



4 Predictions FOR STUDENTS' TOMORROWS

To make students' futures better, we need to consider what skills they will need—and teach them.

Erik Palmer

If we really want to prepare students for life beyond school, we could begin by asking ourselves what pieces of our own education we are using now as adults. That is an edgy question, and many teachers will take offense if anyone suggests that, in spite of their personal, deep love of haiku/Shakespeare/geodes/the Articles of Confederation/cosine, most adults have never needed deep knowledge of any of those to succeed.

The truth is, many highly successful people gain success without remembering large amounts

of material that they learned in school. When the Colorado Student Assessment Program was introduced, Bill Owens, the governor at the time, refused to take the test, despite being a proponent of standards and testing.¹ The legislators who did take a version of the test did not do well. This can be read as criticism of the politicians behind big tests, but it is possibly more of a criticism of our curriculums.

All of us would fail most of the tests we took in school. The information we were tested on has not been relevant to our lives and has been forgotten.

CREATIVA IMAGES/SHUTTERSTOCK

Does that mean we've been teaching the wrong things? Is it possible that *The Scarlet Letter* and the dates of the Hundred Years War are not crucial to life after school? Heresy, right?

What parts of your education have been critical to your adult success? What do you wish you had been taught? Many adults say they wish they were better at public speaking, so let's teach more oral communication. What else? These are tough questions that, answered truthfully, could radically change what we teach.

The relevant, long-lasting lessons from our own education will likely be relevant and long-lasting for our current students. But the world our students graduate into will not look exactly like the world of 2016. We want to prepare students for

Is it possible that *The Scarlet Letter* and the dates of the Hundred Years War are not crucial to life after school?

their futures, which leads us to make predictions. This is a tricky business and not one with which educators have had a lot of success. I remember learning to make computer punch cards because it was the skill of the future. I was also taught BASIC programming because *that* would be the key to getting jobs. There was a "Golly, kids, look at the new-fangled gadgets!" mentality behind these efforts, which, unfortunately, still exists.

When we are asked to think of the future, our minds go to hovering cars, 4D printers, teleportation, and knowledge chips implanted into the brain. I don't want to make guesses about the likelihood of these technologies coming to fruition. I can't tell you what the classroom of the future will look like or whether there will even be classrooms. I'm not going to bet one way or the other on the maker movement or flipped instruction or coding or anything else. But I will make four bold predictions.

Prediction 1. There will still be an Internet.

It will still be possible to pick up a device, ask a question, and get several million results in less than one second. Although I may not be going out on a limb here, the implications of this prediction are profound. Students will need to be able to make sense of the massive amounts of information they will find. These are just a few of the skills an Internet-literate student needs:

- An understanding of what the Internet is. "I found it on the Internet" is not an accurate statement. You found it on a computer connected to the World Wide Web.

- Ways to formulate queries. Typing "childhood obesity" into a search engine is not the best way to discover what health problems are associated with being overweight. Students need to know about Boolean searches, adding prefixes such as SITE and FILETYPE, and more. For example, "site:.edu childhood obesity" will yield search results from educational sites only and eliminate the massive amount of results from .com sites and others.

- An awareness of various types of search engines. Google is not the only option. Specialized search engines can be much more fruitful. Kidrex (www.kidrex.org) is excellent for young students; Google Scholar (<https://scholar.google.com>) only retrieves information from research articles, professional journals, university websites, and other scholarly resources.

- An awareness of how search engine results are ranked. Teach students that being at the top of the list does not mean a result is the best source and that results are rigged to be most pleasing to your tastes.

- An understanding of domain types. Teach the meanings of .com, .gov, .guru, .hr, and .org.

- Tools to evaluate the people behind the website. Teach students how to find the credentials of content creators and evaluate their expertise.

- An ability to analyze a website's purpose. Teach students ways to discover whether the site is designed to inform, amuse, persuade, or sell.

- An awareness of bias. How is www.foxnews.com different from www.huffingtonpost.com? Teach students to look for slanted information.

These skills will continue to be important for evaluating the information the Internet provides,

yet many teachers still send students online to research without direct instruction in these skills. The problems of information overload will get worse, and many students are leaving school without the critical-thinking skills needed to make sense of this information tsunami.

Prediction 2. Salespeople will still exist.

Whether selling standardized tests to the board of education (yes, there will still be Big Tests), holodecks to homeowners, new-generation "geniusphones," candidates for the Interplanetary Council, or virtual reality glasses, the sales profession will remain. Commercials will bombard us from everywhere. The arts of argument, persuasion, and rhetoric will be in high demand.

To evaluate these sales pitches, students will need an understanding of logic, reasoning, argument, and persuasive techniques. We have to teach students the definition of argument (statements leading to a conclusion); how to evaluate arguments (Do the statements force us to accept the conclusion? Are the statements true?); and how to support statements (the five types of evidence: facts, numbers, quotes, examples, and analogies). We have to teach them how to recognize and avoid reasoning errors, such as confusing causality and correlation, generalizing, making ad hominem attacks, derailing the train of thought, and stereotyping. We have to make students aware of persuasive tricks such as transference, bandwagon appeals, and loaded words, as well as rhetorical tricks such as hyperbole, allusion, and euphemism.

We ask students to do argumentative writing, but do we teach the skills involved? Teachers I've surveyed say they've never been trained to teach argument, reasoning, persuasion, and rhetoric, but students will need to understand these techniques as adults.

Prediction 3. Listening will still be important.

That's not an exciting, sci-fi, high-tech prediction. But listening in the future will be high-tech. When we think of listening, we tend to think of

Messages today are an elaborate mix of words, sounds, music, and images.

verbal messages. If you pay attention to what I'm saying, that completes the listening task, right? Actually, listening is more complex than that, and it's getting even more complex. Messages are not merely oral communications but rather an elaborate mix of words, sounds, music, and images. This means that all students will need to be media literate so they can listen well to different kinds of media.

I guarantee that a team of students with a camera can make your school look terrible today. They will find garbage that missed the trash can, a student upset about something that happened at recess, a torn poster on the wall. Another team can make your school look great today. They will photograph a teacher and student engaged in conversation, a well-organized classroom, and a trophy case. Both teams told the "truth," but they made a point by selecting one image over another. Teach students about the power of images.

Good videos are carefully constructed. Have you seen "A Pep Talk from Kid President to You?" (www.youtube.com/watch?v=l-gQLqv9f4o) In the video, YouTube personality Kid President offers some words of inspiration and encouragement. Why is Kid President in a locker room? On a football field? In front of a board covered with Xs and Os? Each scene is chosen for a reason. Are

students aware of this? And why are there so many scene changes? How does that affect viewers?

Teach students about the construction of videos.

Sound and music are selected for a reason.

Teach students how to alter a message with sound.

You can find several fun examples on YouTube of movie scenes that have been given alternate soundtracks. Find the video that makes the movie *Frozen* seem like a horror film (www.youtube.com/watch?v=9eD2UpdhwA) or the silly video of a snail, in which different types of music make the same scene scary, funny, and even somber (www.youtube.com/watch?v=juyRjqSreWo). All of us are susceptible to manipulation by music, and every day we experience it. Teach students specific lessons about sound and its powers.

Prediction 4. People will still be speaking.

The last several years have seen an explosion of ways to display verbal messages: Facetime, Skype, Periscope for Twitter, and cell phone apps, plus tools for video conferences, webinars, podcasts, narrated slideshows, and many more.

Unfortunately, schools have often ignored speaking skills. My son works for a company that connects people who have ideas for high-tech financial innovations with potential investors and users. He reports that there is no shortage of brilliant people with brilliant ideas but a serious shortage of people who can verbally communicate those ideas. Turning ideas into reality involves collaboration and communication. Prerequisites for collaboration and communication? Listening and speaking skills.

For students to thrive in a world of oral communication, we have to teach students how to build and present a message. Teaching students to create a valuable message means teaching them

- How to analyze an audience and craft a message for that audience.
- How to include interesting and important information that connects with the audience.
- How to organize the talk with a grabber opening, clear transitions, and a powerful closing.
- How to create effective visual aids.
- How to adjust their personal appearance for the audience and occasion.

Teaching students how to present the message means teaching them

- How to appear poised and avoid distracting behaviors.
- How to make sure every word is clearly heard.
- How to add life to the voice so listeners can hear passion and emotion.
- How to make eye contact.
- How to use hand, face, and body gestures effectively.
- How to adjust speed for effect.

Just as we teach lessons about capitalization before asking students to write an essay, we need lessons about use of pacing when speaking. Just as we have lessons about finding common denominators before asking students to add fractions, we need lessons about designing slides for visual aids. In a future with oral communication on display to an even greater extent than it is today, students' shortcomings in these areas will hurt them. Teach students to be well spoken.²

Classic Skills for a New Age

Not very sci-fi. No new devices offered. No massive restructuring of schools. No wildly new areas of instruction. Indeed, two of my predictions lead to an increased emphasis on classic arts: Argument, rhetoric, and oral communication have been important since ancient Greece. Still, I feel confident that if you ask students 40 years after graduation what they needed to know and be able to do, many would verify my choices. Internet literacy, media literacy, good thinking, and good speaking will be valued every day of their lives. Let's do more teaching about them. ■

¹Campbell, B. (2000, March 9). Owens plays hooky with his GOP pals. *Colorado Springs Independent*. Retrieved from www.csindy.com/coloradosprings/owens-plays-hooky-with-his-gop-pals/Content?oid=1107922

²Find my framework for teaching these skills in Palmer, E. (2011). *Well-spoken: Teaching speaking to all students*. Portland, ME: Stenhouse.

Erik Palmer (erik_palmer@comcast.net) is an education consultant and the author of *Researching in a Digital World: How Do I Teach My Students to Conduct Quality Online Research?* (ASCD, 2015) and *Teaching the Core Skills of Listening and Speaking* (ASCD, 2014).