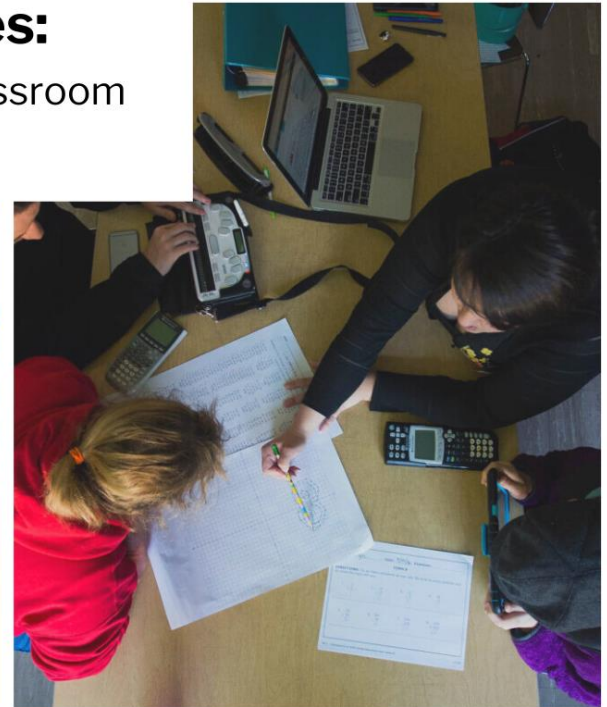




Writing Across Disciplines:
An Expansion of Composition in the Classroom
Fall 2023



What is Writing Across Disciplines?

What does “Writing Across Disciplines” mean?

Defining “Writing Across Disciplines” requires clarity around the terms “Writing” and “Across Disciplines.” Most simply, writing is communicating. Student writers communicate with themselves, peers, teachers and others. Writing in the classroom can have many purposes and audiences and may be formal or informal. In the academic setting, writing can serve as a tool to promote student learning, to allow students to demonstrate their thinking and understanding of the content and/or concepts taught, and/or to share with others in a real-world setting. These types of writing are called Writing to Learn, Writing to Demonstrate Learning and Writing for Publication. “Across Disciplines” refers to using the types of writing—as defined here—in English/language arts as well as other disciplines, such as social studies, science, math and visual and performing arts.

What is Writing Across Disciplines, and what is its purpose?

Writing Across Disciplines is an expansion of [Composition in the Classroom](#), a resource developed by reading and writing teachers to help Kentucky educators provide students with opportunities to develop into confident, independent and proficient writers. *Composition in the Classroom* and its expansions support teachers implementing existing [High-Quality Instructional Resources](#) (HQIRs) adopted by school districts as well as educators teaching in districts that have not yet adopted a primary HQIR in reading and writing. The tips, suggestions and tasks in *Composition in the Classroom* and its expansions should not replace adopted HQIR but should serve to supplement instruction towards the full depth and rigor of the *Kentucky Academic Standards*. For more information regarding high-quality literacy curricula, districts and school leaders may access [The Reading and Writing Instructional Resources Consumer Guide](#), a tool for evaluating and selecting instructional resources for alignment to the *Kentucky Academic Standards (KAS) for Reading and Writing*.

Composition in the Classroom is organized around three modes of writing in the *Kentucky Academic Standards (KAS) for Reading and Writing*, including information regarding standards instruction through Writing to Learn, Writing to Demonstrate Learning and Writing for Publication. *Writing Across Disciplines*, however, contains sample discipline-specific writing tasks, organized by each of the three types of writing mentioned above. This resource is grounded in the *KAS for Reading and Writing*, which includes the Interdisciplinary Literacy Practices as well as each discipline’s content specific standards. The ten Interdisciplinary Literacy Practices are part of the *KAS for Reading and Writing*, appearing on every page of the standards document but **should not be confused as additional standards**. They should guide teachers in providing intentional opportunities for students to engage in deeper learning by practicing the behaviors of a literate citizen. The student practices serve as the overarching goals for literacy instruction for each student across the state. These practices are further clarified by [possible teacher and student actions](#). These actions do not define curriculum, but rather they demonstrate how teachers can provide opportunities for students to experience the literacy practices and how students will apply these practices, so they may become an innate part of life across the disciplines and beyond school. This resource aims to bring more clarity around what these practices look like in action.

While *Composition in the Classroom* primarily serves English/language arts teachers and their students, *Writing Across Disciplines* attends to the needs of all teachers and their students. Because of its widespread classroom use already, the developers chose to begin the expansion

with a focus on Writing to Learn, a professional learning space that will hopefully both affirm and stretch educators' practices. The second release added Writing to Demonstrate Learning and the final release will include Writing for Publication.

Writing Across Disciplines is created to provide what *Composition in the Classroom*, alone, does not. While *Composition in the Classroom* provides general characteristics of each type of writing (Writing to Learn, Writing to Demonstrate Learning and Writing for Publication) and examples of strategies teachers can implement to engage students in each of the types of writing, this expansion includes a more disciplinary, or specialized, look at writing. *Writing Across Disciplines* intends to show more precisely how to ensure opportunities for students to engage in discipline-specific literacies or learning that uses reading and writing skills specific to each field to teach or demonstrate content knowledge and for publication purposes as well. The sample tasks in *Writing Across Disciplines* represent some of the types of reading and writing experts in each field (e.g., economists, biologists, literary scholars, mathematicians, etc.) might authentically engage in to deepen their own expertise.

Writing TO DEMONSTRATE LEARNING Across Disciplines

[Writing to Demonstrate Learning](#), as previously described, is necessary in every classroom for teachers to ascertain how well students are understanding the content, skills or concepts taught. Teachers use this type of writing to provide students opportunities for applying and demonstrating the skills they have learned in class and for assessing students' understanding of the subjects they are studying.

Regularly asking students to think and write about text at the higher levels of Bloom's Taxonomy (i.e., analysis, synthesis, evaluation) can help students not only think through the content but also reveal the depth of their knowledge. Though this kind of writing certainly can promote learning, it is especially used to help teachers understand how well students are learning. Typically, Writing to Demonstrate Learning takes the form of an academic exercise with the teacher as the primary audience and, thus, would not be suitable for publication. When students Write to Demonstrate Learning, their responses will be graded, marked or scored with a rubric to provide feedback to both the teacher and the student on their progress towards mastery. While feedback may focus on compositional or technical skills as a writer, teacher feedback usually focuses on content and conceptual understandings. Most simply stated, Writing to Demonstrate Learning is any composition intended to serve as a measurement of the student's depth of learning.

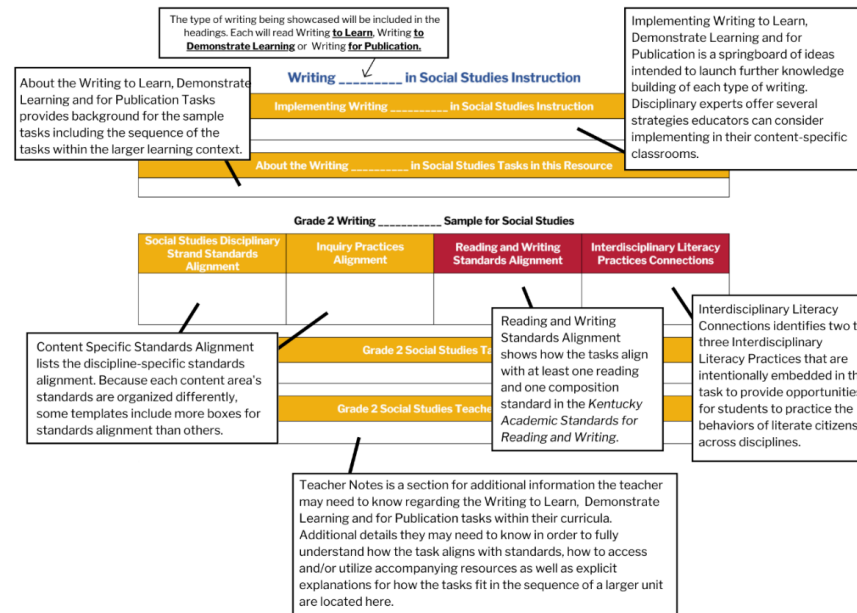
While students may demonstrate their learning through paragraphs or essays, at all ages, student composition should not be limited to traditional formats or restricted to writing on paper or drafting in a word processing document. Instead, students should have numerous opportunities to use digital resources to create, publish, research and update individual or shared products and to take advantage of technology's capacity to link to other information and to display information flexibly and dynamically. This may even require students to incorporate a variety of communication methods into one Writing to Demonstrate Learning composition.

Like Writing to Learn, Writing to Demonstrate Learning Across Disciplines refers to using Writing to Demonstrate Learning in English/language arts as well as other disciplines such as math, science, social studies, and visual and performing arts. The first section of this expansion, Writing to Learn Across Disciplines, provides samples of Writing to Learn tasks for each discipline. The Writing to Demonstrate Learning section is the second of three sections that will make up the complete expansion and provides samples of Writing to Demonstrate Learning. Explicit reading-writing connections are intentionally present throughout the sample tasks, requiring students to read and think deeply about text, or "anything that communicates a message," as defined by the *KAS for Reading and Writing*. Throughout the sample tasks,

readers engage in passages, videos, graphs, data sets, experiments or other forms of communication while processing and documenting their learning through Writing to Demonstrate Learning.

How to Read the Writing Across Disciplines Templates

Each content area template begins broadly with a compilation of possible Writing to Learn, Writing to Demonstrate Learning and Writing for Publication strategies that experts in the field deem especially applicable to learning that discipline's content. The remainder of each template provides authentic content-specific sample tasks, organized into elementary and secondary levels. These sample tasks can help educators recognize the presence or absence of Writing to Learn, Writing to Demonstrate Learning or Writing for Publication instructional strategies within their adopted high-quality instructional resource (HQIR), equipping them with the knowledge to identify when the curriculum does not include adequate opportunities for students to engage in both types of writing. Because the types of texts involved in reading and writing vary across disciplines, each sample contains discipline-specific approaches each type of writing.



Writing to Demonstrate Learning in Reading and Writing Instruction

Implementing Writing to Demonstrate in Reading and Writing Instruction

Writing in conjunction with reading is an expectation of English/language arts classrooms beginning in kindergarten and becoming progressively more sophisticated as the grade levels increase. Teachers must intentionally provide opportunities for students of all ages to write daily about what they are reading and learning with ample opportunities to employ Writing to Demonstrate Learning. The learners' developmental levels and intended learning goals, particularly what content or skills the assignment intends to assess, are key to selecting how students will engage in Writing to Demonstrate Learning. Understanding that the *Kentucky Academic Standards for Reading and Writing* defines text as anything that communicates a message remains important as well. While traditional print may often be an appropriate medium for Writing to Demonstrate Learning, particularly in English/language arts classrooms, and is certainly one that students should be well versed in, students should also be exposed to and have opportunities to demonstrate their learning using a variety of formats, including but not limited to verbal and visual representations.

The Composition strand (formerly named Writing strand) supports text as anything that communicates a message. To reiterate from the introductory section, at all ages, student composition should not be limited to writing on paper or drafting in a word processing document; instead, students should use digital resources to create, publish, research and update individual or shared products and to take advantage of technology's capacity to link to other information and to display information flexibly and dynamically. This may even require students to incorporate a variety of communication methods into one text.

Because Kindergarten and first grade students are not yet writing full paragraphs, students may combine a variety of communication methods in their compositions. Their writing typically consists of drawing and/or forming letters to make words using paper and pencil and digital platforms (spelling may be invented, having words with extra or omitted vowels and consonants). More intentional and sophisticated multimodal writing is common in the upper grades as students express more complex ideas and content when they Write to Demonstrate Learning. At any age this writing may take the form of composing auditory and video recordings as well as dramatizations or other visual representations. While these and other compositions may not always include written text, they are often developed from written text – such as prewriting notes – and tend to communicate more clearly to audiences when accompanied by written text. Most importantly, students' Writing to Demonstrate Learning should incorporate age-appropriate and sufficient forms of text to clearly communicate the content or skills they've learned.

Once students reach the intermediate grades and certainly for middle and high school students, the goal of instruction goes beyond learning to read and write and towards using reading and writing as tools for learning and demonstrating learning. *Composition in the Classroom* emphasizes text-based and evidence-based writing experiences. Text-based writing greatly benefits reading comprehension by encouraging students to review and reflect on what they have read. Reading and writing should be viewed as complementary learning rather than as separate subjects.

Implementing Writing to Demonstrate in Reading and Writing Instruction

According to Graham, Harris and Herbert (2010)¹, writing practices that strengthen students' reading include having students write about the text they read, teaching students the writing skills and processes that go into creating text, and increasing how much students write. Students should have opportunities to engage in sustained, independent grade-level reading and writing in response to their reading. Though some adolescent students are proficient readers who may complete literacy tasks with relative independence, the Institute for Education Sciences What Works Clearinghouse Practice Guide for *Teaching Secondary Students to Write Effectively*² recommends explicit instruction of reading and writing skills for adolescent students. Therefore, middle and high school reading instruction should also explicitly model the academic vocabulary, dispositions, strategies and patterns of thinking typically applied when analyzing increasingly complex literature and informational text. Consider providing middle and high school students opportunities to develop and demonstrate reading and thinking skills with frequent feedback from peers and instructors to refine skills.

This resource provides three samples of Writing to Demonstrate Learning to clarify what implementing Writing to Demonstrate Learning in reading and writing classrooms may look like across grade levels. As described above, writing that demonstrates learning in the reading and writing classroom takes many forms as there are many ways in which students can communicate their comprehension and analysis of text. Some examples include, but are not limited to, the following:

- Short answer and extended responses to Text-Dependent Questions (TDQs)
- On-demand prompts
- Exit slips and Quick Writes
- Reflective writing
- Student-created text
 - Posters
 - Slides
 - Pamphlets
 - Websites
 - Infographics
- Mind Maps and other graphic organizers
- Discussion board posts

Teachers are also encouraged to leverage writing as a tool for deeper learning using Writing to Learn tasks described in [Writing to Learning in Reading and Writing](#).

¹ Graham, S., Harris, K. & Herber, M.A. (2010). Writing to read: Evidence for how writing can improve reading: A Carnegie Corporation time to act report. Washington, DC: Alliance for Excellent Education.

² 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). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from the NCEE website: <http://whatworks.ed.gov>.

About the Writing to Demonstrate Learning Tasks in this Resource

In the previously released [Writing to Learn](#) tasks, aligning to the same standards across grade levels was an intentional decision to highlight the standard progression of Reading Literature Standard 2 from kindergarten to grade 8. The Writing to Learn publication clarifies what it may look like in the primary grades to work from a summary to determine theme and then gradually build towards summarizing to analyze the development of theme in later grades.

In contrast, these Writing to Demonstrate Learning Tasks do not represent one Reading Literature standard across multiple grade levels. Instead, the developers chose to publish tasks aligned to Reading Informational standards. Offering standard balance was more important than standard progression. Grade level needs were considered when selecting to which reading informational standards the tasks would align. Both the grade 5 and 9-10 tasks align to RI.8 while the kindergarten task aligns to RI.7. Often, ELA classrooms are reported as spending more time reading and analyzing literature than informational texts. Grades 5 and 10 align to RI.8 to bring awareness to this standard since Guiding Principle 8 is not applicable to literature standards. While standard 8 is equally important in kindergarten, the kindergarten task aligns to RI.7 as this standard has students describe the relationship between visuals and text. Providing a sample task focused on the relationship between visuals and text at an early grade is an opportunity to model instruction around how visuals and text work together while not depending on visuals alone to make meaning, which may be a tendency for some early readers if not intentionally taught to rely on decoding primarily and visuals secondarily.

The Writing to Demonstrate Learning Task for kindergarten is part of a series of lessons focusing on how authors use pictures and printed text to help their readers understand what they are writing about. In the example below, students create their own poster to demonstrate their learning of the relationship between visuals and text.

In the Grade 5 Writing to Demonstrate Learning sample, students closely read an informational text about Pittsburgh's famous Hispanic baseball player, Roberto Clemente. Then, students analyze the authors' claims in a short answer response. Before students are expected to demonstrate their understanding of how the author uses evidence and reasons to support claims, they practice identifying the reasons and evidence found in the article using a coding system to mark the evidence and reasons.

The task for Grade 10 represents an example of Writing to Demonstrate Learning as students read Martin Luther King, Jr.'s "Letter from a Birmingham Jail" as a part of a text set also including three thematically related poems. The sample below comes from a unit requiring students to closely read 2-3 paragraphs per day. Students practice one specific standards skill each day, and the unit culminates in a longer analytical essay requiring students to integrate skills and ideas from each of the four texts. The Writing to Demonstrate Learning task below is a quick write for students to demonstrate their ability to delineate an argument and provide an explanation of the validity of a writer's claims.

Kindergarten Writing to Demonstrate Learning Sample for Reading and Writing

Reading and Writing Standards Alignment	Interdisciplinary Literacy Practices Connections
<p>RI.K.7 With prompting and support, describe the relationship between visuals and the text.</p> <p>C.K.2 Compose informative and/or explanatory texts, using a combination of drawing, dictating, writing and digital resources, to establish a topic and supply information about the topic.</p>	<p>ILP 1: Recognize that text is anything that communicates a message.</p> <p>ILP 2: Employ, develop and refine schema to understand and create text.</p>

Kindergarten Reading and Writing Task

After reading an informational text such as *From Caterpillar to Butterfly* by Deborah Heligman, students will create a poster, using pictures and words, to explain the journey from an egg to a butterfly. The task will require students to make decisions about usage and placement of pictures and words and demonstrate understanding of the relationship between the visuals and the text. Each student will share their poster with their teacher and peers, focusing on describing why they used certain pictures and words together or in certain places to teach the process of metamorphosis.

Present the Writing to Demonstrate Learning task using language such as, “I am going to give you paper to make your own poster. Your job will be to use pictures and words to make a poster that teaches others how a caterpillar changes into a butterfly. I will give you an envelope with pictures inside of it and an envelope with words inside of it. You may use the pictures and words in the envelopes to help you or you may choose to draw and write your own words. The important part is that you choose pictures and words that work together to explain how a caterpillar becomes a butterfly and that you choose the best spots on your poster to place the pictures and words in a way that makes it easy for readers to understand what happens on the journey from an egg to a butterfly.”

Kindergarten Teacher Notes

This task is suitable for kindergarteners who may not have any letter recognition all the way to students who recognize every letter in the alphabet and are able to read some words. The task works well for varying abilities because students are able to demonstrate their understanding of the relationship between visuals and words without being able to read or write independently. Students may use [the pictures and words from the envelopes](#) with or without the support of a reader or scribe to complete the task or they may choose to draw and/or write words of their choosing on their own. Whatever the case, in addition to assessing student understanding of the relationship between visuals and text, this task offers an opportunity for teachers to assess a student's orthographic processing skills, too.

The teacher may consider asking questions like the ones below to probe students' thinking as they describe why they used certain pictures and words together or in certain places to teach the process of metamorphosis.

Questioning Opportunities: Why do you think this picture is a good choice to show that part of the butterfly's journey? How does the picture you chose help show the idea you're sharing on your poster? How do the words and pictures you chose help show the butterfly's journey?

Grade 5 Writing to Demonstrate Learning Sample for Reading and Writing

Reading and Writing Standards Alignment	Interdisciplinary Literacy Practices Connections
<p>RI.5.8 Explain how an author uses reasons and evidence to support particular claims in a text, identifying which reasons and evidence support which claim(s).</p> <p>C.5.2 Compose informative and/or explanatory texts, using writing and digital resources, to examine a topic and convey ideas and information clearly.</p>	<p>ILP 5: Apply strategic practices, with scaffolding and then independently, to approach new literacy tasks.</p> <p>ILP 8: Engage in specialized, discipline-specific literacy practices.</p>

Grade 5 Reading and Writing Task

You read about how Roberto Clemente overcame “barriers” and built a “legacy” for himself. Explain how the author used evidence and reasons to support the claims that Clemente overcame “barriers” and left a “legacy.”

Grade 5 Teacher Notes

This task is adapted from a grade five ELA [EngageNY](#) unit that has students read and analyze informational text about the importance of sports in American culture, answering evidence-based selected response and short answer text-dependent questions. EngageNY is a free, online high-quality instructional resource (HQIR) for reading and writing available to all educators. Many districts in Kentucky have adopted HQIRs for reading and writing and may consider using a resource such as EngageNY to address gaps in their existing curriculum. EngageNY is a helpful resource also for districts that have not yet adopted HQIRs.

For access to the article, “Roberto Clemente’s Gifts from the Heart,” open [Grade 5: Module 3A: Unit 3: Lesson 2](#). The lesson link includes step-by-step directions for using annotation tools (a form of [Writing to Learn](#)) to help students understand the Roberto Clemente article. There are also questions for students to analyze the article in small groups. Some students may be able to read and respond to this type of task independently or with little instructional support. However, explicit instruction of literacy skills remains best practice to support all learners, even if they are proficient readers and writers. The annotation tools students are taught to use as they read the Roberto Clemente article and identify various barriers and legacies of his life, is explicit instruction of the analysis skills required in RI.5.8.

Grade 10 Writing to Demonstrate Learning Sample for Reading and Writing

Reading and Writing Standards Alignment	Interdisciplinary Literacy Practices Connections
<p>RI.9-10.8 Evaluate the argument, specific claims and evidence in a text, assessing the validity, reasoning, relevancy and sufficiency of the evidence; identify false statements and fallacious reasoning.</p> <p>C.9-10.2 Compose informative and/or explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization and analysis of content.</p>	<p>ILP 5: Apply strategic practices, with scaffolding and then independently, to approach new literacy tasks.</p> <p>ILP 8: Engage in specialized, discipline-specific literacy practices.</p>

Grade 10 Reading and Writing Task

Using your annotations on “Letter from a Birmingham Jail” by Martin Luther King, Jr., compose a paragraph delineating the argument and specific claims in paragraphs 10–11. Assess whether King’s evidence is relevant and sufficient.

Grade 10 Teacher Notes

This task is adapted from an [EngageNY](#) unit that leverages a text set including Martin Luther King, Jr.’s “Letter from a Birmingham Jail” and three short poems. EngageNY is a free, online high-quality instructional resource (HQIR) for reading and writing available to all educators. Many districts in Kentucky have adopted HQIRs for reading and writing, and EngageNY is a helpful resource for districts that have not yet adopted an HQIR.

EngageNY’s [Grade 10 Module 2, Unit 1: How Do Authors Use Rhetoric and Word Choice to Develop Ideas and Claims?](#) details the entire learning sequence for this unit, while [Lesson 5](#) specifically addresses instruction and assessment of **RI.9-10.8** and **C.9-10.2**.

Tools to Support Teacher and Student Content Knowledge: Some students may be able to write a response to this task independently or with little instructional support. However, explicit instruction of literacy skills remains best practice to support all learners, even if they are proficient readers and writers. Below are tools to provide explicit instruction of the analysis skills required in RI.9-10.8. Notice how Writing to Learn can support Writing to Demonstrate Learning:

Grade 10 Teacher Notes

1. [Argument Delineation Tool](#): An example of [Writing to Learn](#) that demonstrates to teachers and students how to delineate an argument with grade 10 standards expectations in any informational text.
2. [Central Ideas Tracker](#): Another example of Writing to Learn that demonstrates to teachers and students not only how to determine a central idea but how to analyze how specific textual details can shape and refine a central idea over the course of a text (RI.9-10.2).
3. [Short Response Rubric and Checklist](#): An assessment tool that helps teachers and students follow grade 10 standards expectations for reading informational text and responding to the task above. This tool helps teachers and students answer the questions, “How well am I applying the skills I learned in this lesson? To what level am I demonstrating my learning?”

Students will engage in Writing to Learn experiences throughout the instructional sequence in order to build knowledge about why shadows change. Writing to Demonstrate Learning is illustrated through the constructing of the scientific explanation as they synthesize information across all the data samples to answer the question. As they begin to think about the relationship (CCC: Cause and Effect) between the sun's movement across the sky and the movement of the shadows (DCI: ESS1.B Earth and the Solar System), the students use their data as evidence to support their thinking (SEP: Constructing Explanations). Teachers can use this task to formatively assess the students' ability to construct a scientific explanation as well as the students' current understanding of how the sun's movement across the sky causes observable patterns in the direction of shadows.

This learning is a progression of science ideas from the first grade. In the first grade, students learned that patterns of sunrise and sunset can be observed, described and predicted (1-ESS1-2). Students also learn that some materials block the light and form a shadow (1-PS4-3). Both of these ideas are prerequisites for this learning. If students do not have a good understanding of these concepts, teachers may need to build that understanding.

For more guidance on using this phenomenon and instructional moves see [NSTA instructional materials: Tree Shadows Phenomenon](#).