

Show Me the Proof: Requiring Evidence in Student Responses

To be prepared for college and careers, students must know what constitutes evidence and why it's important.

Nancy Frey and Douglas Fisher

As teachers and curriculum developers learn more about the actual implementation of the Common Core State Standards, they realize that evidence is often missing from students' responses. For example, many classroom discussions are interesting and engaging, but upon deeper analysis and reflection, teachers become aware that they do not involve students' provision of evidence for their thinking. Unfortunately, students do not have a lot of experience with furnishing evidence, and in some cases, they have been encouraged to focus on their own experiences rather than do so. That has to change if students are going to demonstrate mastery of the new core standards. Instructional leaders would be wise to talk to teachers about the expectation for evidence and to observe classroom instruction with an eye and ear toward students' use of evidence in responses.

Consider the following example, which in the past might have been viewed as an exemplary lesson. The students are discussing coastal erosion as part of a unit on earth science. The teacher has given the students information about sandstone and its ability to absorb water, a terrain that includes many cliffs, and the impact of tides on those cliffs. The students then watched a video clip of a house

sliding down the hillside during an exceptionally strong storm. Their conversation afterward reveals their interest and a lack of evidence in their responses.

Marisol: Do you think that there were people in the house when it went down?

Scott: I didn't see anybody. But it went pretty fast. They didn't even have any warning.

Jasmine: But they lived on that cliff, so they shoulda known. It's a dangerous place to have a house, like Mr. Adams said.

Scott: Is there anything that you can do to protect the houses? What about your house?

Marisol: We live in a canyon area, but not by the water, so I think that wouldn't happen.

Jasmine: Yeah, probably. The storm was heavy so it caused that to slide.

Marisol: My parents wouldn't have bought the house if it was going to fall off.

The students' conversation does not include any of the information that they learned about sandstone nor does it focus on the topic of coastal erosion. In fact, Marisol's house could be at risk if large quantities of water were absorbed in the sandstone on



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Watch the Video

Watch a teacher model the use of evidence in her own writing.
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which her family's house was built. But even that discussion does not prompt them to use the evidence from their learning in their discussions.

Setting Expectations for Evidence

First, teachers need to clearly communicate their expectation that students will include evidence in their verbal and written responses. US history teacher Michael Sanchez has a large poster in his room that says "Show me the proof," and he regularly refers to it during the lesson. He also reminds students of that expectation each time they begin to work collaboratively or engage in writing. For example, as they were beginning to read sections of *Trench Art* by Nicholas Saunders (Pen and Sword, 2011) as part of their investigation of World War I, he reminded his students to "remember to collect evidence for your responses.

If you make a point about the life of the soldiers during World War I, you should have evidence, which can come from the various texts we've read."

The second thing that teachers can do is discuss the standards and types of evidence with their students. Many teachers have incorporated the language of legal standards of evidence into their expectations for students. For example, Marla Jenkins asks her students if their evidence is "beyond a reasonable doubt" when they present their solutions to the Algebra II problems they are solving. Government and economics teacher Kevin Stein asks his students whether they have "substantial evidence" or "clear and convincing evidence" when they discuss their perspectives on political issues. He said, "I want my students to recognize that their discussions can be informed by the type of evidence they believe that they have. Of course,

they're allowed to have an opinion and make an argument, but I want them to recognize when they are doing so and when they are providing evidence for their claim. I think that this will make them much more prepared for college."

Evidence in Writing

In addition to the use of evidence in discussions, students need to provide evidence in their writing. Mostly, students want to support their claims with quotes. But there are more ways to show evidence for their arguments, including:

- Statistical evidence in which numbers are used to make a point. For example, in his paper for his senior seminar class about US consumerism and the pressure to buy, Vincent included the following statistic: "for the first time, the number of people on food stamps will exceed the 30 million mark." He was using this statistical evidence to support his claim that people are spending beyond their means and needing government assistance.
- Testimonial evidence focuses on the direct and verifiable experience of a specific person. This is often used in eyewitness situations or when quoting an authority. Vincent quoted Anna Quindlen's essay "Stuff Is Not Salvation" (2008), noting that "these are dark days in the United States: the cataclysmic stock-market declines, the industries edging up on bankruptcy, the home foreclosures and waves of layoffs." He used the testimonial evidence of an essayist to support his claim that US citizens have less money to spend.
- Anecdotal evidence is based on an individual's personal observations of the world. Although often

dismissed, anecdotal evidence can be used to disprove generalizations, providing the one example that contradicts the claim. In his essay Vincent said, “I, myself, have purchased things that I don’t need. I, too, got caught up in the buying frenzy that is America.” Vincent added this evidence to support the idea that there is tremendous pressure to “keep up with the Joneses.” Students need to be reminded that this type of evidence can be effective but that it needs to be combined with other types of evidence.

- Analogical evidence involves a comparison of certain similarities between things that are otherwise unlike. This type of evidence is powerful in the absence of other types or as a supplement to those

already provided. Analogies work because humans like to find connections between and among things. In Vincent’s essay he wrote, “Workers are trampled by eager shoppers like salmon heading to spawn.” This analogy helps the reader create a mental image of thousands of people desperate to spend their money, which Vincent argues they do not have. But the use of analogies can be problematic, especially if students are never required to provide other types of evidence. If Vincent had only provided this analogy, he would have failed to meet the standards of evidence for his claims.

Teaching and Expecting Evidence

Students must be taught to use evidence in their discussions and in their writing. They need examples from their teachers about appropriate standards of evidence as well as different types. Teacher Heather Anderson models the use of evidence in her writing (see video) as part of her 10th-grade English class. The students in Chuck Hargrove’s math class observe another group as they provide evidence for their answers through a “fishbowl” discussion about solving multiple-step problems. The students in Monique Allen’s World History class have a library of videos on their class website with examples of students talking about how they find evidence to include in their writing by using primary source documents. In other words, different teachers provide students with different resources for integrating evidence into their thinking, discussions, and writing.

To illustrate the type of discussions that occur as a result of the focus on using evidence, when the students in Mario Milton’s Life Science class discussed

genetic testing, they relied on evidence to make their claims. Their conversation was informed by both their readings and their personal experiences.

Deedra: I think genetic testing should be automatically done as part of the prenatal screening because there is evidence that early identification can improve the outcomes for the child. For example, the *Newsweek* article about the baby that needed surgery right when it was born that they knew because of the testing.

Andre: I agree that there should be genetic testing available, but I don’t think it should be mandatory because it’s very expensive. Remember the article we read about the wasted money on genetic testing for people with no risk factors?

Paulina: I don’t agree. I don’t think there should be this much genetic testing because people might want to get rid of the baby. I remember the video that the woman with a disability said, “Are you trying to prevent people like me from being born?”

Although it’s a controversial topic, the students were able to have a discussion in which they used evidence to guide their thinking. They understood the issue deeply and were able to write sophisticated essays in which they explored the pros and cons of genetic testing. They presented many more ideas than we have space to cover, but suffice it to say that their thinking, not to mention their achievement, was improved when they learned to integrate evidence into their discussions and writing. Requiring evidence from students is a positive step forward in education because it mirrors the expectations that they will face in in college and the workplace. **PL**

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