

Essential Practices for College and Career Ready Instruction





Acknowledgments

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This instructional framework was developed by staff members in RTI's Center for Education Services. The framework is intended to serve as a resource for early college educators and other educators working to provide rigorous and engaging student-centered instruction that supports college and career readiness. The following team members contributed to its development:

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Overview

Introduction

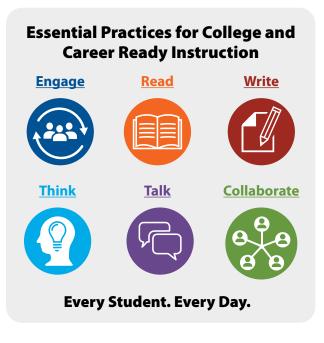
The **Essential Practices for College and Career Ready Instruction** framework identifies research-based instructional strategies for use in early college high school programs, as well as other educational settings where educators seek to build a rigorous and engaging culture of learning grounded in student ownership of the learning process. The early college model bridges the gap between high school and college, allowing students to graduate with a high school diploma, associate degree, workforce credentials, and up to 2 years of college credit. In preparing students to meet and exceed college- and career-ready standards, the early college model combines academic rigor, high-quality instruction, and a comprehensive approach to student support in a college-going environment. More than 2 decades of research indicates that the model improves students' postsecondary outcomes, especially for students who are economically disadvantaged, first-generation college students, and from groups that are statistically underrepresented in higher education. Although early college models vary in how they are implemented at the state and local level, rigorous, student-centered instruction is an essential component of the model regardless of setting.

Future-Ready Students

This framework contains research-based instructional strategies aligned with the core competencies students need to be prepared for their next steps in college and careers.² College and career readiness is about more than just mastering rigorous content; it requires the development of academic skills and mindsets that support success through self-efficacy and ownership of the learning process. With this in mind, the framework focuses on strategies and practices that faculty and staff can use to build a culture of learning that supports rigorous and engaging student-centered instruction. This framework is intended to be a resource for both high school and college faculty. Instructional frameworks support student learning and improved teacher efficacy by defining high-quality instruction and providing a common language to support continuous improvement through professional learning, professional collaboration, and reflection on practice.³ This is important as research indicates that collective teacher efficacy—the collective belief that teachers have the ability to positively affect students—is highly correlated with student achievement.⁴ This framework aims to serve as such a resource by identifying research-based instructional practices that support students in developing the skills and competencies that are essential to their success in college and career pathways.

The Essential Practices

This framework organizes essential instructional practices around six core areas of focus: Engage, Read, Write, Think, Talk, and Engage. Although these practices are not unique to early college high schools, research has shown that the practices and related competencies are highly effective in preparing students for their next steps in college, careers, and life.5 The included practices are intended to be applicable across content areas, making learning relevant and accessible by leveraging students' prior knowledge, providing opportunities for independent and collaborative learning, creating opportunities for application of new learning, and building enduring understanding through feedback and reflection. In addition to being aligned with established college and career-ready competencies, the practices are also intentionally aligned with the science of learning and development to support deeper learning and to build



student ownership of the learning process.⁶ Applying these practices over time, with "every student, every day," empowers students to become self-directed learners who are prepared to engage with rigorous content and complex challenges.

The framework is designed to be flexible and adaptable across a wide range of educational technology tools and platforms, allowing educators to implement the practices using the tools that best fit their particular context. It is also intentionally designed to be applicable across subject areas, supporting instructional strategies that build students' skills and knowledge across the curriculum. While not focused on discipline-specific literacies such as digital, media, or scientific literacy, the practices align with and can reinforce related literacy development across disciplines. As such, this resource aims to serve as a practical and adaptable guide for a wide range of educators committed to fostering high-quality learning experiences that prepare all students for their next steps in college and careers.

This framework provides an in-depth description of each essential practice along with a brief summary of the related rationale. Each essential practices section includes a toolkit with strategies and protocols that provide examples of activities that can be used to implement the essential practices in classrooms. While many of the activities could be included in several of the component toolkits, each activity is included in only one section to prevent redundancy. Each toolkit section also includes suggested AI prompts to expand on strategies with generative AI tools like ChatGPT and Perplexity. Each prompt is designed to model effective and responsible AI use in planning instruction; however, users are responsible for critically evaluating AI outputs for bias, fairness, and accuracy. AI is a support tool, not a substitute for human judgment, and should be used ethically, with proper oversight and source validation.

Systems of Support

In thinking about effective instructional practices in early college settings, it is important to note that robust systems of student support are typically a key component of the early college model. As educators consider ways to use the instructional practices identified in this framework, they should consider best practices in identifying and addressing student learning needs, including the use of data and formative assessment to implement instructional scaffolds and supports that help all students access rigorous learning experiences. Family engagement in learning is also a critical component of student success that is not explicitly mentioned in this framework but is important to consider when supporting students in rigorous learning.8 Although the framework focuses on core instruction designed to support all learners, robust student supports and meaningful family engagement are essential to the early college model. Strong school-family partnerships foster academic growth; celebrate student progress; and help students feel known, valued, and connected. Early colleges often serve students who are the first in their families to attend college and can play a critical role in helping families navigate unfamiliar systems. Engagement must go beyond communication; it should empower families with the knowledge, tools, and confidence to support a journey they may not have experienced themselves. With students often traveling longer distances to attend early college, schools must also adapt engagement efforts to be inclusive and responsive to geographically dispersed communities. Together, the instructional framework, student supports, and family partnerships form a tightly woven foundation, ensuring that all students are supported, challenged, and connected on their journeys toward college, career, and lifelong success.

Introduction Endnotes

- ¹ Edmunds, J. A., Unlu, F., Furey, J., Glennie, E., & Arshavsky, N. (2020). What happens when you combine high school and college? The Impact of the early college model on postsecondary performance and completion. *Educational Evaluation and Policy Analysis*, 42(2), 257–278. https://doi.org/10.3102/0162373720912249
- ² For more on College and Career Readiness (CCR), see resources listed in the appendix. See also American Institute for Research's College and Career Readiness Success Center, National College Attainment Network's Connecting College and Career Success. It is also worth noting that CCR competencies and skills are closely aligned with similar competencies in Portrait of a Graduate work given the adoption of related frameworks by schools, districts, and state agencies across the United States.
- ³ Travers, N. L., Jankowski, N., Bushway, D. J., & Duncan, A. G. (2019, May). Learning frameworks: Tools for building a better educational experience (Lumina Issue Paper) [PDF]. Lumina Foundation. https://files.eric.ed.gov/fulltext/ED598309.pdf; Nichols, J., & Nichols, W. H., & Rupley, W. (2020). Teacher efficacy and attributes on the implementation of tiered instructional frameworks. *International Journal of Evaluation and Research in Education*, *9*(3), 731. DOI: 10.11591/ijere.v9i3.20625.
- ⁴ Hattie, J. (2008). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.
- ⁵ The specific practices in this framework have been included based on alignment with current research on the science of learning and college and career readiness. The appendix includes an extended list of references organized by section that support the practices named throughout.
- ⁶ See appendix for additional resources on the science of learning and development.
- ⁷ Edmunds, J. A., Unlu, F., Furey, J., Glennie, E., & Arshavsky, N. (2020). What happens when you combine high school and college? The impact of the early college model on postsecondary performance and completion. *Educational Evaluation and Policy Analysis*, 42(2), 257–278. https://doi.org/10.3102/0162373720912249
- ⁸ Mapp, K. L., & Bergman, E. (2021). Embracing a new normal: Toward a more liberatory approach to family engagement. Carnegie Corporation of New York; Henderson, A., Mapp, K., Johnson, V., & Davies, D. (2007). *Beyond the bake sale: The essential guide to family-school partnerships*. The New Press.

Essential Practices



The early college model is built around a personalized and engaging approach to teaching and learning. It blends high expectations with intentional support, helping students develop academic and social skills through meaningful, relevant experiences that foster student ownership of learning over time. Early college instruction is designed to actively engage students in ways that encourage students to embrace challenges, take academic risks, and build the agency and self-efficacy needed to reach their college and career goals. Intentional engagement includes a range of instructional practices that create learning environments that maximize opportunities for growth through positive relationships, cultural responsiveness, and rigorous instructional design.

WHAT

Engagement in early college classrooms is driven by instruction centered on: Belonging Creating inclusive, responsive learning environments where all students feel valued and connected. Relationships Intentionally engaging students in activities that establish and strengthen relationships among students and teachers over time. Ownership Scaffolding agency by empowering students to confidently make choices and take responsibility for their learning. Relevance Connecting content knowledge and skills to big ideas, realworld contexts and students' interests. Activating and building on students' prior knowledge to Prior Experience scaffold learning that is increasingly challenging over time. **Application** Providing frequent opportunities for students to actively apply, practice, refine, and transfer new learning.

Although **Engagement** alone does not guarantee student academic success, related instructional elements can significantly impact student learning outcomes when they are implemented effectively. Students are more motivated and successful in academic environments when they believe they belong and are accepted in those environments.¹ Extensive research has shown that fostering strong relationships with and among students supports student well-being and enhances learning.² Connecting curriculum content to real-world contexts and students' lives increases the perceived relevance of the material, thereby boosting engagement and deepening understanding.³ Additionally, it is well established that learning is enhanced when students connect new ideas to known concepts and prior experiences.⁴ By tailoring instruction to existing knowledge and student interests, teachers can significantly enhance student engagement, make learning experiences more meaningful and relevant, and improve the acquisition of skills and knowledge essential to college and career readiness.

ENGAGE Essential Practices Toolkit—Suggested Strategies and Protocols

Strategy/Protocol	Purpose	Links
23 Ways to Build and Sustain Classroom Relationships	Activities that support positive relationship building throughout the year.	<u>Edutopia</u>
Anticipation Guide	Activates prior knowledge and surfaces assumptions.	The Teacher Toolkit
Chalk Talk	Involves silent written discussion to build on peer ideas.	Center for Leadership and Edu Equity
Culturally Responsive Instruction: Best Practices and Supports	Provides strategies for responsive pedagogy to benefit all students by creating learning environments where students are respected, valued, and empowered to succeed.	Institute of Education Sciences (IES) at the U.S. Department of Education
Goal Setting	Encourages students to set goals for themselves, which is essential for self-regulated learning and helps them develop a growth mindset.	Edutopia
Hopes and Fears	Builds a culture conducive to learning by surfacing expectations and concerns about a given topic or activity.	National School Reform Faculty
Parts-Perspectives-Me	Analyzes objects or systems from multiple views and helps students make personal connections.	Harvard Project Zero

Continued

Strategy/Protocol	Purpose	Links
See-Think-Me-We	Builds personal and collective reflection.	<u>Harvard Project Zero</u>
See-Think-Wonder	Sparks curiosity by encouraging students to observe, interpret, and question.	Harvard Project Zero
Student-Led Conferences	Elevates student voice, reflection, and communication skills through structured, self-driven presentation.	<u>Edutopia</u>
Which One Doesn't Belong	Compares items to spark criteria-based discussion.	WODB Photos

GenAl Prompts

In <u>ChatGPT</u> or your favorite AI chatbot, paste the following prompts and replace the bracketed text with your specific information.

Lesson Hook Prompt

You are an expert educator and instructional designer who is particularly skilled at creating lessons and activities that simultaneously captivate students while also effectively conveying information. Your task is to create [NUMBER] fun ways for me to introduce a lesson on [DESCRIPTION OF LESSON OR ACTIVITY] for [GRADE LEVEL] students in [CLASS / SUBJECT]. The activities should be [NUMBER] minutes long. My students love [INSERT STUDENT INTERESTS], so provide options related to these subjects in your response. Include a collaborative structure for how students will work together. Align the strategies to these skills and competencies [COPY THE ENGAGE SKILLS AND COMPETENCIES].

Connection and Relevance Prompt

You are an expert educator and instructional designer with a deep understanding of how to make learning meaningful by connecting new concepts to students' backgrounds and lived experiences. Your task is to create [NUMBER] engaging activities or discussion starters to introduce [DESCRIPTION OF LESSON OR TOPIC] for [GRADE LEVEL] early college students in [CLASS / SUBJECT]. Each idea should help students draw on their prior knowledge and see the real-world relevance of the topic. My students are interested in [INSERT STUDENT INTERESTS], so please include connections to these areas in your suggestions. Keep each activity around [NUMBER] minutes long. Include a collaborative structure for how students will work together. Align the strategies to these skills and competencies [COPY THE ENGAGE SKILLS AND COMPETENCIES].

Belonging and Voice Prompt

You are an expert educator and instructional designer skilled at designing inclusive learning experiences that build community and student ownership. Your task is to develop [NUMBER] interactive ways to start a lesson on [DESCRIPTION OF LESSON OR TOPIC] for [GRADE LEVEL] early college students in [CLASS/SUBJECT]. Each activity should encourage students to take risks, share their perspectives, and actively participate. Make sure your ideas also foster a sense of belonging and connect to students' cultural backgrounds or personal interests like [INSERT STUDENT INTERESTS]. The activities should be about [NUMBER] minutes each. Include a collaborative structure for how students will work together. Align the strategies to these skills and competencies [COPY THE ENGAGE SKILLS AND COMPETENCIES].



Engage Endnotes

- ¹ Yeager, D., Walton, G., & Cohen, G. L. (2013). Addressing achievement gaps with psychological interventions. *Phi Delta Kappan*, 94(5), 62–65.
- ² Hernández, L. E., & Darling-Hammond, L. (with Nielson, N.). (2024). *Cultivating relationships in secondary classrooms: Practices that matter.* Learning Policy Institute. https://learningpolicyinstitute.org/product/cultivating-relationships-secondary-classrooms-brief; Hamre, B. K., & Pianta, R. C. (2006). Student-teacher relationships. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 59–71). National Association of School Psychologists.
- ³ Learning Policy Institute & Turnaround for Children. (2021). *Design principles for schools: Putting the science of learning and development into action*. https://learningpolicyinstitute.org/sites/default/files/product-files/SoLD_Design_Principles_REPORT.pdf; Newman, F. M., Wehlage, G. G., & Lamborn, S. D. (1992) The significance and sources of student engagement. In Newman, F.M., Ed., *Student engagement and achievement in American secondary schools* (pp. 11–39). Teachers College Press.
- ⁴ Learning Policy Institute & Turnaround for Children. (2021). *Design principles for schools: Putting the science of learning and development into action*. https://learningpolicyinstitute.org/sites/default/files/product-files/SoLD_Design_Principles_REPORT.pdf; Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). How people learn: Brain, mind, experience, and school. National Academy Press.



READ

Reading is at the heart of learning across all content areas and is an essential skill for college and career readiness. To become strong readers, students need to make sense of information, think deeply, and understand ideas across multiple forms of texts.

Teachers support reading development by engaging students in a range of authentic materials (e.g., articles, books, graphs, datasets, literature) and by guiding them through thoughtful routines before, during, and after reading occurs. As a foundation for learning, effective reading instruction provides structure and strategies for students to understand and grapple with a variety of texts, problem sets, and documents.\(^1\)

Across content areas, systematic and explicit literacy instruction combines ongoing practice with increased text complexity to build core content background knowledge and strengthen comprehension.\(^2\) By coupling reading with classroom discourse, text-dependent questioning, and evidence-based writing, early college instructors can ensure deeper learning, enduring understanding, and improved academic outcomes for all students.\(^3\) In the rigorous early college environment, teachers play a critical role in scaffolding students' ability to engage meaningfully with challenging content.\(^4\)

WHAT

Reading Skills in early college classrooms are developed through instruction that is centered on:		
Comprehension	Helping students to build understanding and critical thinking through engaging with a variety of genres and authentic texts that build in complexity over time.	
Academic Vocabulary	Providing opportunities to develop academic language and literacy skills essential for college readiness.	
Building and Refining Schema	Linking new information to students' existing knowledge structures and lived experiences to deepen understanding and strengthen retention.	
Disciplinary Literacy	Developing students' ability to apply reading skills and strategies across content areas so that they can access and gain disciplinary knowledge through a variety of texts.	
Independence	Helping students independently apply learning and skills gained from reading to approach new texts, explore unfamiliar topics, solve problems, and engage across disciplines.	

Reading and literacy skills are fundamental building blocks for students to succeed in college, careers, and life. Strong reading skills are known to improve college and career opportunities and outcomes and have been shown to increase long-term earning potential.⁵ Reading is the foundation of literacy, which is critical in developing informed citizens who are able to think critically about their world, analyze the growing volume of information available to them, and develop solutions to complex problems. Literacy is not developed in isolation; it is highly dependent on the related skills of discussing, writing about, and thinking about rich content.⁶ Related instructional practices help students learn skills that are essential for the literacy demands of college and careers.

READ Essential Practices Toolkit—Suggested Strategies and Protocols

Strategy/Protocol	Purpose	Links
4 A's Protocol	Analyzes Agreements, Arguments, Assumptions, and Aspirations in a text.	National School Reform Faculty
Compass Points Thinking Routine	Helps students understand personal thinking styles, improving group dynamics and encouraging productive collaboration.	Harvard Project Zero
Connect, Extend, Challenge	Helps students reflect on new learning by making connections to what they know, extending thinking, and identifying new questions or challenges.	Harvard Project Zero
Read-Think Routine	Helps students pause to process text through reflections; builds metacognition and confidence.	Read, Think, and Take Notes Template
Save The Last Word	Highlights important quotes and deepens text-based evidence through discussion.	Center for Leadership and Educational Equity
Say-Mean-Matter	Helps students analyze a quote or passage by interpreting its meaning and making connections to its relevance.	Geocities
Word-Phrase-Sentence	Pulls impactful language to help students unpack nuance and vocabulary.	Harvard Project Zero

GenAl Prompts

In <u>ChatGPT</u> or your favorite AI chatbot, paste the following prompts and replace the bracketed text with your specific information.

Text Comprehension Prompt

You are an expert educator and instructional designer with a deep understanding of how students build comprehension and critical thinking skills through reading. Your task is to create [NUMBER] engaging activities that help students analyze and make meaning of a [TYPE OF TEXT] on [TOPIC] in a [SUBJECT] course. Each activity should promote active reading, discussion, and reflection. My students enjoy [INSERT STUDENT INTERESTS], so please incorporate those where appropriate. The activities should take about [NUMBER] minutes each. Include a collaborative structure for how students will work together. Align the strategies to these skills and competencies [COPY THE READ SKILLS AND COMPETENCIES].

Vocabulary and Schema Prompt

You are an expert educator and instructional designer known for creating strategies that develop academic vocabulary and connect new learning to students' prior knowledge. Your task is to generate [NUMBER] vocabulary-building activities that help [COURSE] students understand and retain the language of a text about [TOPIC]. Each activity should make space for students to draw on their personal experiences or lived knowledge. My students are especially interested in [INSERT STUDENT INTERESTS], so include relevant connections. Each activity should be about [NUMBER] minutes long. Include a collaborative structure for how students will work together. Align the strategies to these skills and competencies [COPY THE READ SKILLS AND COMPETENCIES].

Transfer and Independence Prompt

You are an expert educator and instructional designer who specializes in building students' confidence to independently apply what they read to new topics. Your task is to design [NUMBER] reading extension activities that help [GRADE LEVEL] students in [COURSE] transfer key ideas from a text on [TOPIC] to a new situation, problem, or content area. Each activity should promote ownership of learning and encourage students to take initiative. Please include references to [INSERT STUDENT INTERESTS] where appropriate. Activities should take about [NUMBER] minutes each. Include a collaborative structure for how students will work together. Align the strategies to these skills and competencies [COPY THE READ SKILLS AND COMPETENCIES].



Read Endnotes

- ¹ Kamil, M. L., Borman, G. D., Dole, J., Kral, C. C., Salinger, T., & Torgesen, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices: A practice guide* (NCEE #2008-4027). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, and U.S. Department of Education. Retrieved from https://files.eric.ed.gov/fulltext/ED502398.pdf
- ² International Literacy Association. (2017). *Content area and disciplinary literacy: Strategies and frameworks.* https://www.literacyworldwide.org/docs/default-source/where-we-stand/ila-content-area-disciplinary-literacy-strategies-frameworks.pdf
- ³ Pearson, P. D., Salinger, T., Lee, C. D., Uccelli, P., Alexander, P., & Vogt, M. (2024). *Bridging science: An integrated approach to supporting student literacy development*. The Collaborative for Academic, Social, and Emotional Learning (CASEL). https://casel.org/student-literacy_white-paper/?view=1
- ⁴ Kamil, M. L., Borman, G. D., Dole, J., Kral, C. C., Salinger, T., & Torgesen, J. (2008). Improving adolescent literacy: Effective classroom and intervention practices: A practice guide (NCEE #2008-4027). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from https://ies.ed.gov/ncee/wwc
- ⁵ Kamil, M. L. (2003). Adolescents and literacy: Reading for the 21st century. Alliance for Excellent Education.
- ⁶ Pearson, P. D., Salinger, T., Lee, C.D., Uccelli, P., Alexander, P., Vogt, M., Immordino-Yang, M., Osher, D., Jagers, R., Fenwick, L., & Steele, L. (2024). *Bridging sciences: An integrated approach to supporting student literacy development* [White paper]. The Collaborative for Academic, Social, and Emotional Learning (CASEL), American Association of Colleges for Teacher Education. https://casel.org/student-literacy_white-paper/



WRITE

Writing is not only a way for students to demonstrate what they know but also a powerful tool to communicate learning. Both formal and informal writing help students make connections, process ideas, and reflect on understanding. Because writing can be a challenging skill to develop, students need time, support, practice, and feedback to grow their writing skills. Teachers nurture this development by creating regular opportunities for low-stakes writing—quick tasks that let students think through ideas, ask questions, work with peers, and give and receive feedback. In addition, formal assignments help students to refine their thinking, practice key writing competencies, and clearly communicate concepts and ideas, preparing them for the demands of postsecondary education and the workplace.

Writing in early college classrooms is developed through instruction that centers on:

Purpose	Helping students identify and apply writing strategies that are intentionally aligned to the audience and intended outcomes.
Process	Supporting the use of the writing process to synthesize information and compose well-structured writing using academic language and conventions for educational and professional contexts.
Argument	Providing opportunities to gather, evaluate, and incorporate relevant evidence and information from credible sources to support arguments.
Co-construction	Facilitating peer feedback and use of co-constructed writing tasks to refine thinking and strengthen skills through collaboration.
Persistence	Strengthening confidence and writing stamina by guiding students through iterative writing and revision based on feedback
Reflection	Encouraging metacognition and ownership by prompting students to examine their learning through frequent opportunities to write.



Writing is a lifelong skill that plays a key role in all aspects of postsecondary success. Learning to write effectively is a critical component of overall literacy as writing is a critical tool for describing ideas, refining and communicating thoughts and opinions, and analyzing information. Implementing low-stakes writing activities provides opportunities for students to explore ideas and concepts and allows educators to identify misconceptions that should be addressed. Instruction in formal writing provides opportunities to develop and master written conventions while demonstrating and applying relevant content knowledge. It is important to provide opportunities for students to develop formal and informal writing skills in every academic discipline, not just in English Language Arts, in order to foster content learning, critical thinking, and strong communication skills. Writing across the curriculum equips students with transferable skills and prepares them for academic, professional, and lifelong success. In the curriculum equips students with

WRITE Essential Practices Toolkit—Suggested Strategies and Protocols

Strategy/Protocol	Purpose	Links
+1 Routine	Builds shared knowledge through collaborative writing.	<u>Harvard Project</u> <u>Zero</u>
Dual Draft Conclusion	Strengthens revision and writing skills through peer feedback and reflection.	ReadWriteThink
I used to think Now I think	Helps students reflect on how their thinking has changed by comparing initial ideas with new insights.	Harvard Project Zero
One Minute Note	Engages students in timed reflection that captures take-aways and questions, boosting metacognition and retention.	Teacher Toolkit
Quick Writes	Engages students in low-stakes bursts of writing that surface prior knowledge, promote reflection, and increases warm-up fluency.	<u>Edutopia</u>
Revision Stations	Involves students in rotating tasks that target specific aspects of writing and promote iterative improvement.	TeachWriting.Org

GenAl Prompts

In <u>ChatGPT</u> or your favorite AI chatbot, paste the following prompts and replace the bracketed text with your specific information.

Writing to Synthesize Prompt

You are an expert educator and instructional designer with a talent for helping students deepen their understanding through writing.

Your task is to create [NUMBER] writing activities that prompt students to synthesize information from [TEXTS, TOPICS, OR EXPERIENCES] in order to support a central idea or claim. These activities are for [GRADE LEVEL] students in [COURSE] and should take approximately [NUMBER] minutes.

Please ensure that some of the activities connect to students' interests in [INSERT STUDENT INTERESTS] and are appropriate for an early college learning environment. Include a collaborative structure for how students will work together. Align the strategies to these skills and competencies [COPY THE WRITE SKILLS AND COMPETENCIES].

Writing to Reflect Prompt

You are an expert educator and instructional designer who helps students grow as writers through reflection and revision.

Your task is to design [NUMBER] low-stakes writing activities that help students reflect on their own thinking or progress as writers. These activities should also guide them through making meaningful revisions based on feedback.

The activities should be designed for [GRADE LEVEL] early college students in [COURSE], take about [NUMBER] minutes, and include connections to student interests like [INSERT STUDENT INTERESTS]. Include a collaborative structure for how students will work together. Align the strategies to these skills and competencies [COPY THE WRITE SKILLS AND COMPETENCIES].

Collaborative Writing Prompt

You are an expert educator and instructional designer skilled in creating collaborative writing tasks that build students' shared understanding.

Your task is to design [NUMBER] writing activities where students co-construct a written product—such as an argument, summary, or creative response—through peer collaboration and feedback.

These tasks should be for [GRADE LEVEL] early college students in [COURSE], take about [NUMBER] minutes, and provide options to connect to student interests like [INSERT STUDENT INTERESTS]. Include a collaborative structure for how students will work together. Align the strategies to these skills and competencies [COPY THE WRITE SKILLS AND COMPETENCIES].



Write Endnotes

¹ National Commission on Writing for America's Families, Schools, and Colleges. (2004, September). Writing: A ticket to work ... or a ticket out; A survey of business leaders. New York: College Entrance Examination Board. Retrieved from http://www.writingcommission.org/prod_downloads/writingcom/writing-ticket-to-work.pdf; Council of Writing Program Administrators, National Council of Teachers of English, & National Writing Project. (2011). Framework for success in postsecondary writing. Retrieved from http://wpacouncil.org/files/framework-for-success-postsecondary-writing.pdf

² Savion, L. (2009). Clinging to discredited beliefs: The larger cognitive story. *Journal of the Scholarship of Teaching and Learning*, 9(1), 81–92.

³ Graham, S., Bruch, J., Fitzgerald, J., Friedrich, L., Furgeson, J., Greene, K., Kim, J., Lyskawa, J., Olson, C.B., & Smither Wulsin, C. (2016). *Teaching secondary students to write effectively* (NCEE 2017-4002). National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from https://files.eric.ed.gov/fulltext/ED569984.pdf

⁴ Childs, K. R. (2020). Write away: Writing across the curriculum and beyond. In *Texas Association of Literacy Education's Literacy Yearbook: Vol. 7.* https://files.eric.ed.gov/fulltext/EJ1286844.pdf



THINK

Critical thinking and problem-solving are key skills for success in college, careers, and life. Teachers can enhance thinking and spark curiosity by designing learning experiences that challenge students to ask questions, explore ideas, and apply what they're learning in meaningful ways. Deep thinking develops through practice and involves forming hypotheses, exploring solutions, and making sense of complex ideas. Through intentional learning experiences, students learn how to approach complex problems, identify reliable sources, analyze information, and determine what is most relevant when developing solutions. These experiences prepare students to navigate the types of tasks they will encounter in college and the workplace. As they interpret and synthesize information, students create and share their work in different formats, and their reasoning becomes stronger through peer feedback, self-reflection, and opportunities to revise and refine their work.

Thinking in early college classrooms is developed through instruction tha	t
centers on:	

centers on:	
Questioning	Sparking curiosity and promoting deeper exploration by encouraging students to ask thoughtful, open-ended questions.
Experimentation	Teaching students to develop and test ideas with opportunities to try new approaches and distilling insights from observations and evidence.
Analysis	Scaffolding the development of problem-solving strategies by breaking down information to examine relationships, patterns, and evidence.
Evaluation	Supporting students to discern the validity of ideas, information, and solutions by analyzing sources, questioning assumptions, weighing evidence, and considering alternatives.
Innovation	Providing opportunities for students to develop creative solutions and novel approaches that apply learning in new contexts.
Self-Regulation	Teaching students to monitor and reflect on thinking processes to become self-directed learners.



As artificial intelligence (AI) and other technology tools transform how we engage with information and the world around us, the ability to think critically and creatively is more important than ever in preparing students for success in college, career, and life.1 A growing body of research consistently supports the importance of critical thinking in enhancing cognitive development, improving academic performance, increasing engagement and motivation, developing lifelong learning skills, and preparing students for future challenges.² Critical thinking is a key part of each of the essential practices outlined in this framework, and it is important to integrate related instructional practices across content areas.

THINK Essential Practices Toolkit—Suggested Strategies and Protocols

Strategy/Protocol	Purpose	Links
Claim + Evidence + Reasoning (CER)	Supports critical thinking by scaffolding logical arguments rooted in evidence and clear reasoning.	<u>Edutopia</u>
Design Thinking Cycle	Encourages creative problem-solving through empathy, ideation, prototyping, and testing real-world solutions.	IDEO Education
Question Formulation Technique	Teaches students how to ask open-ended, rigorous questions to drive deeper inquiry and thinking.	Right Question Institute
Connect, Extend, Challenge	Promotes metacognition by asking students how new ideas connect to prior learning, extend thinking, or pose challenges.	<u>Harvard Project</u> <u>Zero</u>
Problem-Solving Protocol	Structures the process of identifying a problem, exploring solutions, and reflecting on outcomes.	Problem-Solving Method Overview
Hexagonal Thinking	Encourages students to visually map connections between concepts, building analysis and synthesis.	<u>Cult of Pedagogy</u>
Tug of War	Helps students weigh opposing viewpoints or claims and justify positions with evidence.	Harvard Project Zero
See, Think, Wonder	Develops students' observation and inference skills by prompting them to analyze visuals or data.	<u>Harvard Project</u> <u>Zero</u>
Planning for Learning	Provides a student template for setting goals and monitoring learning.	RTI Self-Regulated Learning Template
What? So What? Now What?	Facilitates reflection and metacognitive thinking following a task or experience.	Model Thinkers

Continued

Strategy/Protocol	Purpose	Links
60-Second Reflection: One Word, One Sentence	Provides students with a chance to reflect and make meaning; gives teachers a quick tool for making formative assessments.	<u>Edutopia</u>
3 Whys Protocol	Deepens purpose-driven thinking by linking classroom content to global and community contexts.	Harvard Project Zero
7 Instructional Strategies That Push Students to Own the Thinking	Provides strategies and links them to additional activities that support engagement and critical thinking by giving students frequent opportunities to "do the thinking."	TNTP

GenAl Prompts

In <u>ChatGPT</u> or your favorite AI chatbot, paste the following prompts and replace the bracketed text with your specific information.

Deep Thinking Strategies Prompt

You are an expert educator and curriculum designer who is particularly skilled in generating strategies for students to think deeply about a topic, which result in profound discussions and student products. Your task is to generate a list of strategies for [COURSE] class on [TOPIC] with [LOW/MEDIUM/HIGH] complexity level. Include a collaborative structure for how students will work together. Align the strategies to these skills and competencies [COPY THE THINK SKILLS AND COMPETENCIES].

Bloom's Taxonomy Prompt

You are an expert teacher who is experienced in developing lesson plans, assessments, and educational frameworks that result in effective and meaningful learning for your students. Your task is to create learning activities from higher levels of the Revised Bloom's Taxonomy for [COURSE] students studying [TOPIC]. Format as a bulleted list. Include a collaborative structure for how students will work together and align the activity to these skills and competencies [COPY THE THINK SKILLS AND COMPETENCIES].

Critical Thinking Questions Prompt

You are an expert educator and instructional designer with expertise in crafting open-ended questions that elicit higher-order thinking from your students. Your task is to create a list of [NUMBER] open-ended, critical thinking questions for [COURSE] class on [TOPIC]. Align the questions to these skills and competencies [COPY THE THINK SKILLS AND COMPETENCIES].



Think Endnotes

- ¹ Dumitru, D., & Halpern, D. F. (2023). Critical thinking: Creating job-proof skills for the future of work. *Journal of Intelligence*, *11*(10), 194. https://doi.org/10.3390/jintelligence11100194
- ² Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, *24*(2), 97–140. https://doi.org/10.1080/10888691.2018.1537791; Cantor, P., Osher, D., Berg, J., Steyer, L., & Rose, T. (2018). Malleability, plasticity, and individuality: How children learn and develop in context1. *Applied Developmental Science*, *23*(4), 307–337. https://doi.org/10.1080/10888691.2017.1398649



Meaningful classroom discussions help students talk through their thinking, ask questions, and deepen their understanding—skills that are essential for success in college and careers. Classroom talk can start in low-stakes settings like pairs or small groups and build toward sharing ideas in larger class conversations and formal presentations. Teachers play an important role in creating and guiding opportunities for students to find their voices, develop active listening skills, process ideas out loud, and explore new ways of thinking. As part of this process, teachers should introduce and model important vocabulary and academic language, encouraging students to use these terms in their conversations. This builds confidence and clarity of thinking and strengthens students' ability to communicate complex ideas.

WHAT

Talking skills in early college classrooms is developed through instruction that centers on:		
Discussion	Engaging students to work on meaningful dialogue in pairs, groups, and whole-class settings with confidence to explore, defend, and extend ideas with peers.	
Listening	Providing opportunities for students to practice attentive, respectful listening to understand diverse perspectives, build shared meaning, and support peer feedback.	
Inquiry	Supporting students to pose and pursue thoughtful, open- ended questions that drive academic conversations, deepen understanding, and encourage evidence-based thinking.	
Clarification	Helping students refine their thinking by expressing ideas clearly, using precise academic language, and responding to peer feedback to strengthen their ideas.	
Presentations	Providing opportunities for students to develop public speaking skills by giving presentations in formal and informal settings to a variety of audiences.	

There are many benefits to supporting students as they develop the ability to engage in classroom talk. Academic discourse represents the primary way in which students express, explore, and exchange ideas. Effective classroom dialogue promotes critical thinking, allows students to articulate their reasoning, and provides opportunities for them to engage with diverse perspectives, leading to a deeper understanding of the subject matter. Additionally, developing strong verbal communication skills builds confidence and prepares students to navigate educational and professional environments.

The benefits of classroom talk cut across the other elements of essential instructional practice in that it supports student engagement, reading comprehension, thoughtful discourse, effective feedback, and successful collaboration.⁴ Although important for all learners, classroom talk is especially important in providing multilingual learners with critical opportunities to practice and refine their language skills while grappling with content specific vocabulary and real-world applications.⁵

TALK Essential Practices Toolkit—Suggested Strategies and Protocols

Strategy/Protocol	Purpose	Links
5 Strategies to Improve Students' Listening Skills	Provides insights and activities to help students develop listening skills.	<u>Edutopia</u>
Accountable Talk Stems	Promotes equity of voice by scaffolding how students build on each other's thinking respectfully.	Accountable Talk Features and Language Stems
Dialogue Journals	Builds written conversation between students and teachers or peers to help them reflect on and extend discourse.	Cult of Pedagogy
Fishbowl Discussion	Provides structure for observation and reflection while peers engage in academic dialogue.	Facing History & Ourselves
Four A's Protocol	Structures rich conversation using a text by prompting students to explore Agreements, Assumptions, and more.	National School Reform Faculty
Four Corners	Promotes critical thinking and verbal justification by having students take a stance and discuss their positions.	The Teacher Toolkit
Lines of Communication	Engages students in a quick partner rotation activity that allows them to engage in repeated practice of content talk.	BetterLesson
Save the Last Word for Me	Builds thoughtful dialogue and attentive listening by delaying students' personal responses until their peers have shared.	Facing History & Ourselves
Sentence Starters/Frames	Supports multilingual learners and those developing academic language in structured discussion.	Colorín Colorado
		C =+!

Continued

Strategy/Protocol	Purpose	Links
Socratic Seminar	Fosters deep inquiry through open-ended questioning and student-led discussion around complex texts.	Teaching Channel
Talk Moves	Encourages reasoning and academic language through strategic teacher questioning and student responses.	Edutopia and Card for Desk
Talk-Read-Talk-Write (TRTW)	Integrates discussion, reading, and writing to deepen understanding and reinforce content learning.	TRTW Overview
Think-Pair-Share	Supports all learners in processing and verbalizing their thinking in a low-risk setting before full-group discussions.	Facing History

GenAl Prompts

In <u>ChatGPT</u> or your favorite AI chatbot, paste the following prompts and replace the bracketed text with your specific information.

Academic Discussion Prompt

You are an expert educator and instructional designer who is skilled in facilitating academic conversations that deepen student understanding and promote confidence in sharing ideas.

Your task is to design [NUMBER] discussion-based activities that help [GRADE LEVEL] early college students in [COURSE] meet the following objective: [LEARNING OBJECTIVE]. Each activity should include collaboration structures (pairs, small groups, or whole class) and support students in exploring, defending, and extending ideas using academic vocabulary. Connect to student interests like [INSERT STUDENT INTERESTS] and keep each activity around [NUMBER] minutes long. Align the activities to these competences: [COPY THE TALK SKILLS AND COMPETENCIES].

Clarifying Thinking Prompt

You are an expert educator and instructional designer with a focus on helping students communicate complex ideas clearly and accurately. Your task is to create [NUMBER] classroom talk activities that help [GRADE LEVEL] early college students in [COURSE] meet this objective: [LEARNING OBJECTIVE]. Each activity should support students in using precise academic language, responding to peer feedback, and refining their thinking out loud. Include scaffolds such as sentence stems or vocabulary supports and connections to [INSERT STUDENT INTERESTS]. Activities should be about [NUMBER] minutes. Align the activities to these competences: [COPY THE TALK SKILLS AND COMPETENCIES].

Convert to Discussion Prompt⁶

Act as an experienced [GRADE LEVEL/CONTENT AREA] teacher, skilled at designing authentic assessments based on durable skills such as collaboration, critical thinking, and creativity. Help me redesign an assessment for my students. In the past, students have written an essay to demonstrate their understanding of [TOPIC OF STUDY]. Your task is to convert the essay assignment into a discussion assignment in which students will participate in a small group discussion of the topic and then write a reflective essay summarizing the discussion. The goal of this assignment is to help me gain an understanding of the students' conceptual understanding of [TOPIC OF STUDY]. Include detailed assignment instructions and a grading rubric formatted as a table for the reflective essay.

Align the activities to these competences: [COPY THE TALK SKILLS AND COMPETENCIES].



Talk Endnotes

- ¹ Bakhtin, M. M. (1984). *Problems of Dostoevsky's poetics* (C. Emerson, Ed. & Trans.). University of Minnesota Press; Dewey, J. (1938). *Experience and education*. Macmillan.
- ² Osborne, J. (2010). Arguing to learn in science: The role of collaborative, critical discourse. *Science, 328,* 463–466; Resnick, L. B., Asterhan, C. S. C., & Clarke, S. N. (Eds.). (2015). *Socializing intelligence through academic talk and dialogue*. American Educational Research Association.
- ³ National Association of Colleges and Employers. (n.d.). *What is career readiness?* https://www.naceweb.org/career-readiness/career-readiness/career-readiness-defined#competencies
- ⁴ Murphy, P. K., Wilkinson, I. A. G., Soter, A. O., Hennessey, M. N., & Alexander, J. F. (2009). Examining the effects of classroom discussion on students' high-level comprehension of text: A meta-analysis. *Journal of Educational Psychology, 101*, 740–764. https://doi.org/10.1037/a0015576
- ⁵ Walqui, A., & Heritage, M. (2018). Meaningful classroom talk: Supporting English learners' oral language development. *American Educator*, 42(3), 18–23, 39.
- ⁶ Al for Education. (n.d.). *Convert an essay into a discussion with an Al chatbot*. <u>https://www.aiforeducation.io/prompts/convertan-essay-into-a-discussion</u>



COLLABORATE

Creating an inclusive classroom environment encourages students to work together in meaningful and productive ways. Through collaboration, students learn how to solve problems, make sense of new ideas, and produce high-quality work as a team. When students collaborate, they learn and apply real-world lessons about working together and communicating with others—skills that are necessary for success in college, career, and life. Teachers support collaboration by designing tasks that deepen learning through shared effort, where students rely on each other's thinking, and by setting up clear structures that help students work effectively as a team. Strategies such as thoughtful questioning, targeted feedback, purposeful discussion, and intentional groupings ensure that every student participates and is held accountable.

WHAT

Collaboration in early college classrooms is fostered through instruction that centers on: Collaborative Providing students with a variety of opportunities to engage in meaningful tasks that require them to work together and Tasks draw on one another's strengths, knowledge, and skills for success. **Planning** Developing students' ability to clarify objectives and establish norms, roles, and responsibilities to complete group tasks and projects. Negotiation Providing students with opportunities to listen, advocate, compromise, and resolve differences, as well as supporting productive group work through dialogue and peer feedback. Teaching students to encourage peer engagement, ensuring Peer that all voices shape the team's work by fostering inclusivity **Empowerment** and respect. Accountability Implementing structures that foster both individual and shared responsibility by ensuring that all group members are accountable for their own performance, learning, and contributions toward collective goals and outcomes.

The understanding that learning is a highly social process has been well established for decades.¹ Collaboration is essential to developing students' capacity to communicate clearly, listen actively, negotiate conflict constructively, and cooperate to solve problems. Research underscores the role that collaborative learning plays in the development of critical thinking skills and in enhancing students' understanding and retention of content knowledge as they work together to achieve shared goals.² Through intentionally planned opportunities for group work, students develop positive peer relationships, build cultural competencies, and develop individualized and shared leadership proficiencies, which are key competencies for thriving in postsecondary and professional environments.3

COLLABORATE Essential Practices Toolkit—Suggested Strategies and Protocols

Strategy/Protocol	Purpose	Links
Collaborative Graphic Organizers	Provides visual tools for group information processing that promote shared contribution and clarity.	<u>Teacher Vision</u>
Collaborative Group Rubrics	Provides tools that students can use to self-assess team functioning, helping build accountability and metacognitive awareness.	<u>PBLWorks</u>
Compass Points— Exploring Working Styles	Supports collaboration and conflict resolution by building understanding of working styles among group members.	National School Reform Faculty
Consensus Census: 1-3-6	Engages students in collaborative approach to answering questions or solving problems together.	<u>Consensus</u> <u>Census</u>
Consensus Protocol	Guides groups to collectively evaluate options and reach shared agreement.	Strategy Guide
Group Contracting	Allows students to co-create agreements for behavior, expectations, and shared goals to build commitment and safety.	Facing History
Group Roles	Assigns students structured roles (e.g., facilitator, recorder, timekeeper) to ensure equitable participation or roles like analyst, checker, and presenter to promote accountability in tackling complex challenges.	Center for Teaching and Learning
Jigsaw	Allows students to become "experts" on a portion of content, then teach their peers—building interdependence and ownership.	<u>Classroom</u> <u>Strategies</u>

Continued

Strategy/Protocol	Purpose	Links
Mistake Analysis	Gets students to work in groups to create problems, identify common errors, find solutions, and then explain the process.	A Collaborative Approach to Mistake Analysis
Peer Coaching	Encourages students to give structured support to partners during collaborative work to build confidence, reflection, and ownership.	Catlin Tucker: Peer Feedback
Six Strategies to Help ELLs Succeed in Peer Learning and Collaboration	Provides strategies that are focused on leveraging peer learning as a powerful tool in the classroom, particularly for English language learners (ELLs).	<u>Colorín</u> <u>Colorado</u>

MOH

GenAl Prompts

In <u>ChatGPT</u> or your favorite AI chatbot, paste the following prompts and replace the bracketed text with your specific information.

Collaborative Task Design Prompt

You are an expert educator and instructional designer who specializes in creating engaging, collaborative learning experiences. Your task is to design [NUMBER] meaningful group activities that require students to work together to [LEARNING OBJECTIVE OR OUTCOME] in [COURSE] for [GRADE LEVEL] early college students. Each activity should ensure that students draw on each other's strengths and actively contribute to the final product. Connect the activities to student interests such as [INSERT STUDENT INTERESTS] and include clear instructions for how group members will work together. Align the strategies to these skills and competencies: [COPY THE COLLABORATE SKILLS AND COMPETENCIES].

Accountability in Group Work Prompt

You are a highly effective teacher who helps students become responsible collaborators.

Your task is to design [NUMBER] group work strategies that ensure individual and shared accountability for [LEARNING OBJECTIVE] in [COURSE] for [GRADE LEVEL] students.

Each activity should include tools for tracking individual contributions, peer evaluation, and group reflection. Include examples of how teachers can model and reinforce these routines.

Align the strategies to these skills and competencies: [COPY THE COLLABORATE SKILLS AND COMPETENCIES].



Collaborate Endnotes

¹ Vygotsky, L. (1978). Mind in society: *The development of higher psychological processes*. Harvard University Press; Dewey, J. (1938). *Experience and education*. Macmillan; Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc; Johnson, D. W., Johnson, R. T., & Smith, K. (2007). The state of cooperative learning in postsecondary and professional settings. *Educational Psychology Review*, *19*(1), 15–29.31

² Loes, C. N. (2022). The effect of collaborative learning on academic motivation. *Teaching and Learning Inquiry, 10*. https://doi.org/10.20343/teachlearninqu.10.4

³ Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140. https://doi.org/10.1080/10888691.2018.1537791

Resources

Additional Toolkit Resources

The following resources contain additional strategies and activities to support student engagement and ownership of learning in rigorous learning environments.

- Al for Education Prompt Library for Educators
- Harvard Project Zero Core Thinking Routines Toolbox
- Instructional Strategies That Push Students to Own the Thinking
- The (not so) Little Itty Bitty Book of the C.I.F.

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