

WHAT COUNTS AS EVIDENCE?

Katherine A. Dougherty Stahl

During the Reading First era, the instructional catchphrases were “scientifically based” and “research-validated.” In the new era of the Common Core State Standards (CCSS), we no longer hear demands for teachers to use instructional techniques that have been studied by researchers who have devoted their lives to improving reading instruction in classrooms. Instead, the catchphrase du jour has become a demand for students to provide “text evidence.” Initially, I was optimistic about the high level of thinking, the complex texts, and the emphasis on an integrated approach to literacy emphasized in the CCSS. However, in many of the classrooms that I visit, the translation to practice has been incongruent with what research evidence indicates might be the best way for children to achieve the Standards.

We know that classroom instruction of award-winning children’s classics should breathe life into the texts, not use “close reading” to suck the life from them. Units of study should challenge all students to become better readers and thinkers. For example, students in New York City might compare the segregation described in *The Other Side* (Woodson, 2001) to the segregation in today’s urban elementary schools described in a compelling Village Voice article (Thrasher, 2010). Comparing text evidence from a narrative set in the South in the 1960s to a news article about the segregated public schools in their own neighborhoods today could be used to expand thinking and perspectives. However, rather than inspiring children to think more expansively about the texts they are reading, this prompt for “text evidence”

often requires only literal recall, and children resort to plucking words, phrases, or sentences from texts to satisfy the prompt.

Integrating the disciplines and literacy is a key component of the CCSS. This significant shift has implications for the selection of text evidence. “Disciplines are cultures of practice, and each has its own norms for how knowledge should be created, shared, and evaluated” (Shanahan & Shanahan, 2014, p. 636). In order for readers to identify the appropriate text evidence, they must know what counts as evidence within each discipline. Anyone who has watched *Judge Judy* knows that only the words from a live witness or a police report count as evidence in the courtroom; the words, even written testimony, of an absent witness do not count in Judge Judith Sheindlin’s courtroom. Similarly, literary critics, historians, and scientists have different standards for what counts as evidence, which our students need to recognize. Situating reading, writing, and language instruction within the content areas enables us to explicitly teach what counts as evidence in each disciplinary discourse (see Table).

Evidence in Literary Texts

Literary classics become part of a canon because the themes are timeless and universal to the human experience. Young people today relate to both the plot

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Table Criteria for Evaluation of Text Evidence

Literature (Rosenblatt, 1978)	Social Studies (Wineberg, 1991)	Science (Duschl & Osborne, 2002; Herrenkohl & Cornelius, 2013)	Web Resources (Beck, 1997; Coiro, 2003)
Story grammar elements	Context (time, place written)	Precise language	Accuracy
Theme	Source (author and media)	Quality of data	Author background
Author point of view	Corroboration of information by other sources	Corroboration of information by other studies	Objectivity
Author craft		Comprehensiveness of experimental sample	Recency
Universal human experience		Visual evidence (tables, charts, diagrams, models)	Comprehensive coverage of topic

of *Romeo and Juliet* and the feelings of the characters. The best writers bring us to uncontrollable tears or belly laughs as we sit on a sunny beach or a subway seat reading their intentionally crafted words. Our favorite writers simultaneously transport us while their story touches the deepest part of our souls. In the words of Stephen King (2013), serving as a *New York Times* Sunday Book Review critic,

"The Goldfinch" is a rarity that comes along perhaps half a dozen times per decade, a smartly written literary novel that connects with the heart as well as the mind. I read it with that mixture of terror and excitement I feel watching a pitcher carry a no-hitter into the late innings.

When drawing from a literary source, it is the story elements, author's craft, and expression of the human experience that count as the text evidence (Rosenblatt, 1978). The power of literature is that it helps eliminate our feelings of isolation and expands our compassion for others who may have life experiences or views that differ from our own.

Therefore, when asking students to respond to literature, text evidence includes the author's purpose and the word choices made by the author (Rosenblatt, 1978). Text evidence also includes story elements such as text

excerpts that address the plot, a character's motivation or goals, and a character's evolution throughout the story. Probably the most popular text evidence requested in classrooms and among the easiest to teach is asking students to identify a character's personality traits by extracting quotes depicting what the character says or does to demonstrate those traits.

Although most curriculum materials published after the adoption of the CCSS have moved away from asking readers to apply their own personal experiences as a way of responding to texts, the integration of personal connection is appropriate in responding to literary texts. For example, the following passage came from a critic's book review posted by Faith Draper (2010), the Lansing Children's Books Examiner:

I have to admit, I cried reading this one. Being a veteran myself I know the pain of being separated from family and loved ones. "A Paper Hug" really brought home what the thousands and thousands of children of military personnel experience daily and my heart goes out to them as it does for the troops serving our country.

in hypermedia. Simply plucking a sentence from a history text would not count as evidence for most historians (Wineburg, 1991, 2004). By asking children to identify a phrase or a line from a single historical document as text evidence, we may be violating the principles of what actually counts as historical evidence.

According to Wineburg (Stephens, 2012), "Students know how to find information but many are ill-equipped to answer whether that information should be believed in the first place." Instead, historians try to understand historical events through the examination of multiple documents, both primary and secondary. In collecting information from these documents, they consider the source and the context or setting and they cross-check multiple versions of the event for consistencies (Wineburg, 1991).

- **Source:** Who wrote this text? How did they gather their information? What is the author's background?
- **Context:** When was the text written? Under what circumstances was the text written? Is this a primary or secondary source? Where (in what setting) was the text written? In what kind of publication did it appear? Who is the typical audience of the publication?

Evidence in Historical Texts

Digital transformation has made it imperative for children to learn how to evaluate the quality of evidence that they are reading, whether on paper or

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- *Cross-Check and Corroborate:* How does this text compare to other reports of the event? How is it the same as other reports? How is it different from other reports? What might account for those similarities and differences?

PATHS (Promoting Argumentation Through History and Science) was a National Science Foundation–funded research project designed to teach elementary students the nature of evidence in history and science. A set of lessons that was designed to teach fifth graders to use text evidence in appropriate ways called for them to identify where Rosa Parks sat on her famous Montgomery bus ride (Herrenkohl & Cornelius, 2013). One key point of this lesson series was that reading a single account of the incident and plucking out the sentence describing where she sat had a small likelihood of being accurate!

Evidence in Scientific Texts

Language plays a critical role in determining what counts as evidence among scientists (Duschl & Osborne, 2002). As in the discipline of history, scientists believe that teaching science misses the mark if it only teaches students to read and memorize scientific facts. Learning science requires that students learn argumentation, the essential process for solving problems and advancing knowledge. Unlike the test prep booklets that ask children to develop an argument that includes two pieces of text evidence, the development of a scientific argument

must be preceded by an inquiry *process*. PATHS engaged students in an inquiry process in which the role of the audience as critic was demonstrated as essential to determining what counts as solid evidence (Herrenkohl & Cornelius, 2013). Just as academics must have their research reviewed by a group of peers before it can be accepted for publication, student discourse that includes an explanation and audience review process is essential to determining what counts as evidence in building scientific knowledge. Through engagement in this process, students are taught to question the logic of the predictive theory, the methodology of the experimental process, the comprehensiveness and quality of the data, and the validity of the argument. It is up to the author (or verbal presenter) to create an argument that uses precise language to make this process transparent to the reader-critic. In the field of science, this evidence is often presented most clearly in the form of visuals, be they tables, figures, photographs, charts, models, or diagrams.

In the PATHS study, students had to generate predictions and theories about what causes items to sink or float. Unlike simpler units in kindergarten classes that call for children to record their

observations and categorize the objects, these fifth graders had to develop theories, test their theories with their own selection of items, and then create and defend arguments about what caused items to sink or float. Their classroom peers had to evaluate the evidence by generating questions about the logic of the prediction, the method, or the final theory composed by the experimenters. This is quite different from plucking a fact out of a text and being satisfied that you have met the criteria for presenting text evidence.

An examination of the sample items from the new PARCC and Smarter Balanced CCSS-based assessments indicates that children will be asked to use text evidence to support high-level thinking, concept development, and evaluation. One example is Smarter Balanced sample ELA/Literacy test item 43012 (Smarter Balanced Assessment Consortium, n.d.): “Explain why exercise is important for astronauts while they are in space. Use two details from the video to support your answer.”

Before answering the question, children are called upon to watch a video titled “Exercise in Space.” The video provides an explanation of gravity, not descriptions of exercise routines for astronauts. In order for the fourth graders to be able to answer the question, they need to comprehend the video’s demonstration and explanation of gravity and the implications that space’s lack of gravity has on the body. Embedded within the short video is a description of an experimental study of people who are unable to leave

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their beds (which is physically analogous to space habitation) and the impact that this has on their bodies.

Students will not simply be able to pick a few sentences from an existing text to meet the evidential criteria. The question requires children to make inferences regarding the ways that gravity on Earth forces simple daily activities, like standing, to strengthen the body. Since the information is presented in a video format, children will have to compose their own arguments, not pluck sentences from an existing text.

Evidence in Hypermedia

The CCSS identify the unique demands of literary and informational texts by organizing them as separate strands. That is not the case for hypermedia, which is embedded in all of the existing strands for reading, writing, listening/speaking, and language. *Hypermedia* refers to linked media or information that is connected but stored in different places. It may include visual media or text-based information. Today, hypermedia is often accessed through Web links. Because so much information is easily accessible on the Internet, it is important for the youngest children to critically evaluate the information that they find on websites. Many of the evaluation skills needed are similar to those for reading printed text. For example, whatever we read is presenting a single author's limited perspective. Some of the challenges presented by the Internet that call for explicit instructional attention are

a lack of consistency in multimedia formatting, a lack of quality control, access to an infinite amount of information, problems with currency, and most important, increased exposure to a growing amount of information for young readers designed to sell, discredit, deceive, or persuade. (Coiro, 2003, p. 29)

We are setting a dangerous precedent if we are training readers to count whatever they see in text as reliable, valued evidence. Unlike scientific journals or other traditional print sources, the Web does not have a common standard for ensuring the accuracy or reliability of information. Therefore, we need to teach our students how to corroborate information that they find on the Web. Children in the elementary years need to be explicitly taught to find the date of publication, the sponsor of the website, and author information. Identifying this key information can serve as the first step in a critical examination of objectivity and author or website bias.

Conclusion

As educators, we want our students to grow as a result of reading great literature and to learn from a wide variety of informational sources, including new formats that become available as technology evolves. However, we want our students to think deeply about these sources, integrate new information with their existing knowledge, compare multiple sources, and critically evaluate what they read. In order for our students to meet these standards, we must become accountable for asking our students the kinds of questions that go beyond the literal information found in texts. Historians, scientists, and literary critics have paved the way for us to identify what counts as evidence within each area of disciplinary study. Our students need to be taught to distinguish how the types of evidence valued in each discipline contribute to the ongoing development of our knowledge about ourselves and the world around us.

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