NOTEBOOK

Fostering a Can-Do Attitude

WHEN TEACHERS HELP students develop the positive attitudes and behaviors that characterize effective learners, they can increase students' chances of succeeding in school and in life, according to Teaching Adolescents to Become Learners—The Role of Noncognitive Factors in Shaping School Performance: A Critical Literature Review, published by the Consortium on Chicago School Research at the University of Chicago. "Students who come to class and complete their work are likely to have developed the kind of work habits they will need in college as well as in the workforce," the authors write. To that end, this report examines the specific behaviors, skills, attitudes, and strategies that good students rely on "to successfully manage new environments and meet new academic and social demands."

The report identifies the following five factors as important for success:

- Academic behaviors, like regularly attending class and paying attention;
- Academic perseverance, including completing assignments;
- Academic mindsets, which are the beliefs students hold about themselves in relation to academic work;
- Learning strategies, which are the processes students employ to make sure they understand material; and
- Social skills, such as cooperating with others and acting responsibly.

Of these, "academic mindsets" and "learning strategies" are the most malleable factors, so the authors suggest that teachers focus on those

in helping students reach their potential. The report is available at www.bit.ly/MLR5s0.

Child Poverty Higher and Deeper in U.S.

AT 23.1 PERCENT, child poverty is dramatically higher in the United States than in countries considered to be its peers, according to an analysis of Census Bureau statistics conducted by the Economic Policy Institute. Among 25 developed nations, the average child

poverty rate is 9.8 percent. The U.S. rate is nearly five times greater than that of Iceland, which achieved the lowest rate of child poverty at 4.7 percent.

The analysis also found that the child poverty gap—the difference between the poverty line and the median household income of children below the poverty line—is also greater in the United States than in peer countries. This means, as the authors explain, that poor children in the United States "face higher relative deprivation than impoverished children in other developed countries." The full report is available at www.bit.ly/MbQqq8.



Diane Ravitch Stands Up for Teachers

AMID THE ATTACKS on teachers and their unions, Diane Ravitch continues to take on the countless conservatives seeking to privatize public schools. In her blog at dianeravitch.net, the education historian and author of *The Death and Life of the Great American School System* offers her perspective on how high-stakes tests and the proliferation of charter schools are undermining public education.

In two posts from June 29, she applauds a judge's rejection of a cyber charter school application from a group with a dismal education record, and criticizes investors in for-profit education who planned to hold a

> conference at a private club and charge \$1,195 for admission for the day.

"I don't want to see the for-profit corporations taking over more schools," she writes. "Why are our top education leaders sitting back and letting this happen without a squawk? I think we should all squawk."

Besides her own commentary, Ravitch's blog features e-mails from teachers. Many thank her for speaking out against the fixation on testing and the hollow reforms that plague the profession. Her blog has become a kind of forum for teachers. "For whatever reason the public is continuing to scapegoat us perhaps because they do not want to look at the realities of poverty and the price tag of really saving our country's children," writes one teacher in a post dated August 2. "We need to be able to speak the truth-express ourselves about our work with children, about our perspectives on education and what is really happening in our communities and in our schools."

Like many educators, this teacher reads Ravitch's blog to fill a void in her professional life. "I know it is one way for me to get that injection of support."

Khan Academy: The Hype and the Reality

By Karim Kai Ani

IN A PROFILE in *Time* magazine, Sal Khan, founder of the popular Khan Academy, explains how he prepares for each of his video lessons. He doesn't use a script. In fact, he admits, "I don't know what I'm going to say half the time."

During a recent address to Washington, D.C.-area educators, Secretary of Education Arne Duncan highlighted the importance of teacher education and professional development, and urged that we as a country provide teachers with more time to collaborate and plan lessons for their students. He then turned and praised Khan as a leading innovator transforming education for millions of students around the country.

The highest-ranking official in American education says that effective teaching requires training and planning, and then holds up as his archetype someone who openly admits to showing up to class every day unprepared. If a teacher said that, he or she would be fired. And yet, in the past year, Sal Khan has been hailed as the savior for everything that ails public education.

The narrative surrounding Khan Academy has gotten a bit out of hand.

It's not Sal's fault. He didn't set out to become one of the biggest celebrities in education but simply to help his cousins with their math homework. But Ann Doerr, wife of venture capitalist John Doerr, picked up on it. Then Bill Gates. Then the *San Jose Mercury News*, 60 *Minutes*, the *New York Times* ... and all of a sudden Khan Academy, a collection of low-res videos offering step-by-step instructions for how to solve math problems, was being hailed as the Next Big Thing in education.

And big it is: Khan Academy boasts almost 3,300 videos that have been viewed more than 160 million times. That's a heroic achievement. But there's a problem: the videos aren't very good.

Take Khan's explanation of slope,

which he defines as "rise over run." An effective math teacher will point out that "rise over run" isn't the definition of slope but merely a way to calculate it. In fact, slope is a rate that describes how two variables change in relation to one another: how a car's distance changes over time (miles per additional hour); how the price of an iPod changes as you buy more memory (dollars per additional gigabyte).

To the layperson, this may seem like a trivial distinction, but slope is one of the most fundamental concepts in secondary math. If students don't understand slope at the conceptual level, they won't understand functions. If they don't understand functions, they won't understand algebra. And if they don't understand algebra, they can't understand calculus. It's that simple.

Or rather, it's not. Because effective teaching is incredibly complex. It requires planning. It requires reflection. And it certainly requires more than just "two minutes of research on Google," which is how Khan describes his own pre-lesson routine.

As a result, experienced educators have begun to push back. In June, two professors created their own video in which they pointed out errors in Khan's lesson on negative numbers: not things they disagreed with, but things he got plain wrong (see www.wapo.st/S9NdX1). To his credit, Khan did replace the video. However, instead of using this as an opportunity to engage educators and improve his teaching, he dismissed the criticism.

"It's kind of weird," Khan explained, "when people are nitpicking about multiplying negative numbers."

When asked why so many teachers have such adverse reactions to Khan Academy, Khan suggests it's because they're jealous. "It'd piss me off, too, if I had been teaching for 30 years and suddenly this ex-hedge-fund guy is hailed as the world's teacher."

Of course, teachers aren't "pissed off" because Sal Khan is the world's teacher. They're concerned that he's a bad teacher who people think is great, one who describes the precise explanation of mathematical concepts as mere "nitpicking." Experienced educators are concerned that when bad teaching happens in the classroom, it's a crisis; but when it happens on YouTube, it's a "revolution."

The truth is that there's nothing revolutionary about Khan Academy at all. In fact, Khan's style of instruction is identical to what students have seen for generations: a do this, then do this approach to teaching that presents mathematics as a meaningless series of steps. Khan himself says that "math is not just random things to memorize and regurgitate," yet that's exactly how his videos present it.

Khan has done something remarkable in creating such a vast library, and he deserves to be recognized. His commitment to making the site free is a rare and selfless act, and he deserves to be praised. He is a good guy with a good mission. What he's not, though, is a good teacher.

Unfortunately, the media hype surrounding Khan Academy has created a level of expectation far beyond what any person could ever reasonably deliver.

The real problem with Khan Academy is that we believe the promise of silver bullets—of simple solutions to complex problems—and in so doing become deaf to what really needs to be done.

As Duncan said, we need to invest in professional development and provide teachers with the support and resources they need. We need to give them time to collaborate and create content that engages students and develops not just rote skills but also conceptual understanding. We have to help new teachers figure out classroom management—to reach the student who shows up late to class every day and never brings a pencil—and free up veteran teachers to mentor less-experienced colleagues.

We face challenges in K-12 education, and they will not be solved with just a Wacom tablet and a YouTube account. Instead, they'll be solved by teachers who understand their content and how children learn, who walk into the classroom every day and think, "I know exactly what I'm going to say, because that's what teaching means."

Karim Kai Ani, a former middle school teacher and math coach, wrote a longer version of this commentary for Valerie Strauss's The Answer Sheet, a Washington Post blog. To read the original, go to www.wapo.st/My6i4i.