does not include a bibliography page. 	<ul style="list-style-type: none"> • Cites few sources, with errors. • Includes a bibliography page, but with errors. 	<ul style="list-style-type: none"> • Cites sources, mostly using a correct format. • Includes a bibliography page with few errors. 	<ul style="list-style-type: none"> • Cites all sources using the correct format without errors. • Includes a bibliography page that is free of errors.
Mechanics of Writing	<ul style="list-style-type: none"> • Makes many errors in spelling, capitalization, punctuation, or usage that inhibit meaning. 	<ul style="list-style-type: none"> • Makes some errors in spelling, capitalization, punctuation, or usage that may inhibit meaning. 	<ul style="list-style-type: none"> • Makes few errors in spelling, capitalization, punctuation, or usage; errors do not inhibit meaning. 	<ul style="list-style-type: none"> • Makes no errors in spelling, capitalization, or usage • Makes few or no punctuation errors.

Research Writing Process With Feedback Rubric

This rubric may be completed by the writer for self-assessment or by a peer or instructor for additional feedback. Provide feedback related to glows (what is working well) and grows (what needs attention).

<p>Engagement in the Writing Process</p> <ul style="list-style-type: none"> <input type="checkbox"/> Created a detailed pre-writing plan. <input type="checkbox"/> Set and monitored targeted goals and backward mapping. <input type="checkbox"/> Used feedback. <input type="checkbox"/> Polished a final draft to be ready for publication. 	<p>Glow:</p> <p>Grows:</p>
<p>Thesis Statement</p> <ul style="list-style-type: none"> <input type="checkbox"/> Includes a clear thesis statement and well-developed support of the thesis statement. 	<p>Glow:</p> <p>Grows:</p>
<p>Information Gathering</p> <ul style="list-style-type: none"> <input type="checkbox"/> Paper is well researched, detailed, and accurate. <input type="checkbox"/> Strongly related source information to the thesis. 	<p>Glow:</p> <p>Grows:</p>
<p>Analysis</p> <ul style="list-style-type: none"> <input type="checkbox"/> Showed exceptional analysis and integration of source information. <input type="checkbox"/> Consistently made connections between the thesis and evidence. 	<p>Glow:</p> <p>Grows:</p>
<p>Mechanics of Information Gathering</p> <ul style="list-style-type: none"> <input type="checkbox"/> Cited all sources in the correct format with no errors. <input type="checkbox"/> Included a complete bibliography page in the correct format with no errors. 	<p>Glow:</p> <p>Grows:</p>
<p>Mechanics of Writing</p> <ul style="list-style-type: none"> <input type="checkbox"/> Made no errors in spelling, capitalization, or usage. <input type="checkbox"/> Made few or no errors in punctuation. 	<p>Glow:</p> <p>Grows:</p>

Building and Presenting Information

Grade	Goal	Example
Grades 3–5	Build knowledge about a topic through investigation, using several sources and different aspects.	Describe a character. Compare and contrast two or more characters or settings.
Grades 6–8	Answer a question (can be self-generated), draw on several sources, refocus inquiry when appropriate, use focused questions for further research, and encourage exploration.	Compare and contrast various elements of literature across genres. Analyze a modern work. Trace and evaluate arguments, distinguish claims, and assess whether the reasoning is sound.
Grades 9–12	Conduct short and/or more sustained research projects to answer a question (can be self-generated), synthesize multiple sources, and demonstrate understanding of a subject.	Analyze, demonstrate knowledge, and delineate and evaluate the argument and specific claims in a text.
Higher Education	Conduct short and/or more sustained (typically more sustained) research projects to respond to a question and synthesize many sources; must demonstrate understanding of subject and sources.	Write a lab report. Write a mini-research paper. Write a sustained, semester-long paper addressing a central idea/tenet of the course. Analyze, demonstrate knowledge, and delineate and evaluate the argument and specific claims in a text, with an emphasis on knowledge of sources and ability to synthesize information from many sources (research, lecture, textbooks, visuals, graphs, charts, etc.).

AVID Site Team Connection: *Deepening Inquiry Through Research Schoolwide*

Educators need opportunities for collaboration and input from colleagues. The AVID Site Team is one of the key elements in taking high-leverage strategies and core beliefs across a campus. When a Site Team unites around an essential strategy like deepening inquiry through academic research, builds collaboration opportunities into scheduled meeting times, and supports one another in seeing the value of academic research taking place within each discipline, students across the campus can expand their research writing skills.



INSTRUCTIONAL PRACTICE: Reflective Brainstorming

This is an excellent way for a team of instructors to clarify and understand the prerequisite skills students need to become independent researchers. This work can also guide a district or campus in developing a schoolwide structure for building upon the skills students need to be effective writers and researchers.

Instructional Goal

- Educators will work through a research assignment to identify the skills needed for students to develop and hone their academic research skills.

Preparation for Instruction

- Select a research assignment for participants to work with as key academic research skills are identified.
- Determine whether participants will work within content-area teams, small groups, or pairs.
- Decide on how the skills will be categorized and archived for future discussion, as well as what the next steps will be based on the discussion and outcomes.

Instructional Strategies

- Share the research assignment with participants.
- Ask them to brainstorm all the tasks they think will be necessary to achieve a high-quality final product.
- Categories might include:
 - Tasks to prepare to do research
 - Tasks needed for information gathering
 - Writing skills that need to be utilized
- Items that might appear on a brainstormed list include
 - Focused note-taking
 - Locating resources
 - Developing questions
 - Figuring out what I already know
 - Figuring out what I want to know
 - Creating a plan
 - Making an outline
 - Reading using the internet
 - Reading using the library
 - Paraphrasing
 - Citing sources
- Once a list of tasks has been generated, ask participants to respond in writing to the following prompt:

Look at the list of all the things students need to do to be effective researchers. What are two things on the list that you think are your areas of strength or taught within your content area or grade level? Explain why you chose these areas of strength. What are two things on the list that you think might be a little challenging for students in your content area or grade level? How could we work together as a site to develop these skills within our students?
- Ask participants to pair up and share their reflective writing with each other.
- Brainstorm ideas from the collaborative share-out.
- Identify the next steps the Site Team will commit to taking in order to support students in building academic research skills.

Post-Reading Reflection Questions

It is critically important to intentionally teach research and research writing skills in all levels of education across all content areas. Because of the internet and advances in technology, today's students are inundated with massive amounts of information. Teaching students how to critically think as they wade through the enormous amount of data and then analyze, synthesize, and integrate it into a cohesive piece of work will enable them to be college and career ready and empower them to live productive 21st century lives.

When reflecting on the research writing process, consider:

- How will I engage students in collaborative activities to encourage them to work together as researchers and writers?
- How will I ensure that my students have the necessary skills that will enable them to be successful with research projects?
- In what ways can I use inquiry in the research process to deepen students' understanding of content?
- How will I encourage students to critically think through the research process to ensure they utilize sources that are reliable, accurate, credible, and relevant?
- How will I scaffold the research process for my level of students and my content area?
- How can I plan for inclusion of components of the writing process, WICOR, focused note-taking, and inquiry into the research process?
- What are my next steps in planning a research writing assignment for my students?

K-2 Post-Reading Reflection Questions

- What strategies will I use when facilitating inquiry and research in the classroom?
- For what stages of the research process do I have room for growth or additional instructional strategies?
- How will I make questioning a more robust part of my classroom?

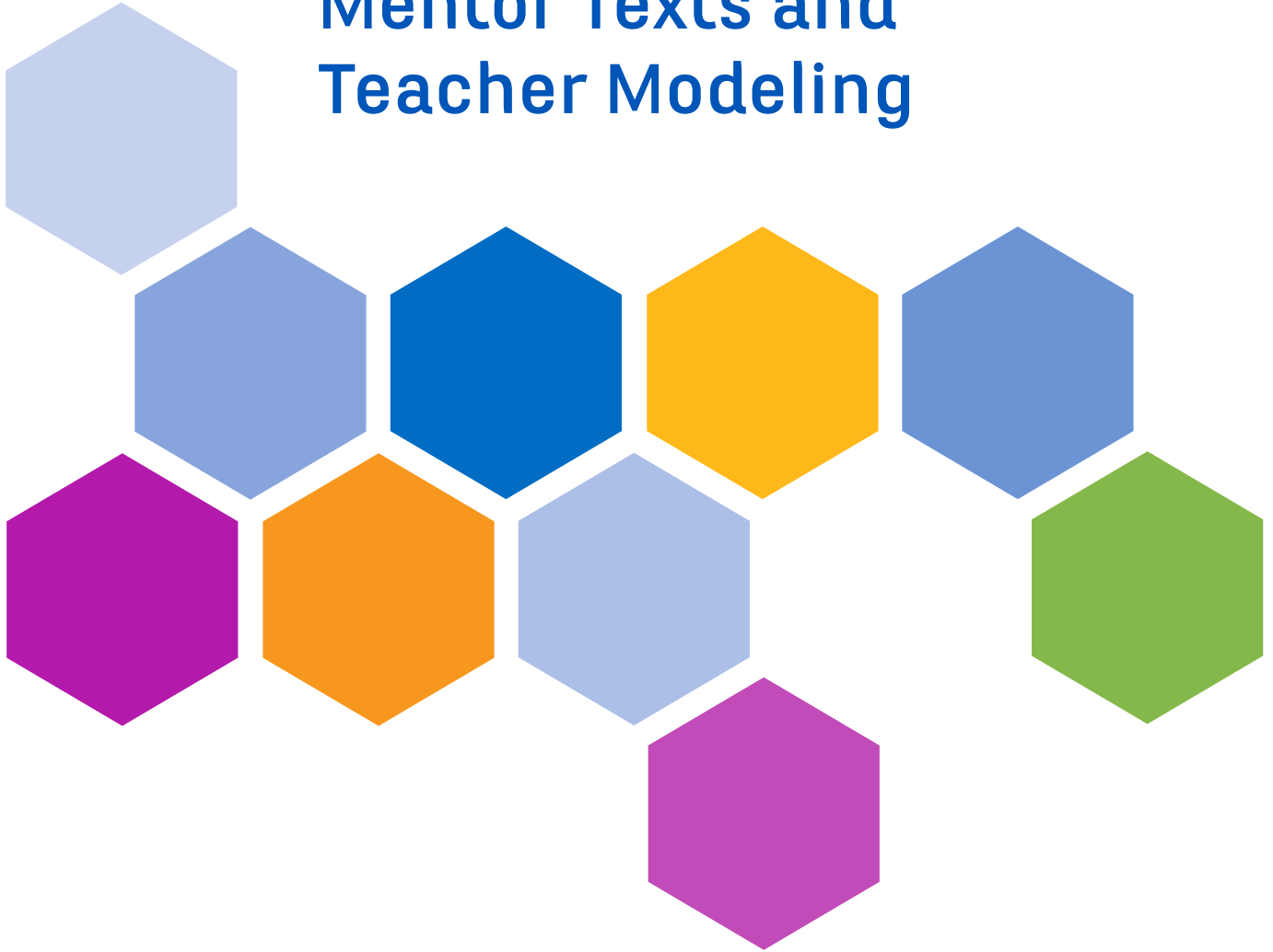
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CHAPTER SEVEN

Mentor Texts and Teacher Modeling



Visit the *AVID Writing for Disciplinary Literacy* webpage
on MyAVID for additional materials and resources.



CHAPTER Introduction

Academic language scripts are sentence stems and frames that provide students with the formal language needed to engage in academic discourse in a variety of learning experiences and settings.

Mentor texts are real-world exemplars used as models of writing; these texts provide essential guidance to teach and support students in learning to write.

One of the best ways to improve at something is to view examples from people who are skilled at doing whatever that thing is. Home cooks watch professional chefs on television to learn how to make a cheese soufflé or how to chop vegetables quickly without losing a finger. Teachers wanting to increase the quality of students' talk in their classrooms might view videos of master teachers facilitating Socratic Seminar discussions using **academic language scripts**. Aspiring home decorators peruse magazines to notice how the pros use color and select accessories to create the perfect living space. Similarly, writers working to improve their writing look at examples of well-written texts and observe writers as they write.

The word “mentor” conjures up many pop culture associations. Yoda taught Luke Skywalker. Professor Dumbledore guided Harry Potter. And Mr. Miyagi educated the Karate Kid about self-defense and about life. In real life, Oprah Winfrey credited Maya Angelou for providing wisdom and support, and Facebook CEO Mark Zuckerberg mourned the 2011 death of his mentor, Apple co-founder Steve Jobs, on his own Facebook page.

Similar to mentors who advise their less experienced counterparts, **mentor texts** provide essential guidance to writers to teach and support them in learning to write. Mentor texts are models or examples of the types of writing students are being asked to create. Most often, they are real-world, published texts, but sometimes instructors create mentor texts for their students to use. As students become more accomplished and familiar with the use of mentor texts, they can begin to select texts from their own reading or research to help them with self-identified areas of writing growth. Graham and Perin (2007) identified a positive correlation between the use of models and writing improvement when students “read, analyze, [and] emulate” published writing.

The focus on mentor texts is not on content or meaning. The *what* of the text is less important than the *how*. Student writers intentionally examine the moves the author is making and try them out themselves. The lens used to examine the mentor text may be extremely wide—studying a text to see how an author forms a persuasive argument or how a particular type of text is organized—or quite narrow—noticing how colons and semicolons are used correctly or how to cite a source in a scholarly journal. In the world beyond school, people use mentor texts all the time without realizing that is what they are doing. Perhaps you consulted some mentor exemplars “just to see how it’s done” the last time you updated your résumé, had to make a wedding toast, submitted an article to a publication, or completed a grant proposal.

Mentor texts benefit students in many ways. Exposure to examples of real-world texts in various academic areas increases student buy-in for

“*The starting point for becoming a good writer is to be a good reader. Writers acquire their technique by spotting, savoring, and reverse-engineering examples of good prose.*”

Steven Pinker, linguist, cognitive scientist, and author

“ *When I was teaching writing—and I still say it—I taught that the best way to learn to write is by reading. Reading critically, noticing paragraphs that get the job done, how your favorite writers use verbs, all the useful techniques. A scene catches you? Go back and study it. Find out how it works.* ”

Tony Hillerman, author

“ *I am the best writer in my classroom. You are the best writer in your classroom. Our children need to stand next to us and see how we write. And in addition to standing next to us, our students should also stand next to and study other expert writers. I want my students to ask, ‘What do these writers do that I’d like to try?’* ”

Kelly Gallagher, author of *Write Like This*

writing and removes some of the artificiality associated with writing in school. Mentor texts also empower students to write with confidence because having exemplars and parameters frees up space for creativity to flourish; mentor texts foster creativity rather than stifling it. The self-differentiating nature of mentor texts allows instructors to address the needs of a wide array of abilities. While some students will adhere closely to the wording and form of a mentor text, especially at first, more advanced writers will use the text as a jumping-off point to greater risk taking and exploration. Just as sentence frames and stems help students learn academic English, mentor texts allow students to try out language structures until they feel free to extemporize on their own.

Additionally, the use of mentor texts teaches students the valuable skill of becoming self-directed writers, learning to seek out exemplars to improve on self-determined skills. Reinforcing a strong connection between reading and writing, mentor texts develop students’ skills in both areas in a meaningful way. As students begin to notice what writing looks like in each academic area, they can learn to write like scientists, mathematicians, and historians. The ability to “code-switch” among the types of writing expected in math, science, English, and social sciences is one piece of the “hidden curriculum” puzzle that determines a student’s success in college.

English language learners benefit from seeing models of texts written at their proficiency levels. Modeling writing from texts, particularly nonfiction, equips them with chunks of language to use in their own writing (Haynes, 2007). Beyond focusing on comprehension, English language learners should read informational texts to seek patterns and identify the writer’s craft (Ferlazzo & Hull-Sypnieski, 2014).

In addition to using texts as models, instructors themselves should become mentors for their student writers by modeling writing practices in the classroom. According to Kelly Gallagher (2011), “Of all the strategies I have learned in my twenty-five years of teaching, no strategy improves my students’ writing more than having my students watch and listen to me as I write and think aloud”(p. 15). This requires some vulnerability on the part of the instructor, but students need to see that writing is a difficult process for everyone and that writers seldom crank out flawless first drafts. What is most important is that educators make tangible the processes and struggles of writing—what goes on in the head as well as what ends up on the page. When educators make this thinking obvious to the students, they provide something for their students to emulate as they continue to hone their crafts as writers.

This chapter addresses both types of modeling: students examining mentor texts to improve their writing and instructors modeling writing with their students. These high-impact practices pay off in big dividends as students increase their abilities to become self-directed, independent writers who make strategic decisions based on their observations.

Chapter 7 Objectives

As a result of interacting with this chapter, educators will be able to:

- Help students learn to write using real-world texts as models.
- Select appropriate mentor texts for desired writing outcomes.
- Model writing with students to demonstrate the writing process and the challenges of writing.
- Teach students to read and write like advanced writers using 21st century skills for career and college readiness.

Pre-Reading Reflection Questions

- How has watching someone else helped me to learn to do something myself?
- What kinds of writing in the real world relate to the subject I teach?
- How do experts in my subject area read, write, and view the world?
- What kinds of models do my students look at to help them as they write in my course?

K-2 Pre-Reading Reflection Questions

- If you already use mentor texts in your classroom, what elements do you believe belong in a strong set of mentor texts?
- How might a mentor text that has a combination of writing and illustrations help support and enhance acquisition of reading and writing skills?
- How might storytelling be used as a scaffold for younger students?

Guiding Principles

- People learn by watching more experienced people do things and by looking at examples. Writers learn by reading and examining the work of other writers.
- The best writing teachers provide many models for their students to examine.
- Student writers benefit from studying quality exemplars, not from inadequate ones. In other words, it is better to study what to do rather than what *not* to do.
- Access to real-world texts as exemplars not only improves students' writing, but also increases students' buy-in about the relevance of writing to their lives.
- Mentor texts can be used at all stages of the writing process to help students plan, draft, revise, and edit their writing.
- Analyzing the moves an author makes in a text helps students make intentional decisions to strengthen their own writing.
- Mentor texts can be as large as entire books and as small as individual sentences.
- Educators must write with their students and in front of their students. Writing and thinking aloud in front of students normalizes the struggles all writers encounter and helps student writers see the conscious decisions writers make.
- When students are learning to write in a new language, a new language register, or an academic discipline, exposing them to models at their language proficiency level helps them understand how fluent writers put words together in that language or style.



INSTRUCTIONAL PRACTICE: Selecting and Using Mentor Texts

Identifying and selecting texts to use as mentor texts involves beginning with the end in mind. Think about the purpose for writing and the type of writing students will be expected to eventually do. Select real-world examples of that type of writing to help students achieve that purpose. Consider elements of the writing students will be asked to notice. Read widely. Read everything with an eye out for texts that exemplify the disciplinary writing of your content, and bring in texts for students frequently. Reading should take place in class routinely, and reading mentor texts should be one of the types of reading that occurs.

Instructional Goals

Students will:

- Read teacher-selected mentor texts to develop mental models for what writing looks like within a discipline or content area.
- Apply content knowledge to real-world examples of content-area writing.

Resource

- *Planning for Mentor Text Usage* (Educator Resource)

Preparation for Instruction

- Mentor texts can be as large as entire books or as small as individual sentences. Only select as much as is needed for the intended purpose. Practice in miniature can often have the largest impact.
- In most cases, students will use an excerpt from a mentor text, not the entire text; the exception is when students are charting the overall structure to discover the organizational pattern of a text or the development of an argument.
- Consider AVID Weekly® as a possible source for high-quality texts at a readability level appropriate for students.
- Select texts for students to emulate, not bad examples. Focus on the good traits exhibited in writing, not the mistakes the writer made.

Instructional Strategies

- Utilize a Think-Aloud to model the curiosity of a scholar. Get excited about reading and writing; students need to see readers and writers outside the English classroom. Don't hesitate to share writing you admire or that excites you. Mentor texts are a form of inquiry that builds on the natural curiosity of readers.
- If students are reading independently in your class from a textbook or separate texts, provide a reading task that leads to an examination of the writer's craft. This reading task should ask students to notice or look for something specific as they read—how the author uses content vocabulary, reasons and examples, organization of ideas, problems and solutions, a particularly persuasive argument, a quotation incorporated powerfully into the text, or strong transitions.

Compiling a class collection of mentor texts is a useful way to develop a library of models for students to access as they write in content-area classrooms. Ask students to assist in creating a classroom collection of mentor texts. Devise an organizational system that will help students locate texts that will be helpful in addressing specific writing needs. Students could write a brief explanation to accompany each mentor text, explaining why they selected it for the collection.

- Explore and use texts that exhibit various purposes of nonfiction writing (Gallagher, 2011):
 - a. Informing and explaining
 - b. Expressing and reflecting
 - c. Evaluating and judging
 - d. Inquiring and exploring
 - e. Analyzing and interpreting
 - f. Taking a stand or proposing a solution
- Mentor texts can come from books, magazines, newspapers, websites, pamphlets, brochures, content-specific abstracts, historical primary or secondary sources, reports, plays, screenplays, letters, and other print and online resources. Less conventional sources could include charts and graphs, comics, advertisements, reference books, children's books, instruction manuals, games, social media pages, recipes, and greeting cards.
- Universities often publish model papers to show students examples of excellence in various academic fields. Websites such as the Yale Center for Teaching and Learning can be invaluable in locating mentor texts for students.
 - <http://ctl.yale.edu/writing/undergraduate-writing/model-papers-disciplines>
- Instructors should familiarize themselves with guidelines regarding copyright and fair use for educators.
 - <https://www.copyright.gov/circs/circ21.pdf>
- Use *Educator Resource: Planning for Mentor Text Usage* to identify how a mentor text will be used, the scaffolding needed, and the learning objective or outcome for this particular mentor text.



Planning for Mentor Text Usage

Instructors can use the following questions to guide their planning for the use of mentor texts in writing instruction.

Purpose: What is the end writing goal?

Choosing a Text: What text or part of a text models the purpose (or a skill related to the purpose)?

Read and Analyze: What will you have students observe or notice about the text?

Reading:

How will you have students mark the text as they read? How can your text markings support the writing purpose?

Isolating sentences or paragraphs: Are there specific portions of the text on which students should focus? Will you identify them or will you have the students locate them?

Creating Stems:

What sentence stems can your students use to help them process their ideas about the mentor text in discussion or writing?

Analyzing:

What mode(s) will students use to analyze the text?

- Individual: Students work on their own with one model or each with different models.
- Collaborative: Students work in pairs, triads, or jigsaw groups.
- Full-Class: Students work with instructor guidance, instructor models the analysis in front of the students, or the whole class processes the same text together.
- Incorporate physical movement, manipulatives, oral processing, etc.

What strategies will students use to analyze the text?

Emulate: How will students practice writing using the mentor text as a guide?

Apply: How will students apply what they have learned to a writing assignment?

Feedback: Where will feedback occur during this process? How will students use the feedback to guide their efforts? What kinds of self-reflection will students engage in?

INSTRUCTIONAL PRACTICE: Did You Notice?

Students must be taught how to read to notice the writing decisions an author makes. This strategy allows students to work cooperatively to practice with one another and improve their ability to read with a writerly eye.

Instructional Goals

Students will:

- Understand what it means to *read to notice*.
- Develop their skills as writers by reading a text closely.
- Collaborate to share their observations and learn from the observations of others.

Resource

- *Reading to Notice* (Educator Resource)

Preparation for Instruction

- Select a text for students to read together. The text should be a real-world example of content-area writing that the students will emulate. Ideally, the text should be one that is short enough to be read multiple times during a class period.
- Have the text available for each student via a paper copy, link to the resource, or a digital file.
- Locate a short video clip to use to model how to notice. Possible videos could include a music video, a commercial, a movie trailer, a news story, or a brief scene from a film.

Instructional Strategies

- Show the students the video clip, asking them to pay attention to what is happening. Ask the students to talk in pairs about the following questions.
 - Why did someone make this?
 - How is it supposed to affect the viewer?
- Watch the video a second time, and ask students to notice things about the video that they think contributed to its purpose and effect. Encourage them to notice things that they think are important and that others may not notice. If necessary, prompt students with an example, such as, “Did you notice that the man was wringing his hands, which might indicate that he was nervous?” or, “Did you notice that the camera zoomed in closer on the woman’s face when she was reacting to the bad news?”



- After watching a second time, students should discuss the video clip in groups of 4 or 5, with each person sharing an idea with the group using the sentence stem, “Did you notice...?”. Allow one member from each group to share one of their group members’ observations with the whole class.
- Explain that this process helps us notice the deliberate decisions made by the creators of the video and that we can learn more about how to make an effective video by pinpointing the things that make a video effective. The same thing is true about noticing things as we read that help us improve our own writing. We learn from noticing what the author does.
- After the video example has been discussed, introduce the exemplar text to the students.
- Students should read the text one time to get the gist.
- Students should then read the text a second time, marking the text as they read (Refer to Chapter 2: Learning Through Writing, pages 42–44, for information on marking the text). This time, the students should notice the effective moves the author makes and note them on the text. They may notice things related to organization, content, style, and grammar and usage. If necessary, read the first paragraph aloud to the students and model this process.
- In groups, students should share the things they noticed by asking their group mates, “Did you notice...?” Encourage students to add other students’ observations to their own copy of the text.
- Allow students to create a writing plan for themselves based on their observations using this sentence frame: “One effective thing the author did was _____. I would like to try this in my own writing so that _____.”

Reading to Notice

When using a piece of text as a mentor text, students read sentences, passages, or entire works to notice the moves the author makes. This can be done broadly (*What do you notice about how a lab report is written?*) or in a more directed fashion (*How is data incorporated into the lab report within paragraphs and in additions to the text, like charts or tables?*). The following is a list of possible elements an instructor could ask a student to notice when analyzing a mentor text. Students would focus on one or several of these, not all of them at once:

Students can keep a writer's notebook with favorite vocabulary, sentences they want to emulate, writing ideas, and other things that come to mind as they read to notice.

Organization

1. Effective introductions and conclusions (including various methods for beginning particular types of writing)
2. Common text structures and organizational patterns (compare/contrast, cause/effect, problem/solution, etc.)
3. Organization of a particular piece of writing (for example, an essay in which the author presents the thesis statement at the end)
4. Organization of title, headings, formatting
5. Thesis statements, hypotheses
6. Effective paragraphing
 - a. When to start a new paragraph
 - b. Topic sentences
 - c. Paragraph cohesion
7. Use of transitional words and phrases for various purposes

Content

Students can outline or locate main ideas or points.

1. What content should or should not be in a particular kind of text (What do writers include—or exclude—in various types of texts?)
2. Persuasive techniques (What does a writer do to achieve the desired reaction in the reader?)
3. Incorporation of connections between the content and the writing purpose
4. Incorporation of evidence
5. Incorporation of concrete details
6. Incorporation of examples
7. Incorporation of anecdotes
8. Integration of quotations
9. Use of supporting facts and data
10. Specificity of a topic
11. Use of content vocabulary, jargon, and terminology
12. Use of images, captions, callouts, charts, videos, infographics, and other graphic or media elements
13. Links or references to outside sources

Style

1. Appropriate voice (degrees of formality or informality)
2. Ability to sound like an expert
3. Sentence length and complexity
4. Use of academic vocabulary
5. Tone/mood
6. Point-of-view (Does the author use first-person perspective in this type of writing?)
7. Appropriate word choice/diction
8. Use of rhetorical devices, poetic language, other literary devices (and the intentionality behind their use)

Grammar and Usage

1. Correct formatting and punctuation of dialogue
2. Correct use of punctuation (semicolons, colons, dashes, commas, etc.)
 - a. Have students find actual examples.
 - b. Students can deduce the grammatical rules from sentences in mentor texts.
3. Correct use of quotation marks; formatting direct quotations
4. For online content, formatting of links to outside sources
5. Academic citation (MLA, APA, Chicago)



INSTRUCTIONAL PRACTICE: Anchor Charts: Charting an Entire Mentor Text

For examples of anchor charts that can be used in a variety of content areas, visit <https://movingwriters.org/2014/05/21/mentor-text-wednesday-mentor-text-anchor-charts/>

Anchor charts are a way to make thinking visible as they are a central place to record strategies, processes, cues, or guidelines to be used during learning. Naturally, one way to use them is to provide a visual reference to guide students' writing. Instead of having instructors create anchor charts for the students, this approach allows students to create their own anchor charts by noting the structures and key features of particular types of texts. These anchor charts can then serve as guides for students as they create outlines for their own writing.

Instructional Goals

Students will:

- Examine and outline a piece of text to identify an organizational pattern to emulate in their writing.
- Make visible the organizational structures and key features of a particular genre of writing.

Preparation for Instruction

- Select a mentor text with a structure the students should emulate in a similar piece of writing of their own. If a published text is not available, is not at an appropriate reading level for the students, or is too lengthy, you may wish to write a sample to use.
- An option for this lesson is to choose multiple texts on a similar topic but from different genres or modes of writing (examples include an editorial, a letter to the editor, a news article, an encyclopedia entry, and an infographic). Each group of students can create their anchor chart about a different text or type of text.
- Provide the text(s) to each group member (in print or in a digital workspace) and have a version available to use with an anchor chart. If using a paper copy, consider enlarging the font size of the document to be used on the anchor chart for better visibility.
- Each group will need a shared physical or digital workspace for the anchor chart, as well as a marking method. If using a paper anchor chart, have tape or glue sticks and markers or colored pencils available to the students.

For information on critical reading strategies, visit the Core Strategies: Critical Reading webpage on MyAVID.

Instructional Strategies

- Allow all students to read and mark their text using critical reading strategies.
 - Students will work in small groups (3–4) to chart the text together. Place the text in the center of the shared workspace or large piece of paper, leaving room for notations on all sides.
 - Using annotations with digital ink, commenting tools, markers or colored pencils, student groups should divide the text into chunks corresponding to different functions of the text and annotate in the margins to explain the purpose of each section (introduction, first main idea, and so forth). The idea is to identify and label the organizational structure of the text.
 - Depending on the writing purpose, student groups may also identify more specific parts within each section (thesis statement, transition, direct quotation, claims, evidence, etc.).
 - Have students complete a Gallery Walk to share and compare or post their work to a shared space for viewing. Afterward, students can add to their own pages if they discovered anything new by viewing others' pages.
 - If all students are using the same text, work as a class to develop an outline format based on the students' observations. If each group had a different type of text, each group should create an outline format for its text structure and then share their outline with the whole class.
 - Keep the students' created work available for them to reference as they write.
 - After writing, students can annotate their own writing to see if it matches the form and contains all the elements of the mentor texts.

Variations

- Have students layer annotations. Several groups or classes may visit the same text on one poster, with each group looking for different elements and adding notations in a different color.
- To increase scaffolding, instructors may provide students with a list of specific elements to identify on their anchor charts.

INSTRUCTIONAL PRACTICE: Characteristics of Nonfiction Text Genres*

Reading strategies play a key role in the use of mentor texts for writing. One of the essential strategies is noticing key features present in different types of texts. As students read more of a particular type of text, they refine their ideas of what characteristics they expect to see in that type of text. When they try their hand at writing that type of text, they can use their mental list of skills to remind them of the essential features readers expect to see.

Instructional Goals

Students will:

- Understand the term *genre* as it relates to visual arts and to literary and nonfiction texts.
- Learn to notice the characteristics of particular genres and understand why noticing these features is important for writing in those genres.

Preparation for Instruction

- Students will need a place for recording their ideas, such as a digital workspace or sheet of chart paper.
- Students will need multiple examples of different types of nonfiction texts. These could be compiled in advance by the instructor, located independently by student groups on the internet, or located by student groups in newspapers, magazines, or other print sources.
- Locate examples of different types of photographic portraits for use in the lesson opening. Assemble the portraits in a slideshow, make copies for student groups, or have students locate them online on devices during the lesson.

Instructional Strategies

Examining Photographic Portraits

- Ask students if they have ever taken a formal family picture. Consider: *How does a formal family picture differ from a candid photo taken with friends?* Have students discuss their responses in pairs and then share them with the class.
- Explain that formal pictures and candid photos are just two kinds of photographic portraits. Brainstorm other types. Ask students to generate a list of features common to all types of photographic portraits.
- In groups of 4–5, ask students to find on the internet or look at instructor-provided examples of photographic portraits (choose several: selfies, yearbook photos, candid, bridal, lifestyle, environmental, glamour, fitness, surreal, etc.) and complete a three-column chart:

Type of photographic portrait	Purpose of portrait	Essential features of this type of portrait (How are all portraits of this type similar? What are features that are not common to all portraits of this type?)

*(adapted from Wilhelm & Smith, 2017)



- Discuss students' findings. Explain the term *genre*, making the connection that groups of photos with similar characteristics are said to belong to the same genre.

Extension

- Ask the students to create a portrait that exhibits the characteristics of one of the genres they identified in this strategy.

Examining Genres in Writing

- Discuss the meaning of the word *genre* in terms of writing. Brainstorm: *What are some genres of fiction you might read?* (In this case, look for answers more specific than “novel” or “short story.” The romance novel, the detective mystery, the dystopian novel, and the survival story are all examples of genres.)
- Explain that genres are important in nonfiction writing, too. When you have to write a cover letter for a résumé, a recommendation letter, a letter to the editor of a newspaper, a thank-you note, or a grant proposal, it is essential to know the characteristics of the genre in which you are writing so that you include the elements the reader expects to find in that type of writing.
- Provide students with a variety of texts on one topic or allow them to find multiple texts within a source (e.g., a newspaper or magazine).
- In groups, students should locate three or more texts in a similar genre to examine (movie reviews, obituaries, letters to the editor, etc.). Depending on the purpose, the instructor can assign genres to groups or provide specific texts for groups to examine.
- Ask students to read and discuss the features of the articles in their selected genre and complete a three-column chart.

Name and purpose of the genre	Characteristics of the texts that support that purpose	Key features common to all examples in the genre (consider content, organization, length, style, word choice, tone, etc.)

- Allow student groups to share their findings or conduct a Gallery Walk to view one another's ideas.
- Practice composing several texts on a single topic using the identified genres, and select one to take through all stages of the writing process. If all students were examining the same genre, allow students opportunities to practice composing a text in that genre, paying attention to the purpose and features they identified.

INSTRUCTIONAL PRACTICE: Scrambled Essay

Organization is a difficult task for writers, especially students who are learning how to write. Once students begin to pay attention and notice the signposts writers include in their writing to signal an organizational plan, they learn to work them into their own writing purposefully. This instructional practice pushes students to examine the organizational clues and cues left behind by a writer to reassemble an essay into its original form.

Instructional Goal

- Students will identify organizational signposts in an essay and apply them to their own writing.

Preparation for Instruction

- Find or compose a text that is unfamiliar to the students but is organized effectively. The text should exhibit traits of organization you would like your students to emulate.
- Provide the rearranged version of the text to students in a digital file or make one copy of the text for each group, and cut the text apart into paragraphs. Place the cut-up parts of the essay into an envelope, one per group.

Instructional Strategies

- Provide each group with an envelope containing the cut-apart paragraphs of an essay. Ask students to try to reassemble the text by putting the paragraphs in order. If using paper, students may glue or tape their reassembled essay onto paper.
- Meet as a class to compare groups' attempts at reassembling the scrambled essay.
- Ask students to quickwrite and then discuss the following:
 - What signposts in the texts helped you reassemble the essay?
 - Which ones were not helpful?
 - Which would you like to try (or avoid) in your own writing?
- Generate a class list of useful strategies for organization, and post it in the classroom or in a shared digital space for continued reference.

Extensions

- Have students compose a piece of writing and mark the organizational strategies they use.
- Have students revisit an essay in progress and revise it to include more effective transitions.



INSTRUCTIONAL PRACTICE: Claim, Evidence, and Reasoning (CER)

The Claim, Evidence, and Reasoning (CER) framework was developed to help students write about their understandings of science (Zemba-Saul, McNeill, & Hershberger, 2013, cited in Allen & Rogers, 2015). Students develop a **claim** statement based on their **evidence** (scientific observations) and discuss their findings by explaining the **reasoning** and underlying scientific principles. Though useful for science, the CER model relates to any evidence-based writing in content areas. The type of evidence may change depending on the purpose for the writing. Types of evidence could include facts, statistics, data, anecdotes, observations, or a quotation from an authority. The reasoning may be the writer's commentary on the evidence or the writer's explanation of why the evidence supports the claim. Examining the claim, evidence, and reasoning can be part of learning through writing, and it is also valuable when using mentor texts to discover how to effectively incorporate evidence to support a claim in writing.

For more information on Claim, Evidence, and Reasoning, see Chapter 2: Learning Through Writing.

Instructional Goal

- Students will use the Claim, Evidence, and Reasoning strategy with a mentor text to discover how to incorporate evidence to support a claim effectively in their own writing.

Preparation for Instruction

- Select an appropriate text for the instructional practice, and make the text available for all students. The text should include one or more claims supported by evidence.
- Students will need the ability to mark up the text with digital tools, colored pencils, or highlighters.

Instructional Strategies

- Introduce the Claim, Evidence, and Reasoning strategy to students by stating a claim that is a conclusion based on a personal observation. (Example: *Being left-handed is an advantage in baseball. Students who attend test tutorials make higher scores on tests. People who shop for groceries on the way home from work buy more frozen foods.*) State the evidence used to make the claim. Then provide reasoning to explain why the evidence backs up the claim.
- Ask students to use that strategy to make a claim of their own, based on evidence from their own observation. Allow students to quickwrite to solidify their ideas. Use a collaborative strategy such as Pair-Share, Team Huddle, or Parallel Lines to allow them to share with at least one other student.

- Provide copies of the selected text for each student. Assign colors to the three parts (Claim, Evidence, and Reasoning), and ask students to highlight or underline them as they appear in the text.
- Ask students to process their color-coding in groups, considering the following questions.
 - What did you notice about how the author used evidence to support claims?
 - How might you use this practice in your own writing?
- After students understand the concept and have identified it in use, they should practice using the strategy in writing. Provide students with an assignment that allows them to make claims and support them.
- Students should color-code their own writing or a peer's writing during revision to generate a visual indication of how they have incorporated CER into their work.



INSTRUCTIONAL PRACTICE: Writing Like an Expert

Using the academic register in writing requires practice and a knowledge of vocabulary and syntax as they are used by experts in a particular academic or professional field. Rather than providing students with lists of vocabulary to memorize and sentence structures to incorporate, educators can empower their student writers by teaching them to examine texts to see how experts write. As students identify “expert moments” in texts, they develop their own word banks, adopt phrases into their own writing, and collect structures to use as models for their own writing.

Instructional Goal

- Students will identify moments in a text where the author sounds like an expert and will compile a list of techniques, words, and exemplar sentences to use in their writing.

Preparation for Instruction

- Provide students with a published text or texts in the content area. For this strategy, a variety of texts will likely yield better results.

Instructional Strategies

- As students read their texts, they should highlight or underline portions where the author sounds like an expert. These could include words, phrases, sentences, or longer passages.
- Have students form groups and collaborate to create posters with “expert” phrases or words on them.
- Direct students to do a Gallery Walk with a partner. As they walk, partners should discuss why some words or phrases were selected for the posters. Each student should identify 3–5 nuggets of expert language or techniques to use in their next writing task. Students could keep a page or section in a writer’s notebook of expert language for future reference.
- Make the posters available for students to view as they draft.
- To provide feedback during the revision and reader response stages, students can read and highlight one another’s papers to identify places where the student author sounds like an expert.

Variations

This text-mining strategy may be modified for other writing focus areas.

- **Moving Through a Text:** Have students identify transitional words or phrases an author uses to guide the reader through the mentor text.
- **Mining a Text for Vocabulary:** Have students identify and collect words in texts to use in their own writing. Rather than focusing on ostentatious vocabulary words, students can focus on especially vivid verbs, powerful adjectives, and precise nouns used effectively. Simple is better in many cases. Sometimes, borrowing words from a different genre of writing can be fun (e.g., choosing words from a restaurant review to spice up a movie or book review the students are writing). In the same way artists and designers often keep notebooks with visual inspirations, writers can collect words for future use.

INSTRUCTIONAL PRACTICE: Creating Rulebooks

Different writing jobs have different demands, and each academic discipline has its own preferences and expectations. For instance, an English professor might value an introduction with an attention-getting opening sentence and powerful imagery to hook the reader, while a science or history instructor might prefer to read essays that get right to the thesis statement without any adornment. Rulebooks and guidelines for various academic disciplines are accessible on the websites of many colleges and universities. Using mentor texts and understandings gleaned from their instructors, students can make their own rulebook or guide for their various classes.

Instructional Goals

Students will:

- Explore the varying demands, preferences, and expectations for writing within a specific discipline.
- Develop rulebooks that can be used as guides for writing within a discipline or about content.

Preparation for Instruction

- Identify the type of writing students will be doing and bring in mentor texts that can act as models (see *Instructional Practice: Selecting and Using Mentor Texts* on pages 375–376 in this chapter).
- Determine whether this instructional practice should be done as an entire class, in small groups, with students working with a partner, or individually.
- Prepare a rulebook model, with a Think-Aloud if necessary, so students can see what needs to be included within the rulebook, or share the guidelines for the rulebooks so students clearly understand the expectations and how they will use the rulebook moving forward.

Instructional Strategies

- Divide students into groups or pairs, or have them prepare to work with the whole class.
- Distribute mentor texts or display one that will be used as the model.
- Walk students through the creation of a rulebook, either by modeling or by outlining expectations for the rulebook they will create.
- The following types of rulebooks can be shared with students.
 - **How to Write Like a _____**: Students can create a rulebook for writing in a particular class (for example, “How to Write Like a Scientist”) using published texts to help them determine the rules and conventions.



- **Juggling the Demands of Various Disciplines:** Students can create a chart to delineate the different expectations for writing in various classes or subject areas. Students could consider thesis statements, introductions and conclusions, writing style, preferred citation format, formatting of pages and headings, what to include or exclude, and more. This could be a useful strategy for students in an AVID Elective class.
- **Grammar, Usage, and Style Rulebooks:** Instead of having to rely on an instructor to teach formal rules of grammar and usage, students can deduce the rules from published texts. Students identify something they need to know more about (e.g., how to punctuate dialogue, how to use a dash, how to cite research in the APA format), locate a text that showcases the skill, and observe patterns and deduce rules that they can later apply in their own writing.



INSTRUCTIONAL PRACTICE: Practice in Miniature – Mentor Sentence and Paragraphs

Mentor texts do not have to be lengthy or complete. Some of the most effective uses of mentor texts occur when writers zoom in to the level of individual sentences or paragraphs. Practicing the craft of writing using sentences as models can help students of all levels learn to code-switch into the academic register and write increasingly complex sentences. Using paragraphs as models can help student writers learn to combine ideas logically and improve the sentence-to-sentence flow of their writing.

Instructional Goals

Students will:

- Use mentor texts to practice drafting sentences and paragraphs by following the style or structure of the text.
- Increase the complexity and variety of their sentences by mimicking the structure of mentor sentences.

Instructional Strategies

Educators can use the following strategies to work with mentor texts at the sentence or paragraph level.

Sentence frames are open-ended sentence structures for students to use in formulating complete, correct, and increasingly more sophisticated responses.

- **Structural Modeling:** Project an example of a mentor sentence and ask students to use the structure of that sentence to write sentences of their own.
- **Sentence Frames:** Students or instructors create sentence frames from mentor texts for students to apply to new content. Examples are provided below.
 - Mentor Sentence: “Four score and seven years ago our fathers brought forth on this continent a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.” (Lincoln’s “Gettysburg Address”)
 - Sentence Frame: _____ ago _____ brought forth _____ a(n) _____, _____ in _____, and dedicated to the proposition that _____.
 - Possible Response: Forty years ago, George Lucas brought forth into the cinema a new film franchise, visionary in scope, and dedicated to the proposition that “The Force is with you.”
- **Mentor Paragraphs:** Have students model the structure of a paragraph, changing the content to suit their writing topic. Another option is to use the paragraph as a guide for organization, encouraging students to analyze the function of each sentence in the paragraph and write a paragraph of their own in which the sentences function in the same ways.

- **Sentence-By-Sentence Dissection:** Create a chart or graphic organizer with students as they dissect a mentor text. For each sentence, students can explain what the author is doing in that sentence or what purpose the sentence serves in the larger work. Then, students can create a sentence of their own using the mentor sentence as a model and try to do the same things the author does. The table below provides an example.

Sentence from the mentor text	What the author is doing	Student's sentence using the sentence as a model
<p>“This cookie’s sandy texture is similar to that of a shortbread, but it has the added richness of chocolate and a hint of crunch from the salt.”</p>	<p>Introduce topic by describing what it’s like; compound sentence with “but” to show how it is different</p>	<p>My lunchtime sandwich’s appearance at first is similar to a typical peanut butter sandwich, but it has the added surprise of actual banana slices and a hint of crunch from potato chips.</p>
<p>“It’s a good one to make in advance, then slice and bake at will.”</p>	<p>A tip or suggestion of how to make or use</p>	<p>It’s best to put the potato chips in right before eating, then enjoy the crispy deliciousness.</p>
<p>“It’s also an ideal candidate for dressing up—it takes equally well to glazes, rich caramel, puffy whipped cream, and scoops of ice cream.” (Mark Bittman, <i>How to Bake Everything</i>, p. 159)</p>	<p>Further advice on how to add other things that go with it. Uses a dash to join the broad sentence to the sentence containing details.</p>	<p>It’s also an ideal sandwich for personalization—it can benefit equally from Nacho Cheese Doritos, Cheetos, Rice Krispies, or chopped-up bits of pretzel.</p>

INSTRUCTIONAL PRACTICE: Peer Feedback Using a Mentor Text

One way to make peer feedback more effective is to use a tangible model such as a mentor text as a guide for providing concrete feedback.

Instructional Goal

- Students will learn to give feedback to one another by helping the writer examine a mentor text against the writer's own work.

Preparation for Instruction

- Design a writing assignment in which students' drafts follow a model of a mentor text as an example of a particular genre of writing. Students could also select their own mentor texts to guide their writing.
- When students have completed drafts and are ready for reader response, employ this lesson strategy.

Instructional Strategies

- Use the video "Austin's Butterfly" (<https://vimeo.com/38247060>) to launch a discussion about feedback. In the video, the student uses a visual example as a mentor piece to improve his own drawing of a butterfly. Ask the students how feedback and revision led to Austin's success. What kinds of feedback are most useful? How did the mentor artwork help him improve his own art?
- Once students have completed a draft using a mentor text as a guide, form groups for student feedback for revision.
- Students giving feedback should not comment on the writer's work directly but should instead direct the writer back to aspects of the mentor text to compare with the written draft.
- Questions to use for feedback include:
 - What do you notice about the way the author...?
 - How does your [introduction, thesis statement, etc.] compare with the one in the mentor text?
 - Can you explain how the mentor text shaped your decision to...?
 - In your opinion, what were the author's biggest strengths?
 - What was your purpose in using the mentor text?
 - Tell me more about a decision you made based on the text you examined.
 - What worked? What didn't work? Why?
- Allow the student receiving the feedback to reflect in writing on the draft or separately to form a plan for further revision.
- Ask students to reflect on the effectiveness of receiving feedback with a mentor text versus receiving feedback directly from a peer reviewer.



Instructor Modeling

In many professions trainees spend time shadowing, interning under, or apprenticed to a more accomplished and experienced worker in the field. It is not enough for employees to read about or be told how to do their jobs; the best training occurs when they are able to see firsthand how the work is done in an actual work environment. The most effective trainers don't tell, they show.

Similarly, simply telling students how to write is much less effective than allowing students to see the writing process in action with all its ups and downs. Gallagher (2006) asserted that many students have come to the erroneous conclusion that writing is easy for some and hard for others, most likely easy for the teacher and challenging for the students. He presumes two reasons for this misconception: 1) teachers don't actively write and have thus forgotten the difficulties of being a developing writer, and 2) teachers do write but "have become expert at hiding the work it takes from their students" (p. 49).

“ Young people need models, not critics. ”

John Wooden, UCLA
Basketball Coach

By taking the plunge to write in front of their students, writing instructors pull back the veil of mystery and allow students to see the inner workings of the process—the decisions, the doubts, the struggles, the backtracking, the messy thinking, the rewording, and the meanderings.

It cannot be said enough: Educators themselves must write. When educators see themselves as writers and allow students to see them as writers, students' attitudes toward writing (and toward their teachers) are likely to improve. Vulnerability is a necessary part of this. Seeing the instructor struggle and keep going, eventually producing a not-so-terrible draft, helps instill a growth mindset in the students.

The immediate concern many educators will have is that modeling writing is time-consuming. Gallagher (2011) countered this argument by reiterating his belief that the payoff is worth the sacrifice of time: "Repeat after me one more time: when teaching students how to write, the most effective strategy is a teacher who writes, and thinks out loud, in front of his or her students. We go first, then they go" (p. 16).

How to Model Writing for Students

Write Before They Do: As a rule, instructors should not ask their students to do any writing assignment they have not done first. Instructors will not know where students may encounter problems if they have not done the work themselves. It is not always necessary nor is it generally advisable to show students the instructor's version of the identical assignment the students are writing. Doing so is likely to cause students to mimic the instructor's work too closely. Showing a teacher-created model on a similar topic can be useful, though. Care should be taken not to conceal the work behind the final draft. Instructors should save all the pre-writing and drafts so students can witness the process itself as well as the product.

Write in Front of the Students: Educators should sometimes demonstrate the writing process itself, whether by drafting an entire short piece or a portion of a longer piece. When talking about ways to begin essays, for instance, the

teacher could write several drafts of possible introductions and project the writing on the screen as it occurs. Thinking aloud—vocalizing the ideas and decisions that take place in the writer’s brain—takes the mystery out of writing for students.

Model What Happens Before Writing Occurs: So much thought and effort goes into writing before a single word is written of the first draft. It’s a shame that students never see what goes on behind the scenes. Instructors can remedy this by planning an essay aloud in front of students or with the help of the class. Thinking and talking through the ideas of a paper before committing them to the page teaches students the importance of pre-writing and what it looks like when it is done well.

Model Revision of a Sentence or Paragraph: Revision is another stage of the writing process that is often glossed over by student writers or completely confused with editing. A writing teacher can begin with a draft of a paragraph that has not been revised and rewrite it in front of the students. Depending on the needs of the class, the instructor may focus on one trait—word choice, use of content vocabulary, bulleting ideas within a piece of writing, sentence fluency, use of transitions, combining sentences, etc.—or select all that apply to the paragraph being revised.

Think-Aloud: Allowing students to “see” and “hear” the thinking and metacognition that occurs during writing is essential for students to understand what proficient writers do. When educators think aloud while deconstructing a writing task, sift through vocabulary to find a precise term, question how they are connecting the thesis statement to the evidence, and incorporate the metacognition that is occurring at the same time, students can gain a clearer grasp of the many moves a writer makes when completing a writing task.

Screencast the Writing: Instructors can use a screencast program or application to capture what happens on their computer screen and accompanying audio as they draft. Creating a screencast video allows students to watch the writing process occur on demand. As the instructor drafts on the screen, the instructor’s thoughts and explanations can be recorded along with the visual of the drafting. The video can be a useful instructional tool for full-class instruction or to meet the individual needs of students as they become evident.

Writing Together: Instead of doing all the work to model writing, instructors can enlist the ideas of the students as the class composes a portion of a draft together. The instructor’s responsibility is to guide the students’ thinking, prompt for further depth of thought, bounce ideas off the students, model a spirit of inquiry, and reinforce the habits of mind the instructor hopes to see in the students.



AVID Site Team Connection: Using *Mentor Texts and Teacher Modeling* Schoolwide

Educators need opportunities for collaboration and input from colleagues. The AVID Site Team is one of the key elements in taking high-leverage strategies and core beliefs across a campus. When a Site Team unites around an essential strategy like using mentor texts and teacher modeling, builds collaboration opportunities into scheduled meeting times, and supports one another in seeing the value of mentor texts and teacher modeling within each discipline, students across the campus can become stronger writers.



INSTRUCTIONAL PRACTICE: Using AVID Weekly as a Mentor Text

AVID Weekly is an excellent resource for a Site Team to commit to using, as articles are written for an elementary through higher education audience on a wide variety of topics that work with every content area. Educators should explore ways to use mentor texts to model reading and writing like a content expert.

Instructional Goal

- Educators will practice using an instructional practice from this chapter with an AVID Weekly article to identify how to incorporate the use of mentor texts into their classrooms.

Preparation for Instruction

- Choose 2–3 AVID Weekly articles that could be read in every content area for a relevant, but different, purpose. For example, “Spiders could theoretically eat every human on Earth in one year,” by Christopher Ingraham, is an article that a math class could read to analyze how math is used in writing, as the article is full of percentages, large numbers, averages, and weight. A science class could read the article to look at how scientists write using Claim, Evidence, and Reasoning in writing. And an English language arts class could read the article to analyze how to write an expository piece containing descriptive language like “eight eyes glistening in the shadows” or words like “voraciousness” and “abundance.”
- Determine whether the articles will be made available digitally or as hard copies.
- Identify one instructional practice from this chapter to model with the staff. Excellent choices include:
 - *Selecting and Using Mentor Texts* (pages 375–377)
 - *Did You Notice?* (pages 378–379)
 - *Anchor Charts: Charting an Entire Mentor Text* (pages 382–383)
 - *Writing Like an Expert* (page 389)

Instructional Strategies

- Group participants into grade-level teams, content areas, or mixed groups, depending on the intended outcome of the collaboration time.
- Take participants through the identified instructional practice, leaving time at the end to debrief and make connections to using mentor texts as a way to increase students’ writing proficiency within content areas.



Post-Reading Reflection Questions

- How can I use mentor texts in my classroom?
- What texts will be most beneficial for my students to see?
- How can mentor texts be used as a scaffolding and support strategy for all learners?
- How do mentor texts engage learners of varied skill levels in different ways?
- How have I used mentor texts as an adult learner, and how did that strategy support my learning?
- What is most difficult for me as a writer? How might sharing that difficulty with students affect their attitudes and their development as writers?

K-2 Post-Reading Reflection Questions

- What elements belong in a strong set of mentor texts appropriate to the grade level I teach?
- How can I use mentor texts containing both writing and illustrations to support and enhance my students' acquisition of reading and writing skills?
- How can I use storytelling as a scaffold?

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CHAPTER EIGHT

Metacognition and Writing



Visit the *AVID Writing for Disciplinary Literacy* webpage on MyAVID for additional materials and resources.

CHAPTER Introduction

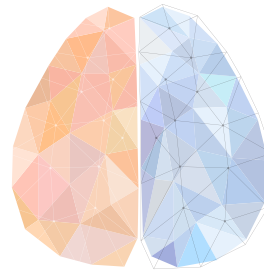
It is difficult to write for academic purposes without spending time thinking about words and ideas, making connections between content, asking questions, and reflecting. It is arguably even more challenging to learn new content without spending time thinking about words and ideas, making connections, asking questions, and reflecting. The goal in every classroom, regardless of grade level or content area, is for students to spend time thinking about content. Writing about content is one of the best ways to accomplish this goal, and taking this one step further and teaching students to learn from all of the thinking they are doing when they are writing is essential. A key way to reinforce students' success as writers and learners and increase the chance of even greater future success is to embrace **metacognition** in the classroom.

Metacognition involves reflecting upon and directing one's own thinking, as well as the ability to plan for a task, take steps to address a task, reflect on progress, evaluate results, and modify the product as needed.

Metacognition—"thinking about our thinking"—can take place in every phase of the writing process and at any part of the learning cycle. Successful people practice metacognition routinely, without necessarily being aware that they are doing so. Just as golfers view videos of their swings, dancers scrutinize their moves in the mirror, and yogis fine-tune their poses by contemplating how their muscles are aligning, thinkers, learners, and writers often step back from the task at hand to ask themselves, "How am I doing what I'm doing? What's working? What isn't? What tools or strategies do I need to employ to achieve the results I want? What do I need to change to get better at this?" During these reflective stepping-back moments, learners examine the inner-workings of their minds, pulling back the curtain to see what is going on and evaluate its effectiveness.

Successful learners possess a repertoire of skills, strategies, and tools to choose from when approaching a learning task. Frequently practicing metacognition within our classrooms enables students to become more skilled, confident, motivated, and independent users of these tools. In a history class, when students are analyzing a photograph or political cartoon, it is crucial that they learn to pause and ask, "What additional resource might I need to do this well? Do I need to go back into my notes or revisit the primary source we read yesterday?" Ideally, students will learn to troubleshoot and assess their own learning when they are taught how to do so. This is metacognition in action, and writing is a perfect vehicle for having students learn to practice metacognition. Whether students are practicing low-stakes writing or formal academic writing, metacognitive writing makes their thinking visible.

According to John Flavell (1979), there are two components of metacognition—“metacognitive knowledge” and “metacognitive experiences or regulation.”



1

Metacognitive Knowledge

Knowledge gained about the cognitive processes that can be used to control these processes.

- Knowledge of person: What one recognizes about their own strengths and weaknesses (“I write better in a quiet venue.” or “I need to have time to collaborate with peers.”)
- Knowledge of task: What one knows or can decipher about the nature of the task and what it will take to complete the task (“I know how much time I will need to write an expository essay.”)
- Knowledge of strategies: The strategies one knows and can apply to accomplish a task (“I know that the summary in my notes needs to answer the Essential Question.”)

2

Metacognitive Regulation

Involves self-awareness and the ability to make adjustments based on information learned about oneself during the metacognitive process. (Flavell 1979, 1987; Schraw & Dennison, 1994).

- Self-awareness: “Thinking of five reasons why triangles matter for the listicle in math was really hard. I need to spend time going back into my notes and identifying triangles in the real world.”

Incorporating metacognitive knowledge and metacognitive regulation into courses and content areas enhances students' learning because the breaking point for many students is when they do not know how to identify what is holding them back from learning new content. Without the metacognitive thinking skills, they may be unable to hone in on what is difficult for them in a particular assignment or task. For years, AVID has emphasized practicing both metacognitive knowledge and metacognitive regulation as crucial components of the processes for Tutorials, Scholar Groups, and Collaborative Study Groups. Looking to instrumental work by Ambrose, Bridges, DiPietro, Lovett, and Norman (2010) provides an outline of the metacognitive process that is important for both educators and students and validates why the metacognition taught during Tutorials, Scholar Groups, and Collaborative Study Groups is essential to learning. The steps can be summarized as follows.

1. How does planning for a task affect learning?
 - How does one undertake self-evaluation as they approach a task?
 - How does one organize thoughts prior to approaching a task?
 - How does one choose which strategies to use as they approach a task?
2. How does monitoring performance in “real time” impact learning?
3. How do evaluation, feedback, and self-reflection impact learning?

Integrating writing, both low-stakes and formal academic writing, into the teaching and learning cycle provides rich opportunities for students to practice metacognition around what they are learning and how they are learning it. And just like writing, metacognition is a skill students need to practice regularly in order to develop proficiency.

Barriers to the use of metacognition in learning and writing arise from both the educator and student perspectives.

- Writing is a vulnerable process that opens students up to feedback and constructive comments. Writing makes invisible thinking visible. Students may be reluctant to think about their thinking if they feel vulnerable or are in a classroom where the philosophical environment has not been established as a place that is safe to make mistakes, ask for help, or struggle.
- Students' fixation on grades and assessments is another barrier to metacognition. Rather than being thoughtful about learning, far too many students focus on making the grade or passing the test.

The **philosophical environment** is the interaction of physical, psychological, interpersonal, and social aspects for an individual or group of people.

For more information on fixed and growth mindsets, see page XI.

- Educators often make the mistake of “assigning” writing and then feel frustrated when students turn in low-quality work, perhaps even assuming that their students “can’t write” when the truth is that the students have not been given the opportunity to write frequently, receive feedback, or learn the many prerequisite skills that are required to write proficiently.
- People sometimes view writing as a skill for which a person either possesses or lacks a natural talent. This fixed mindset is a barrier that interferes with both educators and students fully integrating writing into teaching and learning. This type of thinking occurs when a person believes that intelligence, skills, and talent are inherently fixed and unchanging. (Dweck, 2016).

Overcoming the barriers to metacognition is important, as it helps students see the value and relevance in the learning process. Metacognition allows students and educators to embrace reflection as a learning tool while they practice strategies that foster reflection so deeper learning can occur.

When metacognition is connected to the writing process, students’ learning increases. Writing is a visible record of students’ thinking and learning. Having students write often, both to process their learning in the form of *learning through writing* and also to show what they have learned, is one of the most powerful learning tools educators have and is essential for college and career readiness. As educators invest time and effort into establishing students’ writing as foundational to the classroom learning environment, they should go a step further and explicitly teach metacognition. Equipped with metacognitive thinking skills, students can become the gritty, persistent learners our society desperately needs.

Chapter 8 Objectives

As a result of interacting with this chapter, educators will be able to:

- Distinguish between cognitive and metacognitive approaches and their role in developing effective writers and thinkers within content areas.
- Strategically infuse metacognitive strategies into lessons and content in order to guide students to think about their thinking when writing.
- Understand the importance of metacognition in evaluation, feedback, and self-reflection.
- Employ metacognition in relation to their own writing practice as a way to model the process of metacognition for students.

Pre-Reading Reflection Questions

Metacognition is a self-reflective process that can be used to dive deeper into one's cognitive thought. "Thinking about thinking" encourages people to evaluate, reflect, and modify their learning. Take time to consider the following questions.

- How do I infuse metacognition into my lessons and content delivery to engage writers in metacognitive thought in real time while they are writing?
- In what ways do I utilize metacognitive writing for student evaluation, formative assessment, and self-reflection for myself and my students?
- How do I model metacognition in my own writing to encourage students to think about their thinking?

K-2 Pre-Reading Reflection Questions

Developing metacognition and critical thinking skills in students in the earliest years of elementary school can be a challenging task. The roots of these skills lay in a students' ability to grow their thinking, listening, and speaking skills. Take time to consider the following questions.

- How do I develop my students' ability to participate in academic conversations?
- Are my students able to craft specific questions about a confusing topic or text?
- How might I build my students' ability to respond to others' comments and thoughts appropriately?
- What structures might I create to allow for regular and frequent self-regulation of critical thinking skills?



Guiding Principles

- Although cognition and metacognition are different, they are also similar and interdependent. Cognition allows learners to “construct knowledge,” while metacognition helps learners guide, regulate, and evaluate their learning.
- There are two important aspects to metacognition: what a person knows about himself or herself and the ability to use that knowledge to inform academic and life choices.
- Metacognition is integral to and intertwined with writing.
- Understanding the process of thinking about thinking enhances students’ abilities to be more effective writers.
- Metacognition guides self-awareness and self-regulation throughout the writing process as students plan for, monitor, and evaluate their writing.
- Metacognitive writing enables students to reflect on their thinking and learning while providing educators with an opportunity for formative assessment.
- Students develop metacognition when it is consistently modeled, explicitly taught, and authentically experienced.



INSTRUCTIONAL PRACTICE: Metacognition Before Writing

As outlined in Chapters 5 and 6, the planning stage in the writing process is critical to the successful completion of a task—it is the starting point. Metacognition during the planning stage for educators means taking time to think about how we contribute to student success, self-assessing and reflecting on student outcomes from previous assignments, and determining the strategies and scaffolds needed to ensure students can successfully complete the task.

Instructional Goal

- Students will use metacognition when planning for writing to successfully complete the writing task.

Resources

- *Pre-Assessment for Educators* (Educator Resource)
- *Post-Assessment for Educators* (Educator Resource)

Preparation for Instruction

- Use the information gleaned from the educator pre-assessment to identify how to incorporate metacognition and writing into a lesson.
- Prepare an authentic writing prompt or task related to the course content.
- Analyze the upcoming writing task or assignment with an eye for where students may struggle.

Instructional Strategies

- Provide students with the writing prompt or task and ask them to read it closely and then take a moment to answer one or more of the following questions in writing as they think about this prompt or task.
 - What am I being asked to write?
 - Have I written anything like this before?
 - How do I feel as I approach this writing?
 - What skills and abilities do I possess that will help me with this writing task?
 - Which type of mindset do I have?
 - What would it look like for me to have a growth mindset during this assignment?
 - Where can I seek support when I encounter a roadblock?
- Utilize a learning log, quickwrite, or other instructional strategy from Chapter 2: Learning Through Writing as a way for students to capture their reflection about writing.
- Have students share their reflection with a partner or small group before having a whole group discussion about the prompt and students' responses.



Pre-Assessment for Educators

The purpose of this pre-assessment is to help educators assess how they encourage and support metacognition.

On a scale of 1–5 (5 being the highest), rate your ability in each of the areas described in the left column of the chart.

Objective	Rating	Explanation and Evidence of Rating
<p>Teach students to become self-aware of their metacognition when writing.</p> <ul style="list-style-type: none"> • Do students overestimate or underestimate their writing ability? • Do students assess where they are in becoming a more proficient writer so they can apply information about past successes and challenges? 		
<p>Teach students to identify writing strategies and tools that successful writers utilize.</p> <ul style="list-style-type: none"> • Can students analyze a writing task and create a plan? • Can students adjust the strategies as they are moving through the writing task? 		
<p>Create a supportive writing environment that encourages students to seek resources inside and outside the classroom setting.</p> <ul style="list-style-type: none"> • Do students seek information and advice from instructors, students, and other writing supports like word banks, response frames, mentor texts, paragraph templates, or graphic organizers? 		

Post-Assessment for Educators

The purpose of this post-assessment is to help educators assess how they encouraged and supported metacognition throughout an assignment.

On a scale of 1–5 (5 being the highest), rate your ability in each of the areas described in the left column of the chart.

Objective	Rating	Explanation and Evidence of Rating
<p>How did I teach students to become self-aware of their metacognition during writing?</p> <ul style="list-style-type: none"> • Did students overestimate or underestimate their writing? • Did students assess where they were in becoming a more proficient writer so they could apply information about past successes and challenges? 		
<p>How did I teach students to identify writing strategies and tools that successful writers use?</p> <ul style="list-style-type: none"> • Did students analyze a writing task and create a plan? • Did students adjust the strategies as they moved through the writing task? 		
<p>How did I create a supportive writing environment that encouraged students to seek resources inside and outside the classroom setting?</p> <ul style="list-style-type: none"> • Did students seek information and advice from instructors, students and other writing supports like word banks, response frames, mentor texts, paragraph templates, or graphic organizers? 		

Strategy Selection During Planning

Success with a writing task relies on time spent planning and self-assessing in order to identify strategies that will allow for efficient completion of the task. Choosing the appropriate strategy or strategies requires thoughtful and intentional planning on behalf of the educator. Thinking through and being able to answer the question “Why this strategy, for this task, with this group of students?” is the prerequisite to supporting students toward success with a writing task, accomplishment of the learning outcomes, and development of proficiency as writers. Making our thinking transparent and teaching students how to choose the appropriate strategy or strategies for the successful completion of a writing task develops students’ ability to competently and confidently complete the task.

Using the instructional practices in this section, combined with the intentional use of the gradual release of responsibility, will help students become more mindful of the strategies they choose as they move through the stages of a writing task.

INSTRUCTIONAL PRACTICE: Writing Task Interpretation

Deconstructing or interpreting a writing task or prompt provides an excellent opportunity for educators to model their thinking as well as provide steps that guide students to understand the purpose and expectations of the writing task. Modeling the steps to consider when approaching a writing task is an excellent way for students to see the thinking involved in successful completion of the task. It is crucial that students learn to analyze their preconceived assumptions as they interpret and plan for a writing task so they can gauge whether they “are on the right track” or need to reevaluate.

Instructional Goals

Students will:

- Experience the metacognition involved in successfully interpreting a writing task through observing an instructor model the process.
- Practice using metacognition as they interpret a writing task.

Preparation for Instruction

- Plan a writing task.
- Identify the strategies and tools students should use to deconstruct the task.

Instructional Strategies

When introducing a writing task or prompt, integrate the following instructional steps into the assignment.

- Allow students time to read the writing prompt.
- As students are reading, encourage them to mark the text as follows.
 - Underline key words or key aspects of the instructions.
 - Strike through words that are not essential to understanding the writing task.
 - Circle or color-code verbs that indicate expectations of the writing task.
- Provide time to plan and discuss the action steps and strategies needed to accomplish the task by asking the following questions:
 - What is the purpose of the writing task?
 - If I do not understand the purpose, what support can I seek that will assist me?
 - What steps will I need to take to accomplish the task and meet the expectations?
 - What do I know about the steps?
 - How can I employ strategies that I already know as I accomplish the steps?
 - Do I need to seek support to learn new strategies to approach the steps?
 - What prior knowledge do I possess that is relevant to the writing task?
 - Is that prior knowledge accurate and applicable?
 - How can I use that prior knowledge to guide my writing?
- Using collaborative structures, provide time for students to share their thoughts with a partner, small group, and whole group.



INSTRUCTIONAL PRACTICE: Backward Mapping

Chapter 5: Understanding and Using the Writing Process outlines backward mapping as a way for students to develop a plan for completing a task and identify the resources they will need to complete the task (see pages 236–237 and 239). Teaching students how to practice metacognition when engaged in backward mapping is crucial and reinforces the development of metacognitive regulation and metacognitive knowledge.

Instructional Goal

- Students will engage in metacognition when planning for the successful completion of a writing task.

Preparation for Instruction

- Identify a writing task or assignment to use as a model with students.
- Determine whether students need to see this backward-mapping practice modeled, as well as whether they should work with a partner, work in a small group, or work independently.
- If a model is needed, create one by working backward to develop a plan for successful completion of the writing task, capturing points in the process where practicing metacognition would result in a better written product.

Instructional Strategies

- Display or distribute the writing task description so students can use it to backward map the process with metacognition.
- Highlight strategies and tools students can use to break the writing goal or task into component parts.
- Guide students to reflect on the plan they developed through the following response frames:
 - A strength that I bring to this task is... An area of weakness is...
 - My teacher's expectations include...
 - Strategies I will use include... because...

“ Writing is a way to freeze our thinking, of slowing down the thoughts that pass through our consciousness at lightning speed, so that we can examine our views and alter them if appropriate. ”

Dennis Sparks, *Leading for Results*

Metacognition During Writing

The recursive nature of writing necessitates metacognition. As educators and students move through a writing task, they are cycling in and out of deep reflective thought. Pausing to ask “Should I refer to the writing prompt or the rubric?” is what successful students know to do. Students who struggle with writing likely have not learned the necessary skills to get back on track when they are at a loss for words or do not clearly understand the assignment. When educators and students apply the cognitive strategies of writing, they employ metacognitive strategies to create, shape, and modify their essay, quickwrite, or focused note summary. To an experienced writer, these metacognitive steps may be automatic, but for an emerging writer, explicit instruction is needed. Studies have shown that when instructors identify weak component skills and then support growth through targeted practice, students’ performance on the overall task can improve significantly (Ambrose et al., 2010). Once students garner the requisite skills, practicing those skills and receiving feedback on the attempts leads to more effective application.

When writing becomes part of the daily teaching and learning cycle in a classroom, opportunities for practicing metacognition also exist. Students rarely stop to think about their thinking in the middle of a writing task, yet proficiency on complex or rigorous tasks requires the development of an inner awareness of their thinking and problem-solving abilities so when they feel “stuck,” they will have the strategies and skills to work through the problem.

The mini-lessons that follow in this section provide opportunities for students to practice and model metacognition while writing. Utilizing gradual release of responsibility will help students become more mindful of the strategies they choose as they encounter problems with completing tasks or applying content they have learned to a writing task.



INSTRUCTIONAL PRACTICE: MeTACOG Log

Reflecting on and evaluating the progress of a task or assignment while the task is occurring is integral to the writing process. The MeTACOG Log reflection provides students with the opportunity to determine what is going well and what challenges they are facing. If obstacles arise, students should be able to make adjustments as needed.

Instructional Goals

Students will:

- Practice and apply metacognition in “real time” as writing is occurring.
- Engage in constructive peer feedback as they cycle through the writing process.

Resource

- *MeTACOG Log* (Student Resource)

Preparation for Instruction

- Identify a writing task or assignment for which students will practice using the MeTACOG Log as part of the task completion. Ideally, this should be a writing task for which students have been asked to create long- and short-term SMART goals, so they can answer the goal-related questions in the MeTACOG Log accordingly.
- Determine whether students should work in partners, in small groups, or independently.
- Designate structured class time for students to use the MeTACOG Log.

Instructional Strategies

- Model and then have students use *Student Resource: MeTACOG Log* to reflect on their writing process. This can be done at the beginning of class, during class, or as a reflective strategy at the end of class.
- Guide students as they use the MeTACOG Log to monitor their progress. Encourage students to work through the following areas and revisit their SMART goals for the assignment as they complete their MeTACOG Log:
 - **Meeting Expectations:**
 - How is the writing task going?
 - Am I on the right track?
 - Should I refer back to the writing prompt and/or rubric?
 - What is going well?
 - What are my setbacks and points of confusion?
 - What support do I need?
 - Where can I locate the support?
 - How do I ask for support?

- **Time:**
 - Am I on track with my time frame?
 - If I am not on track, how will I receive the support I need to meet my time frame?
- **Action:**
 - How can I revise this draft?
 - What are my next steps?
 - What strategies will I employ for the next steps?
 - How will I ask for help or support for my next steps?
- **Collaborate:**
 - How will collaboration with my peers support me in this writing task?
- **Organize:**
 - What strategies am I using to organize my thinking?
 - How am I organizing sources and materials needed to complete this task?
 - What can I work on to be more efficient with this task?
- **Goal:**
 - Am I meeting my short-term SMART goal?
 - Am I meeting my long-term SMART goal?
 - Do I need to revise my goal?



MeTACOG Log

<p>Me: Meeting expectations (Am I on the right track? What is interfering?)</p>	
<p>T: Time (Am I on track with my time frame?)</p>	
<p>A: Action (What are my next steps?)</p>	
<p>C: Collaborate (Do I need collaboration or support?)</p>	
<p>O: Organize (Are my thoughts organized?)</p>	
<p>G: Goal (Where am I in achieving my writing goal?)</p>	

INSTRUCTIONAL PRACTICE: How Did I Do That?

People improve at tasks by making sure they understand what they are doing. Whether teaching someone to solve a quadratic equation, dissect an earthworm, compose a letter to the editor, throw a spiral pass, or complete a complex writing assignment, providing some step-by-step commentary can help students reinforce their understanding of what they are learning how to do.

Instructional Goal

- Students will explain the thinking and actions behind a process that led to success or that can help them troubleshoot a lack of success.

Preparation for Instruction

- Select a short video example of a process (e.g., a magician explaining how a trick was done) and a written explanation of a process (e.g., a recipe with lots of how-to explanation in it) to use as models.

Instructional Strategies

- Show the students the brief how-to video twice. Have students take two-column notes during the second showing of the video. (Column headings should be *What they did* and *How or why they did it*).
- Allow students to compare notes with a partner.
- Provide the text of a written explanation of a process. Instruct students to color-code with highlighters or colored pencils the places where the author explains what to do and where the author explains *how* or *why* to do something.
- Direct students to share their color-coding with a partner.
- Have students write how-to instructions for something they have learned or done in class—a piece of writing or a performance task of some kind. Their instructions should not only say what to do, but should also explain how and why.
- Students can color-code their own written explanations in the same way they did for the exemplar.
- Allow students time to group with classmates to discuss similarities and differences in approaches. Encourage students to revise their own work after learning from their classmates.



Metacognition After Writing

The school year often feels like a frantic race toward a finish line filled with too many standards, dense curriculum, rigorous testing, and extensive pacing guides. Opportunities for reflection are few and far between when we spend our days teaching, assessing, and then moving on. This frantic cycle means that we miss out on the opportunity to reflect, learn, and adjust instructional decisions for the benefit of student learning. It is crucial that educators carve out time to reflect on the success of their students, identify where and how students are struggling with writing, and then determine what can be done to guarantee that every student learns through writing. It is also necessary for students to reflect after writing in order to hone writing skills and metacognitive ability.

The two components of metacognition, as identified by Flavell (1979), are metacognitive knowledge and metacognitive experiences or regulation. Metacognitive regulation is the self-awareness and ability to make adjustments based on the information learned about ourselves. Incorporating metacognition into our instruction means that students are better able to identify when they are struggling, what it is they are learning, and how to adjust what it is they are doing so they can get the results they want. Too often students experience struggle and respond by shutting down or giving up. Teaching them to monitor themselves, make necessary adjustments, and then practice reflection while writing is important. Guiding students to practice metacognitive regulation after writing is crucial so that students can carry what they learned into future learning experiences.

Providing opportunities to reflect on the three variables of metacognitive knowledge—person variables (the strengths and weaknesses they possess regarding learning and processing information), task variables (the understanding one has about the nature of the task or what it would take to complete the task) and strategy variables (the strategies a person knows to utilize to accomplish a task)—ensures students are more successful on every assignment. After addressing the metacognitive knowledge variables, individuals can look at their ability to make adjustments based on the information received (metacognitive regulation) and apply that to their plan for the next assignment or learning opportunity.

As educators and students complete a writing task, it is important to think about the overall experience, using metacognitive knowledge to identify what went well in addition to challenges experienced during the process. Metacognitive regulation allows the opportunity to prepare for the next writing task with a much clearer picture of the adjustments needed for success. In looking back, students are able to look forward and take steps that will guarantee academic success.



INSTRUCTIONAL PRACTICE: Annotated Thinking (Metacognition)

Students are taught to annotate the work of others as they read, a practice that helps them process the text actively as they make sense of it and move to deeper levels of thought about what the author is saying and how they are conveying their message. Annotating their thinking on a piece of their own work can help students clarify for themselves and others what was going on in their heads as they were working. The annotated product can be used to demonstrate students' learning or understanding, open up doors for further discussion with the instructor about the product, provide insights into the decisions the student made, and serve as a springboard for further self-evaluation.

Instructional Goal

- Students will make their thinking visible by adding annotations to a finished piece of work or to a work in progress and, in doing so, will be able to reflect on their own process, thinking, and learning.

Preparation for Instruction

- Determine what student product(s) will be used, and arrange for students to have access to those products or copies of them.
- Locate or create an example of an annotated text or other work.
- If technology is being used, arrange for appropriate devices and access to software or apps.
- Prepare to provide the necessary materials to students. The materials required will differ depending on the type of product students are annotating. Materials may include colored pens, highlighters, and sticky notes, as well as examples of annotated texts or other works (the *Annotated Guides*, a series of art books by Robert Cumming, are excellent examples, as are 1990s Pop-Up Videos from VH1—provided that the selected videos/songs are classroom-appropriate).

Instructional Strategies

- Show students an example of an annotated text or other work. Ask students to discuss in pairs what the annotations show or say about the work.
- Explain to students that you want them to use the technique of annotation on one of their own writing products to add commentary and explanation about their thinking as the work was being created. Annotations may correspond to Costa's Levels of Thinking:
 - Level 1: Pointing out, identifying, or labeling components of the work (e.g., Labeling a thesis statement in an essay, a topic sentence in a paragraph, a simile in a poem or essay, a particular technique in a work of art or a performance, etc.).
 - Level 2: Analyzing why you did what you did (e.g., explaining why you chose to employ a technique; use a particular word, phrase, figure of speech, color, or gesture; quote someone else; include an example, etc.).

- Level 3: Evaluating your work (e.g., discussing your thoughts about your strengths and weaknesses; things you did that worked or did not work; what you learned from this attempt; what you will do or not do in the future).
- Annotations may take various forms depending on the material being annotated.
 - Texts:
 - Printed texts can be annotated in the margins using colored pens, pencils, and highlighters. Consider altering the margins to leave plenty of room for students' metacognitive annotations.
 - Sticky notes can be used if it is not desirable for students to write on the copies themselves.
 - Texts could be annotated electronically by using the comment feature in a word processing program or by adding text boxes and arrows.
 - Performances, speeches, and presentations:
 - Students could add annotations in the form of captions or pop-ups of text on a video. Simple video-editing apps can make this easy for students.
 - Artworks, posters, sketches, and other visual pieces:
 - Attach sticky notes with annotations to the original work or add text by hand or electronically to a photo of the work.
- Consider having students share annotations with a partner and, after doing so, compose a paragraph (3–5 sentences) that provides an overall reflection on what they learned from their annotations that they can apply to future learning.

Variations

- **Annotated Homework or Tests:** Students could annotate a homework assignment—some math problems, original sentences, or other open-ended work—to identify the thinking behind the work on the page.
- **Costa's Reflection:** Instead of annotating on the text or product, students could use Costa's Levels of Thinking to create several paragraphs or bulleted lists: What I Did, Why and How I Did It, and What Worked or Didn't.
- **Annotation To-Do Lists:** Provide students with a list of options or sentence stems and ask them to select a specified number to use for their annotations. Options for annotation could include the following:
 - Something I'm proud of is...
 - Something I could improve is...
 - I wonder what would happen if...
 - I took a risk by...
 - If I could get a do-over, I would...
 - I want you to notice...
 - I struggled with...
 - A place where I show I know how to _____ is...
 - I have a question about...



INSTRUCTIONAL PRACTICE: Foreword, Afterword, or Artist's Statement

When writing a book, an author will often compose a foreword or afterword to accompany the text. In many cases, this passage allows the author to comment on the work itself, how it was written, the thinking behind it, the others who contributed to its publication, and the process itself. Similarly, for a theatrical, dance, or musical performance, the director, choreographer, or conductor frequently writes directly to the audience in the program. In these artists' notes, the audience gets a glimpse into the mind of the person responsible for the performance. In all of the cases, the words are primarily intended to enlighten the reader, but crafting these texts provides metacognitive opportunities for the writers to clarify their thoughts about the work itself.

Instructional Goal

- Students will reflect upon their process, product, or performance in a short essay.

Instructional Strategies

- After students have completed a piece of writing or prepared for a performance or performance task, instruct them to compose a foreword, afterword, or artist's statement. If possible, provide students with a model or mentor text to consider.
- Students should focus on answering four guiding questions in their writing:
 - What did I try to do?
 - How did I hope to affect the reader or audience?
 - How did I do what I did?
 - Why did I do what I did?
- These metacognitive pieces can be used to start small-group discussions in which students respond to one another's work. They can also be an effective launching point for providing feedback to the students about how well they achieved their intentions.

INSTRUCTIONAL PRACTICE: Self-Evaluation

Reflecting about a task after the task has been completed is integral to learning. This reflection provides students with the opportunity to determine what went well and what challenges they encountered. This also enables students to identify and adjust for future assignments.

Instructional Goal

- Students will reflect on their learning to identify what went well and what could improve.

Preparation for Instruction

- Identify assignments for students to complete in order to practice self-evaluation.
- Designate structured time in class for this to occur after an assignment has been submitted, graded, and handed back out to students.
- Provide students with clean copies of *Student Resource: MeTACOG Log* for this self-evaluation exercise or have students create a MeTACOG Log in their notes to use throughout the assignment.

Instructional Strategies

- Have students revisit *Student Resource: MeTACOG Log* (page 417) to reflect on their thinking, success, and what they will do differently with the next writing task.
- Hand graded assignments back to students and take them through the following self-evaluation process. Model and facilitate the use of the MeTACOG Log, using the following questions to guide the reflection.
 - **Meeting Expectations:**
 - How did the writing task go?
 - Did I meet the instructor's expectations of the writing task?
 - Did I meet my personal expectations for the writing task?
 - What went well?
 - What were my setbacks and points of confusion?
 - What support should I have sought out?
 - **Time:**
 - Did I meet the timelines connected to this task or assignment?
 - Did I complete the writing task on time?
 - What can I do differently in the future to better manage time?



- **Action:**
 - What did I do well?
 - How can I ensure that I will be consistent with those actions during the next writing task?
 - What presented a challenge for me?
 - How can I modify my writing or the strategies I used so I do not encounter that challenge next time I write?
 - What action do I wish I would have taken?
 - How can I ensure that I will take this action next time?
- **Collaborate:**
 - What peer feedback was constructive?
 - How will I internalize and apply the peer feedback to the next writing task?
- **Organize:**
 - Was I successful in organizing my thinking?
 - How can I be more effective next time in organizing my thinking?
 - Was I successful in organizing my materials and sources?
- **Goal:**
 - Did I reach my writing goal?
 - What is my goal for the next writing task?
 - How will I accomplish my goal?

INSTRUCTIONAL PRACTICE: Successes and Setbacks

Time spent reflecting on the successes and setbacks experienced during a writing task is important for students, as this time reinforces a growth mindset while providing the opportunity for students to capture what they learned about themselves during the process.

Instructional Goal

- Students will engage in a quickwrite, focusing on successes and setbacks within an assignment.

Preparation for Instruction

- Designate structured class time for students to reflect on successes and setbacks with an assignment.
- Determine whether this reflection will be done at the start of class, in the middle of class, or as students' ticket out the door.
- Identify a collaborative structure for having students share their reflection with a partner or small group before engaging in a whole-class discussion.

Instructional Strategies

- Have students do a quickwrite on one or more of the following questions:
 - Successes:
 - What was a success I experienced during the writing process?
 - What was a strategy that I employed to be successful during the writing process?
 - How did I celebrate my success?
 - Setbacks:
 - What was a setback I experienced during the writing process?
 - How did I move beyond the setback?
 - Was that an effective way to move beyond the setback?
 - What other strategies could I have used to move beyond the setback?
 - What do I wish I would have done differently?
- Use a collaborative structure to have students share their reflection with a partner or small group before engaging in a whole-class discussion.
- Be diagnostic and capture the information and data gleaned from this discussion as a crucial component for planning future writing assignments.



AVID Site Team Connection: Using *Metacognition and Writing* Schoolwide

Educators need opportunities for collaboration and input from colleagues. The AVID Site Team is one of the key elements in taking high-leverage strategies and core beliefs across a campus. When a Site Team unites around an essential strategy like practicing metacognition through writing, builds collaboration opportunities into scheduled meeting times, and supports one another in seeing the value of metacognition taking place within each discipline, all students on the campus can be supported to grow in their writing abilities.



INSTRUCTIONAL PRACTICE: Schoolwide Commitment to Metacognition Through Writing

An excellent way for an instructional team to commit to the schoolwide practice of metacognition is through identifying and incorporating specific ways in which students will practice metacognition with low-stakes writing tasks consistent across grade levels, content areas, or the entire school.

Instructional Goal

- Educators will work together to develop a list of learning-through-writing (low-stakes writing) strategies that include opportunities for metacognition and can be used schoolwide.

Resource

- *Metacognition One-Pager* (Educator Resource)

Preparation for Instruction

- Determine whether participants will work in grade-level teams, departments, mixed small groups, or pairs.
- Have working definitions of *metacognition*, *metacognitive knowledge*, and *metacognitive regulation* available to project in the front of the room or in a document that participants can interact with.
- Have copies of *Educator Resource: Metacognition One-Pager* available for each participant, in either digital or paper format.

Instructional Strategies

- Have participants brainstorm definitions for *metacognition*, *metacognitive knowledge*, and *metacognitive regulation*.
 - This can be done by dividing the group or room into thirds and having each group develop one definition, or by having each group develop a definition for all three terms.
- Reveal or display the working definitions of the three terms and have the groups revise and polish the definition(s) developed by their group.
- Share these definitions out and facilitate a discussion around why metacognition, metacognitive knowledge, and metacognitive regulation are skills students need to become proficient with.
- Have each group come up with a list of 3–5 instructional strategies that are both a writing-to-learn strategy and an opportunity for students to practice metacognition.
- Highlight the guiding questions from *Educator Resource: Metacognition One-Pager*.
- Have participants identify one or more focus areas from *Educator Resource: Metacognition One-Pager* that can be incorporated into the strategy.
- Have groups share their best strategy with the whole group, including an explanation of how they are incorporating metacognition into the strategy.



Metacognition One-Pager

Planning for the Writing Task

- What is the purpose of this task?
- Have I written anything like this before?
- How do I feel as I approach this writing? (Apprehensive? Confident? Ready for a challenge?)
- What skills and abilities do I have that will help me with this writing task?
- What previous information or knowledge do I need?
- How can I deconstruct the task or prompt and organize my thinking?
 - Circle key words?
 - Underline “to do” or action words?
 - Cross out words that are not important to the task or prompt?
- What steps do I need to take to accomplish the task and meet its expectations?
- What additional resources might I need?
- Where can I seek support when I encounter a roadblock?

During Writing

- Am I on the right track?
- What is going well?
- Should I refer again to the writing prompt and/or rubric?
- What support or resource do I need?
- Should I collaborate with peers?
- How can I be more efficient with this task?
- Should I adjust my writing strategy?
- Am I addressing the “to do” or action words?
- Am I including key vocabulary terms?

After Writing

- Did I meet the expectations of the task?
- Did I meet my personal expectations?
- What did I do well?
- What will I do differently next time?

Post-Reading Reflection Questions

- How will I infuse metacognition into my lessons and content delivery to engage writers in metacognitive thought in “real time” while they are performing the writing task?
- In what ways will I utilize metacognitive writing for student evaluation, formative assessment, and self-reflection?
- How will I model metacognition in my own writing to encourage students to think about their thinking?

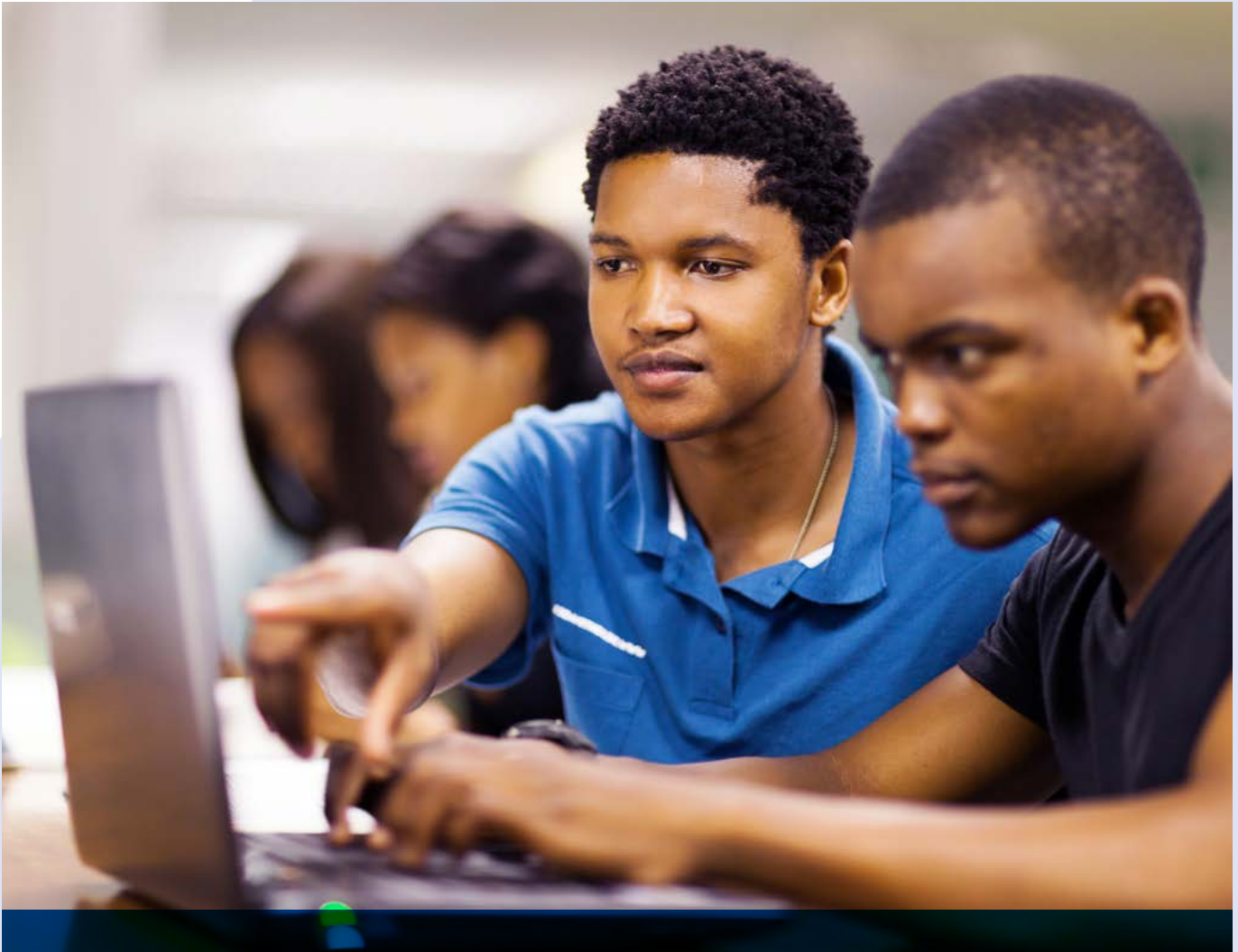
K-2 Post-Reading Reflection Questions

- How do I develop my students’ abilities to participate in academic conversations?
- Are students able to craft specific questions about a confusing topic or text?
- How will I build my students’ ability to respond to others’ comments and thoughts appropriately?
- What structures will I create to allow for regular and frequent self-regulation of critical thinking skills?



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Visit the *AVID Writing for Disciplinary Literacy* webpage on MyAVID for additional materials and resources.

Glossary

academic language scripts: Sentence stems and frames that provide students with the formal language needed to engage in academic discourse in a variety of learning experiences and settings.

annotation: Interaction with a text or diagram by isolating key information and recording notes of explanation, comments, or questions.

argumentative writing: Expressing opinions, beliefs, or arguments that allow a writer to take a stand while providing compelling support for the ideas presented in order to persuade or influence opinions or actions.

AVID Schoolwide: Occurs when a strong AVID system transforms the instruction, systems, leadership, and culture of a school, ensuring college readiness for all AVID Elective students and improved academic performance for all students based on increased opportunities.

bell work: Bell work comprises the short lesson routine a teacher prepares in advance of a class session in such a way that students engage in the work the moment the bell rings. Bell work provides an opportunity to review, practice, or introduce subject matter, content, or specific skills.

Claim, Evidence, and Reasoning (CER): A systematic approach that uses questioning, claims, evidence, and justifications to construct an explanation.

collaborative structures: Effective methods for working together in a way that brings collaboration to life and through which students come to own most of the talking and interactions.

Costa's Levels of Thinking: Framework for three levels of intellectual functioning, or thinking; similar to Bloom's taxonomy.

descriptive writing: Creating a visualization of a person, place, thing, event, or idea.

disciplinary literacy: Thinking critically in a way that is meaningful within the content area; integrates content knowledge, thinking, questioning, reading, writing, speaking, and experiences and skills.

disciplinary writing (or academic writing): Narrative, expository, descriptive, or argumentative writing commonly used throughout academic content areas.

Essential Questions: Objective-based, student-generated or teacher-generated questions appropriate to a particular lesson, unit, or concept; used by students to guide thinking and frame note-taking and summarization in order to accomplish an assigned task.



expository writing: Presenting and explaining information that is factual and to the point.

fixed mindset: A belief that basic qualities such as intelligence or talent are fixed traits.

focused note-taking: A five-phase process that can be used and adapted for various note-taking purposes and that embraces a variety of note-taking formats.

gradual release of responsibility: Instructional model that begins with demonstration or modeling by the instructor and moves to autonomous practice by students.

growth mindset: The understanding that abilities and intelligence can be developed and are not fixed.

inquiry: The process of revealing thinking through questioning, analyzing, and constructing knowledge and understanding.

instructional practice: A teacher resource that includes an overview of the practice, instructional goals, notes on preparation for instruction, and instructional strategies to support implementation of the practice with students in the classroom.

Interactive Notebook: A learning structure that helps students organize and archive their learning, and serves as evidence of learning and a reference tool.

learning through writing: Using writing as a vehicle to access complex content or to deepen understanding about what is being learned; incorporates everything that is involved with writing to learn, with emphasis placed on the power of writing as a tool for learning within the framework of WICOR.

marking the text: An active reading strategy that requires critical thinking about the ideas and essential information in a text.

mentor texts: Real-world exemplars used as models of writing; provide essential guidance to teach and support students in learning to write.

metacognition: Reflecting upon and directing one's own thinking; the ability to plan for a task, take steps to address a task, reflect on the progress, evaluate results, and modify the product as needed.

modes of writing: Four types of writing found in all disciplines: descriptive, narrative, expository, and argumentative.

narrative writing: Telling a fictional story or giving a narration of an event or real-life story.

ongoing feedback: Feedback that is formative in nature helps instructors determine what students currently know and are able to do and helps students develop the metacognitive insight to reflect on feedback and make decisions that can enhance their writing. The goal of such feedback is to assess the degree to which a student is or is not making progress with writing and understanding of content, and then use that information to adjust instruction to meet student needs through scaffolding, differentiation, re-teaching, or acceleration.

philosophical environment: The interaction of physical, psychological, interpersonal, and social aspects for an individual or group of people.

polishing: Refining writing by editing and proofreading, often using feedback provided by a reviewer such as a peer or instructor.

recursive: Using the same operation or step to create the next result, or repeatedly returning to the same point.

reflection: Purposeful processing that is reliant upon thinking, reasoning, and examining one's own thoughts, feelings, and experiences.

scaffolding: Variety of instructional techniques used to move students progressively toward stronger understanding and, ultimately, greater independence in the learning process.

sentence frames: Open-ended sentence structures for students to use in formulating complete, correct, and increasingly more sophisticated responses.

SMART goals: Goals that are specific, measurable, action-oriented, reasonable, and timely.

summarization: Identifying, comprehending, and communicating the main idea of a source by paraphrasing or using different words.

synectics: The process of making unexpected connections; a form of analogous thinking often used in problem solving; a form of analogy.

WICOR: (Writing, Inquiry, Collaboration, Organization and Reading) Key methodologies used in AVID Elective classrooms and AVID Schoolwide sites.

writing process: A complex task consisting of stages: pre-writing, drafting, revising, polishing, and publishing.

writing to learn: A term commonly used to describe short, informal writing tasks that help students think through key concepts or ideas central to course content. These tasks are low-stakes in the sense that they do not involve significant weight in terms of grading.



<https://my.avid.org/curriculum>



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Craig McKinney (Lead Writer)

Ever since I could hold a pencil, I've been a writer. For 25 years I've been a teacher who teaches writing. As I've gained more experience, I've unearthed new questions and discovered new challenges that continue to stretch me. Working on this book was one of those challenges. How do you put into words the practices that have, in many ways, become automatic over the years? How do you distill best practices, research, and methods into something usable, but not overwhelming, to an educator who may be terrified at the very prospect of writing and may feel wholly unqualified to teach others to do so? I'd like to thank my AVID family, who challenge me every day to be better than I was yesterday; my Plano ISD family, who have grown with me for a quarter of a century; and my actual family, friends, and other loved ones, who have been supportive and understanding during this long, busy year.

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Notes









