The Handwriting Debate

Learning how to form letters and words on paper has been a feature of American schools since the days of inkwells. But with the proliferation of personal computers in the 1990s and smartphones and tablets in the 21st century, many educators and policymakers have been questioning the usefulness of spending ever-more-valuable class time teaching handwriting to students who have been born into—and will live and work in—a digital world. At the same time, new research has been emerging that points to the educational value of handwriting in ways that go well beyond being able to read cursive or take notes without benefit of a handheld device.

Today, after the English Language Arts (ELA) section of the Common Core State Standards arrived without standards for cursive writing, the debate has come to state boards of education, who must decide whether to include handwriting standards in the extra 15 percent allowed them under the Common Core agreement or leave the issue to the discretion of districts. This Policy Update 1) looks at handwriting in schools today; 2) examines the pros and cons of the debate, particularly in light of research; 3) reviews some key policy considerations around handwriting; 4) provides examples of state actions in this area; and 5) includes resources for more information.

Handwriting in Schools Today

Handwriting encompasses two distinct forms: manuscript or printed writing using block letters that are not connected when forming words, and cursive writing, where successive letters are joined and angles are rounded. In the United States, printed writing is generally taught beginning in preschool or kindergarten and continuing through 2nd grade, while cursive is taught beginning in the 3rd grade and continuing through 5th grade (in many European countries, students begin cursive rather than manuscript instruction on first entering school). Through most of the 20th century, students in the early grades typically received 30 to 45 minutes of handwriting instruction every day. Today the average is closer to 15 minutes, which is actually the amount of instructional time recommended by experts. A 2007 national survey of first through 3rd grade teachers reported that 90 percent of the teachers said their schools required instruction in handwriting.¹

Arguments and Research For and Against Handwriting Instruction

The arguments against requiring handwriting instruction—cursive, in particular—are based on what might be called “common sense logic” rather than on research. The heart of the argument is simply that with the ubiquity of digital communications, cursive is “old” technology that students no longer need when it comes to being college and career ready—the vast majority of business communications are through digital media, college instructors expect papers and reports to be typed, and more and more tests are going online. If quick notes need to be taken in the absence of a smartphone or laptop, printing is always available. Those arguing against teaching handwriting also point out that given today’s already overcrowded elementary school curriculum and the importance being placed on reading and math instruction, there are simply more important subjects that need to be taught—including keyboarding. Realists note that since handwriting is not a tested subject, it is little wonder that it gets less emphasis in the classroom.

Those who favor handwriting instruction also have “common sense” points: there are and will likely always be times when handwriting notes or lists will be necessary or more convenient—and cursive is faster than printing; handwritten correspondence to individuals has a greater impact on the receiver than emails or digitally printed communications; students, especially in elementary school, still turn in handwritten assignments; there is still a need to be able to read cursive, especially in the case of primary-source documents; and cursive is a powerful cultural and historical link to human development, since the drive and ability to draw symbols with our hands is one of the defining characteristics of our species.
But the strongest arguments in favor of teaching cursive are emerging from a growing body of research from the last 10 to 15 years that points to the educational benefits of learning to write by hand—benefits that go well beyond just the ability to write and read cursive. Following are some of the findings.

★ **Cognitive and Motor Skills Development:** Because handwriting is a complex skill that involves both cognitive and fine motor skills, direct instruction is required to learn handwriting (it is not good enough to just give a workbook to students and hope for the best). However, the result of good instruction is that students are benefited both in their cognitive development and in developing motor skills.

★ **Literacy Development:** Handwriting is a foundational skill that can influence students’ reading, writing, language use, and critical thinking. Students without consistent exposure to handwriting are more likely to have problems retrieving letters from memory; spelling accurately; extracting meaning from text or lecture; and interpreting the context of words and phrases.

★ **Brain Development:** The sequential hand movements used in handwriting activate the regions of the brain associated with thinking, short-term memory, and language. In addition, according to Virginia Berninger, Ph.D., professor of educational psychology at the University of Washington, cursive in particular is linked with brain functions around self-regulation and mental organization. “Cursive helps you connect things,” Dr. Berninger said in an interview.

★ **Memory:** The act of handwriting helps students (and adults) retain information more effectively than when keyboarding, mostly likely because handwriting involves more complex motor functions and takes a bit longer. One study comparing students who took notes by hand versus classmates who took notes by computer found that the handwriters exhibited better comprehension of the content and were more attentive and involved during the class discussions.

★ **Written Expression:** Elementary-age students who wrote compositions by hand rather than by keyboarding, one researcher found, wrote faster, wrote longer pieces, and expressed more ideas.

★ **Learning Disabilities:** Handwriting instruction can be especially valuable to many students with disabilities. As one professor of occupational therapy has written, “One of the first things educators can do to ensure that students with special needs develop good writing skills, besides teaching them spelling and basic writing processes, is to provide them with formal handwriting instruction.” Students with learning disabilities are more likely to need extra support to improve their handwriting, but improved handwriting can both help improve academic outcomes and help in fine motor skill development.

Handwriting advocates make another argument that is related to research—namely, the lack of research around what happens to brain development in the absence of handwriting. Psychiatrist and neuroplasticity researcher Norman Droidge makes this point:

Some neuroscientists say if cursive disappears, those cognitive skills will simply be replaced by new ones, just as they always have since humans began leaving their marks on cave walls. No doubt the lost cognitive skills will be replaced by new ones. But, isn’t it irresponsible to promote such changes without understanding if these changes are beneficial or harmful to the learner?...It is quite possible that by relaxing…handwriting standards and also by reducing practice time for penmanship, we may have hampered and in some cases damaged the learning process.

**Issues to Consider**

State boards that are weighing proposals to maintain or strengthen standards around handwriting may want to include the following areas in their discussions.

★ **Using the Common Core’s 15 Percent Rule**—The Common Core allows states to add up to 15 percent in additional standards for both ELA and math (i.e., as calculated in terms of instructional time, 85 percent would consist of time needed to meet the Common Core standards, while 15 percent of instructional time would be needed to meet the state’s additional standards). This is a grade-by-grade consideration, since handwriting standards would not be adding extra instructional time in the secondary school years.

★ **Simple Statement versus More Detailed Guidelines**—Many state ELA standards include only the most basic statements about handwriting (for example, “produces legible handwriting”), leaving teachers and schools without benchmarks or ways to see where students have gone off track when they don’t meet
the standard. States may consider including grade-by-grade targets within their standards for writing in order to provide more detailed guidance.

**Communicating about Handwriting**—Because of the ongoing and very public debate around handwriting requirements, states that include handwriting in their ELA standards should clearly explain to educators and parents the educational, research-based benefits of learning manuscript and cursive handwriting. This is especially important because so much of the public debate is based on anecdotes and personal experiences.

**Addressing the Uneven Quality of Handwriting Instruction**—Experts note that using current techniques and goals, handwriting can be taught much more efficiently and effectively—and without as much pain for students—than in the past. But many elementary teachers graduate from their preparation programs with little or no formal instruction in how to teach handwriting—only 12 percent of the elementary teachers in the survey cited earlier reported taking a course in handwriting instruction, often leaving them to improvise once they are in the classroom. Some local school systems and handwriting curriculum publishers offer training, but teachers often don't have access to these opportunities. Encouraging districts and schools to adopt handwriting policies or programs—and back them up with training—is one way to begin improving instruction.

### State Actions

**Alabama:** In July 2012, the state board of education voted to include cursive in the 15 percent of state standards added to the Common Core.

**California:** The state board added to the Common Core a standard for 3rd graders specifying that students “write legibly in cursive or joined italics, allowing margins and correct spacing between letters in a word and words in a sentence.” For 4th graders, the standards state that students “write fluidly and legibly in cursive or joined italics.”

**Georgia:** In July 2012, the state board voted to include cursive in the state’s ELA standards. According to a state Department of Education spokesman, “The board came together and voted to include cursive writing. Technology is still important but...to be successful anywhere you need to have legible handwriting. Cursive is always going to be around.”

**Indiana:** Indiana education officials created a stir in April 2011 when the state Department of Education sent a memo to principals noting that the Common Core ELA standards “do not include cursive writing at all. Instead, students are expected to become proficient with keyboarding skills.” The memo declared that the current 3rd grade requirement for cursive would no longer be in effect for the 2011-2012 school year. “Schools may decide to continue to teach cursive as a local standard,” the memo said, “or they may decide to stop teaching cursive next year to focus the curriculum on more important areas.” In early 2012, a bipartisan bill to reinstate the cursive requirement passed overwhelmingly in the state Senate, but later died in the House.

**Massachusetts:** Soon after adopting the Common Core, the state board added the standard that 4th graders should be able to “write legibly by hand, using either printing or cursive handwriting.”

### Resources for More Information

**Handwriting in the 21st Century? An Educational Summit**—The Summit brought together researchers and education thought leaders in January 2012 to discuss whether—and how—handwriting should be taught in today’s classrooms. The Summit’s website includes a summary of the research, videos of presentations, and the results of a survey of Summit participants on key issues around handwriting and keyboarding. Available at [www.hw21summit.com](http://www.hw21summit.com). An Education Week article about the Summit is available at [www.edweek.org/ew/articles/2012/01/25/18handwriting_ep.h31.html](http://www.edweek.org/ew/articles/2012/01/25/18handwriting_ep.h31.html).

**Written-Language Production Standards for Handwriting and Keyboarding (Grades K–8).** An outgrowth of the Handwriting Summit, this set of national standards for written-language production offers developmentally appropriate, research-based indicators to integrate handwriting and keyboarding into the curriculum. Available at [www.hw21summit.com/standards](http://www.hw21summit.com/standards).


**Creating Better Readers and Writers: The Importance of Direct, Systematic Spelling and Handwriting Instruction**
**Selected Media Articles**


**Endnotes**


3. Ibid.


12. Ibid.


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