

April 19, 2007

Is the pen still mighty in the computer age?

Candace Lombardi, for News.com

Your grandchildren may use a stylus on a tablet PC instead of a Bic on tablet paper, but they will continue to write.

That's because even in an era when elementary school students are adept at mousing and teenagers are fiends at text-messaging, some experts say that writing with a pen is still the backbone for teaching people how to read and learn facts.

The difference will be in how the characters are made.

Cursive writing is introduced as part of the English language arts curriculum at the second or third grade level in most states, according to James Miles, senior associate at the International Center for Leadership and Education.

But as states re-evaluate the standards that dictate to schools what students need to know--including the seemingly universal addition of requirements for computer literacy--there is a lot of discussion of whether cursive should even be taught. If it's removed as a requirement, many of today's new teachers, brought up in the computer age themselves, will probably decide against teaching cursive handwriting, said Miles.

"The teachers we have coming into the classroom now were born in the late '80s, so they weren't taught it. It wasn't a focus or priority for their teacher," said Miles.

While cursive skills may be waning, QWERTY skills are on the rise. Today's youngsters are probably better typists than their parents were as children, and perhaps even as adults.

Typing isn't even called typing anymore, what with the PC having made the typewriter as quaint as a Conestoga wagon. Now referred to as keyboarding, it's introduced as part of state standards for computer skills in the second and third grade.

Miles said that based on anecdotal discussions with teachers across the country, the average student exiting fifth grade can touch-type about thirty-something words per minute with fair accuracy. (For comparison, the United States Office of Personnel Management requires 40 wpm for "Clerk-Typist" positions.)

Cursive shouldn't be confused with penmanship, the act of writing with a pen or pencil. Printing is still one of the main teaching methods for reading and writing. Educators call it "writing to teach." Handwriting, which has evolved into a hybrid of script and print, should stay around for quite some time.

"If I go back to my generation, we did the Palmer penmanship (method), and you spent hours getting the tails and stems going the right way. That has gone by the wayside. Basically, what you do now is some form of cursive mixed in with some of the print so we don't necessarily have all our letters connected. The letters look more printed than cursive and it's better for speed," said Miles.

The Palmer method--which should be familiar to many baby boomers, and certainly to their parents--is no longer the method of choice. Just as the number of television channels blossomed with the advent of cable, there are now over a dozen methods of handwriting put forth by various educational resources and textbook manufacturers.

D'Nealian, one popular method of handwriting taught today, incorporates some of the pen movement and style of traditional penmanship, but has fewer flourishing loops and looks closer to printing. Another cursive/print font called Handwriting Without Tears, emphasizes consistency and legibility, but does not dictate to students how the letters should be made with the pen.

Regardless of the variation, most cursive fonts taught today forgo the extra loops and flourishes of the Palmer method in favor of speed and clarity. Some of the companies selling handwriting programs also include European characters, a sign of the expected diversity that today's students will experience in the classroom and later in the working world.

"The Old English writing of calligraphy was a way of writing at one point. We got away from that to a more expedient way and I think this is just a progression," said Miles.

Writing with a pen or pencil is still, however, a requirement for completing the essay portions of state standardized tests and the SATs.

Even some college professors prefer the pen to the keyboard.

David Cole, a professor at Georgetown University Law Center, banned laptops from his classroom in part, he said, because writing in longhand forces students to pay more attention.

"The (laptop) note-taker tends to go into stenographic mode and no longer processes

information in a way that is conducive to the give and take of classroom discussion. Because taking notes the old-fashioned way, by hand, is so much slower, one actually has to listen, think and prioritize the most important themes," Cole wrote in an essay published by the Washington Post.

Sargur Srihari, a distinguished professor of computer science and engineering at the State University of New York at Buffalo, is studying the individuality of handwriting (PDF) to develop handwriting analysis software for use in the legal system.

"One little girl said, 'I don't like to write, because when you make a mistake you have to erase. On the computer, you just go back.'" --James Miles, senior associate, International Center for Leadership and Education

"It's still used in testing children's reading comprehension and that carries over into colleges. The midterm and final are still handwritten, particularly in the sciences and engineering where you are asked for equations," said Srihari.

Srihari has discovered a distinct difference in handwriting between those under 24 and those over 45. Like Miles, he attributes the differences to a shift away from an emphasis on cursive writing in schools.

"We look at certain broad features called macro features in handwriting. These are things like general slant and connectedness of writing, the size of the writing. Micro features look at the strokes and capture three levels of features of individual alphabets and strokes. The primary task was to see if two samples were made by the same person, secondary was whether it could identify demographics," said Srihari.

With about 82 percent accuracy, Srihari's handwriting analysis software can distinguish whether an h, d, x, b, v or l was made by someone under 24 or over 45.

For one comparative study on handwritten characters (PDF), he collected three distinct writing samples from over 1,000 people representative of the U.S. population and scanned them into a computer. Srihari identified that key style characteristics can be used to determine a writer's age.

"Younger people aren't really given penmanship lessons, or something along those lines. The way they hold the pen itself is not quite right in terms of the most comfortable posture which comes with experience. Because of the lack of practice, the skill is somewhat going away," said Srihari.

And even in the ascendant realm of keyboarding, youngsters' fingers aren't behaving as they

used to.

"From a very early age they have been on the computer and can navigate very quickly. Now there is the concern that we no longer use the correct fingering, but if the kids are doing really well without the correct fingering, is it important that we hold on to these old traditions? I'm not sure," said Miles.

So it goes, as the old traditions give way to the technology of the young.

"One little girl said, 'I don't like to write, because when you make a mistake you have to erase. On the computer, you just go back.' I thought, wow. That's this generation," said Miles.

Information contained in this CNET News.com report may not be republished or redistributed without the prior written authority of CNET, Inc. For Permission, contact permissions@cnet.com.
[Copyright 2007](#)

[Privacy Policy](#) | [Search](#) | [Corrections](#) | [RSS](#) | [First Look](#) | [Help](#) | [Contact Us](#) | [Work for Us](#) | [Site Map](#)