

Reshaping Research Skills under the Common Core State Standards

BY SCOTT LALIBERTE



““**N** ever let a good crisis go to waste.”—Winston Churchill

There are precious few people in this world who consider research to be glamorous. Those who do are generally the people who are very good at it or are at least fond of it. Still, the process of research remains one of the most important tools in the educator’s quest to engage students. Regardless of content area or even age, setting students on an independent search to discover deeper knowledge requires a context—and with that, a reason to learn. This outlook is a central theme to the adoption of the Common Core State Standards, and the words of Winston Churchill above can be instructional to the process. The standards are an opportunity to improve upon things that we should, driven by mandate. Let’s work on things because we should do so and, by the way, we have to do so.

While it’s hard to say that a change in school curricula constitutes a “crisis” per se, significant and mandatory change does bring with it a level of discomfort that can border on that crisis level for some practitioners. The clamor surrounding adaptation to the Common Core State Standards is another round of ever-changing expectations to some and yet to

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others a long-awaited alignment of expectations to outcomes. It all depends on where we're standing and what path brought us to that spot. While the consternation is understandable to seasoned educators, there are also many who have been waiting for just such an opportunity; finally, we can show a clear progression from kindergarten to college and career that is grounded in the realities of this age.

Like most large initiatives that have come upon our profession, the devil is in the details. How do we make this happen? How will we re-rig the ship while under sail? The good news is that, at least sometimes, we can find angels in those details as well. With a proper perspective, we find seeds of opportunity that bring about changes much needed and spurred on in nonnegotiable urgency by at least the appearance of a good crisis.

One such seed found in the Common Core State Standards (CCSS) is a change—and a clarification—of a progression of research skills long overdue for adaptation. The skills surrounding responsible information-age research are woven in amongst the ELA standards in a manner that is integral to their meaning. It forms the backbone of thoughtful information processing that applies to all disciplines that require students to seek out and synthesize. A study commissioned by Achieve, Inc. (2012) found that “[m]any skills are reflected throughout the CCSS in either or both subjects—skills such as ... research skills” (p. 2). This point acknowledges the overarching emphasis of these skills on all disciplines using independent research as a teaching method. This is also present in the anchor standards, which guide the composition of all ELA standards and apply to all disciplines. In particular, we look to ELA anchor standard 7, Research to Build and Present Knowledge, and see that all acquisition and communication of outside research is to be addressed using consistent standards.

Drawing a wider lens, the standards addressing research can be grouped into four larger categories:

1. topic development
2. finding and citing sources of information
3. evaluating the credibility of sources
4. synthesis and clear communication of results

While these components of research are hardly new, these areas require adaptation in an era that features unprecedented access to great bundles of information, much of which is generated by sources that are either guided by commercial interest or whose expertise in given areas is unconfirmed. This has introduced new areas of emphasis into the research process. Whereas pre-Internet, or at least pre-Web 2.0, the act of physically locating information took precedent in the process, now information is as close at hand as a smartphone or tablet. *Research has become less about the search itself and more about sifting and synthesizing the results of that search.*

In order to develop a clearer picture of exactly how this looks for students, we consider each of the components identified above, along with the instructional implications of that component.

Topic Development (CCSS ELA standard W7, grades 6–12)

With the wealth of information available to researchers, both students and teachers alike must begin with a careful process of identifying the specific subject and nature of the information they seek. The more focused an inquiry is, the more specific a result. This is a significant change from the days when research was done “manually,” when finding the information was labor intensive and time consuming. In that environment, the narrowing or adaptation of a topic was typical during the course of research; in fact, it was expected. In the present state of information accessibility, there is no shortage of information available in fractions of a second. The result of a generic or unrefined topic search is information overload. This places a greater responsibility on student researchers to define more clearly that for which they are searching prior to engaging in the research process, instead of as a central part of it. Whereas in a more manual research age, a topic would evolve and narrow as the researcher gained access to information, now the sheer volume of information requires a more carefully defined starting point. Student researchers must know more about their topic even to begin.

Implications for instruction: This particular standard requires much greater attention be given to the development process for research topics. By considering the volume of information at the outset of the research process, students can ensure that time spent on collecting information is maximized. A practical approach develops a separate step for “pre-research,” focused specifically on the breadth of a given topic relative to the age and ability of the students. By adapting the research process expectations to include a greater focus on topic development prior to search, we can ensure a greater likelihood of success for the student researcher.

Finding and Citing Sources of Information (CCSS ELA standard W8, grades 6–12)

The emergence of the verb “to Google” has changed forever the manner in which we find and consume information. With web searches executed at a fraction of a second and the overwhelming number of results returned from even the most obscure search, finding some form of information is no longer an issue in research. Among the many new challenges that come with Bing, Google, and Yahoo! is a perception on the part of many people that because they can access this wealth of information from a smartphone while sitting in a public area, this information is somehow also floating about in the public domain. Yet the ethics and economics of intellectual property remain in place. Public access to information does not connote public ownership of it.

Citation has become a fuzzy art for many inexperienced researchers. In larger part, we cannot assume that attributing information to its creator is in any way intuitive in an age when it is so readily available. For some, web-based citation tools make formatting faster and easier, but it’s necessary for emergent learners to come to the process knowing that it’s expected that they actually go there and cite to begin with. It must be taught as an integral part of the process of research. Intellectual property has an owner and an economic value. Certainly the owners of that information have the right to lend or sell their ideas, but they must choose to do so. In most cases, student researchers are not required to compensate owners of information financially (beyond the cost of publication), but they do have a moral and legal obligation to give credit where credit is due. This has to be a point of emphasis in current research practice, and it is a part of the Common Core State Standards.

Implications for instruction: Development of introductory activities that require students to explore the financial and legal implications of intellectual property laws in context of their assignment seems to be time well spent. This is true even of our youngest researchers. Guest speakers, exploratory web-based activities, or other student-centered lessons that are specifically designed to develop student awareness of the value of intellectual property can build an appreciation for the importance of citation. The end result here is the need to build experiences around the responsible stewardship of intellectual property into any student research project.

Evaluating the Credibility of Sources (CCSS ELA standard W8, grades 6–12)

The presence of voluminous information having been established, as well as the ready access to that information, gives rise to the third category. Which information is trustworthy? As we all know, the Internet is a marketplace and in it one can find nearly

anything conceivable for sale. The predominant purpose for composing material for the commercial part of this environment is persuasive. This means that student researchers cannot assume the absence of bias in anything they encounter. Determining source credibility has always been an essential skill to research, but it is even more a factor today. The creativity and pliability of the medium demand that researchers look beyond the bells and whistles of web pages and identify both who has created a piece of information and why they did so.

Many educators are now calling for what is described as “web literacy,” or the active teaching of the language of web pages as a doorway to the evaluation of source credibility. *ESchool News* featured an article by Alan November and Brian Mull (2012), entitled “Why More Schools Aren’t Teaching Web Literacy—and How They Can Start.” The authors make just such an assertion—that the research process requires a different level of familiarity when it comes to understanding the process and language of Internet searches. The authors assert that “we must prepare our students to make meaning from the overwhelming amount of information at their fingertips, and we must guide their ability to create and publish new information worldwide” (p. 2). The authors acknowledge the need for a new approach to making meaning from web-based information resources right down to understanding how to verify a source based upon a URL address.

The blossoming of Web 2.0 technology has opened content creation to anyone with a functioning web-accessible device and the will to communicate. This creates the benefit of global mass communication and a forum for expression that literally changed recent history. It also creates a demand for content consumers to evaluate all of this information with a new level of vigilance. Bias is inherent, and the ability to verify the source of information, along with any slant that may come with it, is crucial to contemporary research skills. Bias is nearly unavoidable, but if identified and factored as a part of a presentation, we can ensure an accurate conclusion for researchers. Student researchers looking to consult opinion as substantiation to their work do so to their own benefit or peril; the expertise of the speaker needs to be verified as a part of the process, as much as does the content of the material.

Implications for instruction: Identifying bias in message or purpose is a crucial element of modern research. This particular component lends itself well to interdisciplinary cooperation. In particular, partnerships with IT professionals within the school or community can be valuable in developing “web literacy.” This kind of collaboration ensures that students receive substantive instruction in the technical elements as well as in content and form. Units that feature exploratory activities requiring students

to evaluate source credibility themselves, under the guidance of teaching staff, can lend context to this concept. In order to be responsible consumers of information, they must have the ability to verify the credibility of speaker and message before they build it into their conclusions.

Synthesis and Clear Communication of Results (CCSS ELA standard W7, grades 9–12)

Once information has been collected and verified, the final challenge to researchers is to bring their results into a coherent and well-substantiated form. Whether research is presented in written form or through presentation or exhibition, the focus is on a clear communication of ideas. While this has always been an important part of the work of research, it is important now more than ever for two main reasons. First, research conducted in a school environment is generally a form of assessing competency. Where the ability to process and synthesize information is so much more challenging in this environment, it is crucial that student researchers be able to convey their findings in a manner that accurately represents their level of competence and understanding. Subpar communication will result in an inaccurate portrayal of a student's level of ability to think and process information and thus hampers a teacher's ability to determine competency in those areas. If research is to be used as a form of student assessment, results must be conveyed with a degree of clarity that displays accurately their level of competence with content under study.

Second, current culture and norms regarding communication have evolved around a value for speed and concise expression. Whether text messaging, tweeting, or posting on social media, limited characters or time result in our students finding ever more creative ways to say a lot quickly and without elaboration. The ability to formulate and substantiate a complex idea is still of great importance and should be preserved in the instructional environment. The Common Core State Standards are written around the outcome of "college and career readiness"; certainly either environment requires the ability to compose a well-supported position on matters of substance. There are places in the modern world for both concise communication and elaboration.

Implications for instruction: This element of CCSS research represents the culmination of the process. Again, this particular requirement presents teachers with an opportunity for collaboration. Many English language arts teachers have long waited for consistent expectations for student work across disciplines, and this is their time to shine. Many different templates and protocols exist for student conferences, evaluating written work, and determining the appropriateness of flow and structure of a thesis. Cooperation between teachers of different content areas provides

a broader context for student work. Content-area teachers often reply that they lack the academic preparation to teach or assess composition. While this may be true in the technical sense, the ability to gauge the flow of a composition or the degree to which a position is substantiated by reliable research is within the capabilities of all educators. The key is in establishing clear standards for student presentations and ensuring that teachers have access to needed instructional support from one another and opportunity to collaborate with teachers from related content areas.

While they do present a challenge, the Common Core State Standards are far from a crisis. They are an opportunity for educators to step back and take a broader view of our charge. The benefits behind our transition to them are substantive and numerous. The standards encourage students to be responsible stewards of knowledge. Surely in the information age there are benefits to the means to locate, evaluate, sort, and communicate that information in a variety of contexts. Our efforts to educate young people in such an environment would seem incomplete without a well-developed approach to research. The tools to develop such an approach are now in our hands.

References

- Achieve, Inc. (2012, December). *Understanding the skills in the common core state standards*. Retrieved from <http://www.achieve.org/files/Understanding-Skills-CCSS.pdf>
- Blow, M. (2011, December 8). *Taking risks for 21st century research skills*. Retrieved from <http://www.scholastic.com/teachers/top-teaching/2011/12/taking-risks-21st-century-research-skills>
- Blow, M. (2011, December 22). *Common core research ideas*. Retrieved from <http://www.scholastic.com/teachers/top-teaching/2011/12/common-core-research-ideas>
- Crovitz, L. G. (2012, April 17). *Before "Watergate" could be Googled—The Internet is no substitute for hands-on reporting*. Retrieved from <http://online.wsj.com/article/SB10001424052702304356604577341883244096256.html>
- November, A., & Mull, B. (2012, May 8). *Why more schools aren't teaching web literacy—and how they can start*. Retrieved from <http://www.eschoolnews.com/2012/05/08/why-more-schools-arent-teaching-web-literacy-and-how-they-can-start/>
- November, A., & Mull, B. (2012, May 25). *Web literacy: Where the common core meets common sense*. Retrieved from <http://www.eschoolnews.com/2012/05/25/web-literacy-where-the-common-core-meets-common-sense/>
- O'Connor, J. (2013, April 1). *What common core standards mean for media specialists*. Retrieved from <http://stateimpact.npr.org/florida/2013/04/01/what-common-core-standards-mean-for-media-specialists/>

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