Educational Leadership

Turning On the Lights

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> **Compared with students' technology-infused lives outside of school, the traditional classroom is a somber place.**

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For most of history, kids grew up in the dark intellectually. Right up until the mid-20th century, when television became widespread, the world outside their own neighborhoods was largely unknown to them. Few traveled. Some heard tales of adventure, war, or derring-do. Many parents told stories of just how dangerous "out there" really was. Few young people read widely. In terms of knowing the world you lived in, as a kid you were pretty much left in the dark.

Until you got to school.

That was the beginning of your enlightenment—the day your window opened on the outside world. As you advanced in the grades, the window opened wider, and more and more light shone in. From your teachers, you learned wonderful things you knew to be true—because they told you so. They taught you to read and, as a result, more of the world became available to you. The images you came across in books and the artifacts you discovered in museums broadened your knowledge.

Over time, your teachers taught you how to conduct experiments, test ideas, and separate fact from fiction. They showed you systems and frameworks that would help you understand history, geography, mathematics, science, and your own and other cultures. You were exposed to civilization's greatest accomplishments and learned about famous men and women. You learned to think logically, structure your ideas and thoughts, and write them down for others to read and critique.

Not every kid found school interesting, of course, and some left earlier than others. But for a great many students, school was truly empowering. It exposed kids for the first time to a wide variety of useful things they knew nothing about, in ways that the students were unable to do on their own.

In fact, one of the key purposes of school was to lead as many kids as possible out of the intellectual darkness into the intellectual light. That is what made being an educator a truly noble calling: We were the people who showed the kids the light.

Plugged in and Connected

There's one big problem with this noble thought today: Today's kids grow up in the light. They're deeply immersed in it long before educators ever see them.

Kids today are connected to the entire world around the clock, in real time, through their media and their myriad personal devices, both electronic (such as TV) and digital (such as the Internet and cell phones). In the 21st century, young people certainly don't grow up with perfect understanding of the world—after all, they *are* still kids. But can we still characterize their intellectual state as one of ignorance and darkness? Hardly.

Thanks to technology, kids in developed countries grow up knowing about, or being able to find out about, pretty much anything from the past or present that interests them. Google, Wikipedia, and millions of reference sites stand at their beck and call.

Many 21st-century kids grow up literally *surrounded* by light, from the first flash of the camera at the moment of birth. They progress to seeing the world through the glow of the TV tube, the sheen of the silver screen, the interactive animations of the computer screen, the LCD on their cell phone, and the screens on their Game Boy Advance consoles, Nintendo DS Lites, and PlayStation Portable Systems. They teach one another to actively participate as often as possible in the world—locally and around the globe—through instant messaging, e-mails, and increasingly free telephone calls, as well as online connections, discussions, and creative social and communal activities that range from making and sharing music, to helping to slow global warming, to helping to stop genocide in Darfur.

Long before they ever get to school, kids have seen a tremendous amount of the world. They've watched wars in far-off countries and explorations of distant planets. They've seen wild animals up close. They've simulated racing, flying, and running businesses. Many have taught themselves to read through the electronic games they play.

The world is no longer a dark, unknown place for today's school kids. Kids are not intellectually empty. Even though some of what they know may be incomplete, biased, or wrong, they arrive at school full of knowledge, thoughts, ideas, and opinions about their world and their universe.

Powering Down in School

Given this new state of affairs, one might suppose that educators would acknowledge that today's kids grow up differently and that kids are enlightened by all their various connections to the world. Educators would figure out ways to use, build on, and strengthen students' reservoirs of knowledge. They would assume that kids will use their connections to the light to find information quickly, structure it in new ways, and communicate with peers around the world in a powerful, 21st-century learning process. Teachers would no longer be the providers of information but instead would be the explainers, the context providers, the meaning makers, and the evaluators of information that kids find on their own. Teaching would still be a noble calling, perhaps even more so than before.

But we've chosen something else. Somehow, schools have decided that all the light that surrounds kids—that is, their electronic connections to the world—is somehow *detrimental* to their education. So systematically, as kids enter our school buildings, we make them shut off all their connections. No cell phones. No music players. No game machines. No open Internet. When kids come to school, they leave behind the intellectual light of their everyday lives and walk into the darkness of the old-fashioned classroom. What are they allowed to use? Basal readers. Cursive handwriting. Old textbooks. Outdated equipment.

"Whenever I go to school," says one student I know, "I have to power down." He's not just talking about his devices—he's talking about his brain. Schools, despite our best intentions, are leading kids away from the light.

The Boredom Crisis

The reality is that students are, for the most part, bored. Pick an average kid, with an average schedule, and shadow him or her for a day in school—go where the student goes, sit in on all his or her classes—and see if *you* can stand it. Recently, at a conference of the heads of California's top independent schools, I asked a bright 10-year-old from one of the very best schools how often she's bored in class. "Ninety-nine percent of the time" was her immediate answer— she didn't even have to reflect. Even with the best teachers we have, most middle school and high school kids say they're bored 50–70 percent of the time.

And it makes perfect sense. A kid who has seen lunar landings and rovers working on Mars, who has done lots of research on the Internet on astronomy, and who comes to school excited about space travel may likely hear, "If you want to go to outer space, learn your math." But the math she learns is not about space—it's 1,200-year-old algebra and 4,000-year-old Egyptian geometry. A kid who has read and enjoyed the Harry Potter books must, in general, learn the rules of writing, spelling, and literary analysis not from the science fiction and fantasy books he enjoys, but from the books in the official curriculum. A kid who masters the electronic games Caesar III,

Age of Kings, Age of Empires, Civilization IV, and Rise of Nations, and therefore knows a lot about world history, is likely to hear, "I don't know what's in those games, but the information may be incorrect. And besides, the history you should care about is what will be on the test."

School instruction is still mostly cookie cutter and one size fits all, despite the fact that we live in an era of customization—students continually customize their buddy lists, photos, ring tones, cell phone skins, Web sites, blogs, and MySpace and Facebook accounts. Moreover, with large class sizes and hundreds of kids to a counselor, schools are unlikely to be able to discover kids' passions and address their education from that base.

Where Kids Learn

Less in School …

In the United States and other developed countries, education is quickly splitting into two separate—and unequal—parts. One part is "school," the education that kids, for the most part, are obliged to experience by law. In exchange, school offers credentials—a diploma and a set of grades—that help determine students' future education and employment.

But many students find that schooling is almost entirely irrelevant to their present and future lives. For one thing, school is usually about the past—what we've learned up until this point (or some point a while ago) about math, science, language, and social studies—with, occasionally, a bit of current events thrown in.

School is certainly not about the future, which kids tell us is their most pressing concern. If schools were future oriented, they would be full of classes in programming, multimedia literacy and creation, astronautics, bioethics, genomics, and nanotechnology. Science fiction and fantasy literature would be a part of the curriculum, as representative of alternative visions of the future. Students would be learning and practicing such future-oriented skills as collaborating around the world electronically and learning to work and create in distributed teams.

Some educators justify the focus on the past by saying, "We don't even know what tomorrow's jobs will be—they haven't been invented yet." Perhaps. Yet we do know many, if not all, of tomorrow's needed skills—we're just not focusing on teaching them in school. Instead, school "covers material." It prepares kids for standardized exams. It continues to offer, for a ton of familiar reasons—such as No Child Left Behind, standards, and parent pressure—an outdated education that most students find irrelevant.

… Than After School

There is another dimension to our kids' education that I call "after-school." After-school education is whatever the kids learn when they're *not* in class, doing their homework, or preparing for or taking tests. Some after-school learning—such as robotics clubs, competitions, and browsing in computer labs—takes place in our school buildings. But after-school learning goes much further. It encompasses all the time kids spend on the Internet at home. It includes all their blogging and social networking in MySpace or Facebook. After-school includes all the time kids spend sharing messages and pictures, talking on their cell phones, and creating many of the hundreds of thousands of videos posted on YouTube. It includes the time kids spend playing complex electronic games like Runescape and World of Warcraft and exploring online nongame worlds such as Whyville, Club Penguin, and Second Life, which are huge learning environments. After-school includes game and other computer programming classes that kids either sign up for or teach themselves. It includes an increasing number of noncurricular summer courses, learning camps, and other learning activities.

It's their after-school education, not their school education, that's preparing our kids for their 21st-century lives—and they know it. This after-school education doesn't bore them because, among other things, they help design it. It's different for every one of them. And there are no exams, only clear levels of competence that everyone knows and respects.

How to Turn On the Lights

To make education relevant to students' lives and truly prepare kids for the future, we need to bring these after-school attractions into our schools. Four important practices can help.

- *Give students the opportunity to use technology in school.* This is less about teachers mastering specific tools or techniques—such as electronic games, blogs, or search engines—than their being willing to allow students to use these tools to find information and create products. We vastly underestimate our students' ability in technological areas and vastly inflate the threat of harm. These two perceptions have the combined effect of locking students in the past.

  Some school districts have taken a different path. For several years, students at Mabry Middle School, Cobb County, Georgia, have created 2- to 3-minute videos for a school "Oscars" program. The videos tackle such topics as immigration, adoption, physical fitness, homelessness, technology, and child labor (see http://mabryonline.org/archives/mtv). The judges, many of whom work in the communications and media industries, select winning films in such categories as best cinematography, best sound, best documentary, best dramatic comedy, and best teaching and learning film.

  These are the kinds of products we should expect from our kids. Schools can address the "inappropriate use" issue, particularly in the higher grades, with one simple rule: If something comes on the screen that a student knows shouldn't be there, he or she has two seconds to shut off the computer—or lose all privileges.

  Once we let students (particularly in groups) take the lead on technology projects, teachers tend to see more engagement and better results. As students share works in progress with the class for critical evaluation from both teacher and students, the teacher takes on the valuable roles of explainer, context provider, meaning maker, and evaluator/coach.

- *Find out how students want to be taught.* This means devoting a meaningful amount of school time (and after-school time if possible) to conversing with students. It also involves promoting discussions on this topic among students, parents, teachers, and administrators. Such discussions might take the form of assemblies moderated, perhaps, by invited guests, such as a local law school professor with expertise at letting all groups have their say. Students would be invited to attend and contribute to the discussion. Both students and teachers have told me that in addition to using technology in school, students like having goals they want to reach, doing rather than listening, getting involved with the real world, having teachers ask them about their ideas and opinions, creating products that are important to them, and thinking seriously about their futures.

- *Connect students to the world.* Today's students know that if they post something on YouTube, the entire world can see it—and comment. Many kids are in touch, through instant messaging, with friends and relatives around the world. So if students are studying the Middle East, why aren't they hooked up with Middle Eastern kids their own age? If they're learning Spanish, why aren't they connecting with kids in Latin America? If they're studying societies in social studies class, why aren't they exchanging videos showing their respective views of their own society?

- *Understand where kids are going—that is, into the future—and help them get there.* "Most of us prefer to walk backward into the future," said management thinker Charles Handy, "a posture which may be uncomfortable, but which at least allows us to keep on looking at familiar things as long as we can." Covering the material and preparing kids for the test is not preparing them for the future. To find out the skills students need, look, for example, at the work of the Partnership for 21st Century Skills, which highlights such areas as computer and technology skills, critical thinking and problem solving, teamwork and collaboration, ethics and responsibility, and global awareness.

By engaging in these four practices, schools have a shot at being part of the "creatively preparing students for the future" process rather than just giving it up to after-school programs. To participate meaningfully in our kids' futures, schools must be willing, finally, to turn on the lights.

Prensky's Principles for Principals

- Annouce that henceforth students will have a meaningful voice in setting all school policy regarding technology use. Hold assemblies that include teachers, students, parents, administrators, and technologists to hear all points of view and establish school policies regarding such issues as blocked Web sites and use of cell phones.

- Make it your business to eliminate boredom from your school—make 100 percent engagement the goal. Poll students as to which of their teachers and classes are engaging and which are boring and why. Investigate and take action.

- Talk with 2–4 students each day for at least one-half hour about their learning. If you feel you can't spare that time to engage with kids, you may need to rethink your priorities.

- Work with both students and teachers to implement the new "kids teaching themselves with guidance" model. Eliminate lectures and busywork from your school. Ask teachers who use active learning to share their practices with their colleagues.

- Promote technology use and move toward one-to-one computing.

- Orient your school toward the future. Offer classes in programming, robotics, long-distance collaboration, and cutting-edge science.

- Keep the computer lab open late and on weekends, especially in areas with limited technology access.

- Introduce computerized exercise games that kids really enjoy, such as Dance Dance Revolution, into your physical education classes.

- Have students share your school's most effective practices and results with the world via YouTube.

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[Hook] Turn on the lights I'm lookin' for 'er too I heard she keep her promises, and never turn on you I heard she ain't gon cheat and she gon never make no move I heard she be there anytime you need 'er, she come through Turn on the lights I'm lookin' for 'er I'm lookin' for 'er. I'm lookin' for 'er Turn on the lights I'm lookin' for 'er I'm lookin' for 'er I'm lookin' for 'er I'm lookin' for 'er. [Verse 2] Send 'er my way Tell 'er I've been lookin' for 'er in the broad day Hangin' with the dope boys in the hallways And I know, to keep 'er, yeah you gotta get that pay Turn on the lights I'm l