

# Marshall Memo 455

A Weekly Round-up of Important Ideas and Research in K-12 Education

October 8, 2012

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## Quotes of the Week

“The consequences of public bickering, budget reductions, and ever-changing political and educational policies are borne by children and families least resilient amid these forces.”

Kamau Bobb in “The Strike and Minority Students” in *Education Week*, Oct. 3, 2012 (Vol. 32, #6, p. 25), no e-link available

“Policies aimed at improving teacher quality by manipulating singular policy levers – such as recruiting top-third college graduates or allowing streamlined preparation programs for those with strong academic credentials – are unlikely to succeed. Rather, it will require a systems approach that attends to the multiple interacting pieces of the teacher education system.”

Marilyn Cochran-Smith et al. (see item #2)

“Physical exercise, even for one minute, presses the reset button on the brain and refreshes students mentally.”

Edward Hallowell (see item #4)

“To find out if students can do mathematics, we need to find out how well they can create, critique, and explain substantial chains of reasoning. Multiple-choice tests cannot handle this, nor can their computer-based variants.”

Hugh Burkhardt (see item #7)

“It’s now possible for students to feel closer to you when you’re the virtual speaker and ghost engineer than when you’re physically standing in front of them – even if you’re saying the same things. My generation finds that astonishing.”

College professor Glenn Hartz (see item #8)

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## 1. Are We Smarter Than Our Ancestors 100 Years Ago?

In this intriguing *Wall Street Journal* article, New Zealand professor James Flynn follows up on his 1984 “Flynn Effect” research and asks if humans are really getting brainier with each passing decade. “From the early 1900s to today,” he says, “Americans have gained three IQ points per decade on both the Stanford-Binet Intelligence Scales and the Wechsler Intelligence Scales.” Using today’s norms, our ancestors in 1910 would have an average IQ of 70 compared to the mean IQ of 130-150 today. “Are we geniuses, or were they just dense?” asks Flynn.

Clearly, Americans in 1910 weren’t dumb. They had the same practical intelligence and ability to deal with everyday challenges that we have today. But there are differences. “Rising IQ scores show how the modern world, particularly education, has changed the human mind itself and set us apart from our ancestors,” says Flynn. “They lived in a much simpler world, and most had no formal schooling beyond sixth grade... Modern people do so well on these tests because we are new and peculiar. We are the first of our species to live in a world dominated by categories, hypotheticals, nonverbal symbols and visual images that paint alternative realities. We have evolved to deal with a world that would have been alien to previous generations.”

A hundred years ago, people wore what Flynn calls “utilitarian spectacles.” The average person got an elementary-school education and then worked in a factory, shop, or farm. “The only artificial images they saw were drawings or photographs,” he says. “Aside from basic arithmetic, nonverbal symbols were restricted to musical notation (for an elite) and playing cards. Their minds were focused on ownership, the useful, the beneficial, and the harmful.”

Here’s an excerpt from an interview that psychologist Alexander Luria conducted with a rural Russian in the 1920s:

- Luria: What do a fish and crow have in common?
- Reply: A fish it lives in water, a crow flies.
- Luria: Could you use one word for them both?
- Reply: If you called them “animals” that wouldn’t be right. A fish isn’t an animal, and a crow isn’t either. A person can eat a fish but now a crow.

Here’s another Luria interview excerpt:

- Luria: There are no camels in Germany. The city of B is in Germany. Are there camels there or not?
- Reply: I don’t know. I have never seen German villages. If B is a large city, there should be camels there.

- Luria: But what if there aren't any in all of Germany?
- Reply: If B is a village, there is probably no room for camels.

“The prescientific Russian wasn't about to treat something as important as the existence of camels hypothetically,” says Flynn. “Resistance to the hypothetical isn't just a state of mind unfriendly to IQ tests.” Flynn says that if his father, born in 1885, had been asked what dogs and rabbits have in common, he would have said, “You use dogs to hunt rabbits.” A student today would say, “They are both mammals,” which is the correct answer on an IQ test.

Nowadays we wear “scientific spectacles,” says Flynn. “We take the hypothetical seriously and easily discern symbolic relationships... Today we find it quite natural to classify the world as a prerequisite to understanding it... We can imagine alternative scenarios and put ourselves in the shoes of others... Widespread secondary education has created a mass clientele for books, plays, and the arts.” People know more words and concepts and make more connections. Being able to deal with the hypothetical means more innovation. Modern people are better as technicians, scientists, administrators, and executives.

And all this has taken place without a genetic or physiological upgrade of the human brain, Flynn concludes. “Our mental abilities have grown, simply enough, through a wider acquaintance with the world's possibilities.”

“Are We Really Getting Smarter?” by James Flynn in *The Wall Street Journal*, Sept. 21, 2012, <http://online.wsj.com/article/SB10000872396390444032404578006612858486012.html>

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## **2. What Drives Turnover – and Staying Power – in Early-Career Teachers**

In this thoughtful article in *American Educational Research Journal*, a team of ten researchers led by Marilyn Cochran-Smith of Boston College reports on a study of how turnover of teachers in their first 3-4 years correlates with classroom effectiveness. The team compared teachers' career trajectories with how well they handled relationships with students and colleagues, classroom management and environment, content and curriculum, pedagogy and practice, student learning, and professionalism. Teachers fell into these categories:

- *Going strong and staying on* – These teachers (six of the 15 studied) did very well with students and stayed in their original school placement. This is obviously the ideal configuration.

- *Going strong but moving along* – These three teachers were exemplary in the classroom but made one or more school moves in search of better professional working conditions. This pattern reflects teachers' dissatisfaction with their schools' adult culture and is clearly less than ideal – although some of these teachers did find greener pastures.

- *Middling, then moving* – These two teachers were mediocre in the classroom and moved when it became clear they wouldn't be rehired or in hopes of doing better in another setting. One did, in fact, improve, while the other eventually left teaching.

- *Falling short but hanging on* – This teacher was judged ineffective in the classroom but somehow managed to remain in teaching. “The career path of the teacher in this category,” say the authors, “was marked by an odd and circuitous route involving multiple positions at the

same school, temporary and non-tenured positions, and eventual movement to a new school to continue teaching despite poor performance and not being rehired by previous schools... Clearly, this represents an undesirable configuration for students, administrators, colleagues, teacher educators, policymakers, and the public.”

- *Falling short and getting out* – These two teachers were fired or not rehired during their first year of teaching and chose to leave the profession. One of them, say the authors, “a young teacher with a stellar academic background and the intention to teach for a lifetime, left teaching undeveloped, crestfallen, and defeated.”

- *Preparing to teach but never teaching* – This teacher became credentialed in graduate school but never actually taught, choosing instead a career in engineering. During his student teaching experience, it became clear to him that teaching was not what he would do best.

“It is absolutely clear,” conclude the authors, “that in order to succeed in the classroom and remain at their schools, early-career teachers need support. Every strong teacher in this study struggled with the demands of teaching and talked about leaving. In fact, the most capable and committed teachers seemed to be at particular risk of burnout – facing enormous demands with few boundaries in place to protect their time. They succeeded through individual effort, long hours, determination, and figuring out ways to continue to learn from and about teaching, despite difficulties. This is admirable, but neither sustainable nor wise. In fact, we think it is a recipe for early attrition. Early-career teachers need opportunities for ongoing and intensive professional development built into the work day, and schools and school districts should assume that responsibility... School organization and school leadership are critical.”

The authors close with this observation: “Policies aimed at improving teacher quality by manipulating singular policy levers – such as recruiting top-third college graduates or allowing streamlined preparation programs for those with strong academic credentials – are unlikely to succeed. Rather, it will require a systems approach that attends to the multiple interacting pieces of the teacher’s education system.”

“A Longitudinal Study of Teaching Practice and Early Career Decisions: A Cautionary Tale” by Marilyn Cochran-Smith, Patrick McQuillan, Kara Mitchell, Dianna Gahlsdorf Terrell, Joan Barnatt, Lisa D’Souza, Cindy Jong, Karen Shakman, Karen Lam, and Ann Marie Gleeson in *American Educational Research Journal*, October 2012 (Vol. 49, #5, p. 844-880), <http://bit.ly/PjKtZN>; Cochran-Smith can be reached at [marilyn.cochran-smith@bc.edu](mailto:marilyn.cochran-smith@bc.edu).

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### **3. Empowering Students to Combat Bullying**

(Originally titled “Joining Hands Against Bullying”)

“Too many efforts to reduce bullying have treated students as passive recipients of information,” say Richard Weissbourd and Stephanie Jones (Harvard Graduate School of Education) in this helpful *Educational Leadership* article. “In too many schools, students are taught values didactically or through a system of punishments and rewards. If we want to change student cultures, we need to prize in students what they prize most in themselves – their

capacity to think – and give them something vital: the tools they need to be better people and to create a more just world.”

Weissbourd and Jones aren't against punishing bullies and encouraging bystanders to intervene, but they don't believe either approach will solve the problem. “Rather than asking students to fight against the tide, we need to find ways to shift the tide itself, to create more caring schools,” they say. “Students primarily take signals from other students about what's ethically in and out of bounds.” Students know what's going on, what cliques are forming, who's being excluded, when teasing is going too far, and when a fight is going to happen. The key for adults in a school is to empower students to change a negative culture.

This is made more complex by the fact that schools have numerous micro-environments – classrooms, lunchrooms, hallways, stairways, and athletic venues – and students interact with peers, teachers, hall monitors, administrators, coaches, and after-school staff. “Each environment has its own norms for behavior and discipline, actual and perceived safety, students' sense of belonging, and levels of adult supervision,” say Weissbourd and Jones. They recommend three strategies, used in concert:

- *Whole-school community approaches* – One such initiative is the *just community*, which convenes groups of students and teachers in regular community meetings that address discipline and moral issues and reach out to students for ideas. Surveying students is an excellent way of generating data to inform these meetings and balance what can sometimes be overly negative perceptions among students about their peers' attitudes and behavior.

- *Student governance* – Student leaders can serve on student councils and other leadership groups tasked to shape and enforce community norms. They should be nominated by peers but closely supervised by adults.

- *Fostering activism* – Students around the U.S. have organized social action groups to combat bullying and meanness – for example, groups in West Virginia have set up “friend zones” where any isolated or threatened student can be sure of friendly company. Schools might provide seed money to help these groups get started and keep operating.

Weissbourd and Jones recommend that secondary students ask questions like these of school administrators:

- Does our school regularly survey students about whether they feel safe, respected, and cared about?
- Is there a confidential way for students to report when they feel unsafe or mistreated?
- Is there an adult whose job it is to make sure everyone feels safe and respected and that people treat each other well?
- Does the school use a program that teaches social and emotional skills such as conflict resolution, showing understanding and empathy, and understanding one's emotions?
- Are teachers and staff members trained in how to prevent and stop bullying and hurtful behavior?
- Beyond punishment, how does the school work with students who act in aggressive and hurtful ways?

- Are certain adults in charge of bathrooms, hallways, and other areas outside classrooms?
- How can students have a say about things that happen in the school – values, community events, and non-academic programming?
- Does the school have a peer mediation or peer counseling program?
- Does the school have a policy clearly stating that discrimination and harassment by race, class, gender, and sexual orientation are not tolerated for any reason?

“Joining Hands Against Bullying” by Richard Weissbourd and Stephanie Jones in *Educational Leadership*, October 2012 (Vol. 70, #2, p. 26-31), <http://www.ascd.org>; the authors can be reached at [richard\\_weissbourd@gse.harvard.edu](mailto:richard_weissbourd@gse.harvard.edu), and [stephanie\\_m\\_jones@gse.harvard.edu](mailto:stephanie_m_jones@gse.harvard.edu).

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## 4. Ways to Help ADHD Students

(Originally titled “Ferrari Engines, Bicycle Brakes”)

In this *Educational Leadership* article, psychiatrist Edward Hallowell describes the rocky time he himself had in school because of ADHD and dyslexia, and the huge difference a first-grade teacher made when she put her arm around him as he read in class. “No one laughed at my stammering and stuttering, because I had the Mafia sitting next to me!” he says. “Such a simple intervention, but profound in its impact.”

Hallowell now works with children and adults with ADHD and dyslexia, and has two recommendations for teachers:

- *Create a safe environment for all students.* “Fear and humiliation, which once upon a time were standard teaching tools, should be relics of the past,” he says. “It is a neurological fact that feeling safe opens up the brain, whereas feeling anxious and afraid clamps it down.”

- *Adopt a strength-based model.* Hallowell says to an ADHD student, “I have great news for you. I’ve taken your history, and I’ve read what your various teachers have had to say about you... After putting all this information together, I’m now able to tell you that you have an awesome brain. Your brain is very powerful. It’s like a Ferrari – a race car. You have the power to win races and become a champion. However, you do have one problem. You have bicycle brakes. Your brakes just aren’t strong enough to control your powerful brain, so you can’t slow down or stop when you need to... But not to worry! I’m a brake specialist, and if you work with me, we can strengthen your brakes.”

So what can teachers do to strengthen students’ brakes? First, explain ADHD the way Hallowell does. Second, establish yourself as a caring member of a team devoted to helping the student succeed. Then, when a student is disruptive, set limits in a non-shaming way: “Joey, your brakes are failing you now.” Other key steps:

- Set up predictable schedules and rules.
- Have ADHD kids sit near you.
- Break down large tasks into bite-size chunks.
- Relate new material to previous learning.
- Balance structure with novelty.

- Make sure the class gets recess and provide frequent brain breaks. “Physical exercise, even for one minute, presses the rest button on the brain and refreshes students mentally,” says Hallowell.

“Ferrari Engines, Bicycle Brakes” by Edward Hallowell in *Educational Leadership*, October 2012 (Vol. 70, #2, p. 36-38), <http://www.ascd.org>; the author is at [drhallowell@gmail.com](mailto:drhallowell@gmail.com).

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## 5. Strategies with Autistic Students

(Originally titled “Call Me Different, Not Difficult”)

In this *Educational Leadership* article, autism expert John Elder Robison says the key to connecting with students with autism is accepting that they are *different*, not *difficult*. “It is a rare autistic child who sets his mind on being difficult,” says Robison. “Autistic kids say and do some pretty peculiar things, and it takes an exceptional teacher to roll with our twists and turns and keep things moving with a smile and a bounce. If you’re not one of those people, it’s OK! Your skills are surely needed elsewhere in the world of education... Don’t try to be something you are not.”

Autistic students often ignore teachers’ questions, do a different assignment than the one that was given, and ask questions that have nothing to do with the topic at hand. “It’s enough to drive anyone crazy,” says Robison, “even me, a fellow autistic person! The thing is, as strange as our responses seem to others, they often make perfect sense to us.” Researchers say that 60-80 percent of the content in human conversation is conveyed nonverbally, and autistic people miss most of that. “Sometimes we miss so much, and seem to ignore you so completely, that you think we’re deaf,” he says.

Here is Robison’s advice to teachers working with students on the spectrum. One hopeful message up front: autism gets better with age – people learn more and more strategies to minimize the disability.

- *Tell students exactly what you want, and say exactly what you mean.* “Go stand over there, by Marcie’s desk” (pointing). And don’t say, “That’s great.” Too vague. What seems self-evident to other students needs to be spelled out to a student with autism.

- *Be consistent and predictable.* “We want to know that art class will always happen at 10:00 a.m. on Tuesday or that we will always sit in a certain spot in the lunchroom at 12:15,” says Robison.

- *Be flexible in your conversational responses.* Someone might say, “I went to a really good movie last night,” and an autistic student responds by talking about his science project. Teachers need to be agile in their responses, but also teach autistic students what is appropriate in different social settings.

- *Expect good manners.* Autism is not an excuse for boorish behavior. “The best way to avoid being rejected is to stop acting weird,” says Robison.

- *Pay attention to sensory issues.* Autistic people can be super-sensitive to musical details, shades of color, or the sound of a certain car. “At the same time, we may not have the

ability to communicate that exceptional sensitivity,” says Robison. “Indeed, we may just assume it’s ordinary.”

- *Be sensitive to our state of mind, even if we seem oblivious to yours.* Anxiety and fear are common emotions. “Adults often look at us and say, ‘He’s so serious,’ when in fact we are roiling with emotion. The knowledge that we can’t see what is obvious to others is often humiliating, so you should approach this area with sensitivity.”

“Call Me Different, Not Difficult” by John Elder Robison in *Educational Leadership*, October 2012 (Vol. 70, #2, p. 40-44), <http://www.ascd.org>; the author is at [john@johnrobison.com](mailto:john@johnrobison.com).

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## **6. Lisa Delpit on Race, Diversity, and Teachers Fulfilling their Potential**

In this interview in *Rethinking Schools*, Jody Sokolower questions author Lisa Delpit about her new book, *Multiplication Is for White People* (The New Press, 2012) and other school issues. A few excerpts:

- Asked why there are so many African-American children in special education programs, Delpit says, “The larger society has a view of African-American people as being less intellectually capable. It’s not something that anybody designed or set out to do, but it’s almost in the air we breathe. And as a result of that, when African-American children do poorly, the first explanation is that there’s something inherent in them that’s keeping them from performing well.”

- Asked how important it is to have diversity in a school’s faculty, Delpit says, “I think what we need is people who represent the culture of the kids in the school, not necessarily in every classroom, because I think teachers of other cultures also have something to offer. However, I think that the piece that is often missing in our schools is the opportunity for professional learning communities where teachers can share what they know and collectively resolve issues relating to culture as well as other factors. If we can do that and ensure that the people who are most familiar with the culture of the children have the opportunity and the responsibility to share some of that knowledge with other teachers, then we will be doing OK.”

- Asked about how to deal with ineffective teachers, Delpit says, “Many teachers are not using a quarter of what they know because the school environment is so foul... So my question becomes not so much whether the teachers at a specific school are good or bad but what is it in this setting that’s not allowing them to teach to their full potential. And many times it is the question of trust.”

- The interview closes with Delpit describing a visit to a classroom during which the teacher said in front of his students how terrible they were and how he had wanted to be a lawyer and fell into teaching. She said to the teacher, “Well, I think it is time for you to pursue your dreams. You need to go to law school.”

“‘Multiplication is for White People’ – An Interview with Lisa Delpit” by Jody Sokolower in *Rethinking Schools*, Fall 2012 (Vol. 27, #1, p. 25-28), <http://bit.ly/PQVTP2>

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## 7. Will New Math Tests Match the Quality of the Common Core Standards?

In this *Education Week* article, assessment expert Hugh Burkhardt worries that new tests being developed to measure students' proficiency on math common-core standards may have the same weaknesses as the tests we're using now. "If so," he says, "most U.S. students and future citizens will be condemned to further mediocrity in mathematics." To accurately measure the new standards and drive instruction in the right direction (what gets tested gets taught), Burkhardt believes the next generation of tests must feature math problem-solving and modeling, reasoning and critiques of reasoning, and the skills necessary to make these possible. But a "strong undertow of fear appears to be pulling the system back to the familiar," he says. "This is a test of our courage – a test our tests may fail."

The reason he's so worried about the PARCC and SBAC tests (Partnership for Assessment of Readiness for College and Careers and Smarter Balanced Assessment Consortium) is that testing companies are wedded to current models and psychometricians are calling the shots (versus math content experts, as is the case in other countries). Current tests have lots of short items whose "grain size" doesn't encompass the basic concepts of mathematics. "In mathematical reasoning and problem-solving," says Burkhardt, "the whole is more than the sum of the parts... To find out if students can do mathematics, we need to find out how well they can create, critique, and explain substantial chains of reasoning. Multiple-choice tests cannot handle this, nor can their computer-based variants... Mathematics is not treated as a coherent body of mathematical content and practices, but as fragments indirectly related to the target knowledge."

What's the alternative? Some short test items are fine, but Burkhardt believes we also need well-crafted performance tasks that really tap proficiency on the standards. These should be scored by trained human beings using rubrics, and the process must be audited to ensure reliability. We assess writing this way, and it's the approach used by other advanced countries in mathematics. Burkhardt says American testing vendors have little experience with this approach and would be on a steep learning curve developing them. Better to draw on the many well-engineered items in the international literature, judged by a panel of math experts.

Isn't hand-scoring of open-response items much more expensive? True, traditional multiple-choice tests cost only a dollar or two per student and can be given in a single 45-minute class period. But Burkhardt says the true cost of these tests is the amount of test-prep that's devoted to getting students ready – up to 20 days a year. "That's more than 10 percent of teachers' time and, worse, more than 10 percent of the students' learning time," he says. "This is the real cost of aiming at a cheap target." So although performance tasks are more expensive and take more class time, the value-add for teaching and learning is considerable. Burkhardt recommends making training and scoring part of each math teacher's job. "This is high-quality professional development," he says, "showing teachers what is valued in math performance and what other students can do. If this takes two days a year, you are still well ahead of the test-prep clock, with many more days for real teaching and learning than with artificial tests."

How would students prepare for these high-quality tests? If the tests are worth teaching to, "test prep" in the deepest sense is the best use of classroom time, and even the assessments

are part of the curriculum. “The test itself is not a waste of learning time,” Burkhardt concludes; “it is instead exactly the task for which teaching prepares you.”

“Engineering Good Math Tests” by Hugh Burkhardt in *Education Week*, Oct. 3, 2012 (Vol. 32, #6, p. 23), <http://www.edweek.org/ew/articles/2012/10/03/06burkhardt.h32.html>

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## 8. An Opponent of Online College Courses Changes His Mind

In this *Chronicle of Higher Education* article, Ohio State University philosophy professor Glenn Hartz, who wrote a 1998 article in a national newspaper criticizing online education, explains why he’s done a 180:

- “Electronic media have become the standard way of communicating,” he says. “Even dating is often done online... It’s now possible for students to feel closer to you when you’re the virtual speaker and ghost engineer than when you’re physically standing in front of them – even if you’re saying the same things. My generation finds that astonishing.”

- Online courses can pack a powerful instructional punch. “High-definition photos and videos and movie clips dominate the show,” says Hartz. “Lecture becomes the soundtrack... And make no mistake, it is a show – this is entertainment education. Assuming that the content is there, the course is now judged largely on how artfully and smoothly the elements meld together into a coherent, pleasing whole.”

- Online courses are much more flexible for students who have jobs, and the savings in fuel and driving time make the online option “nearly irresistible.”

- It’s possible to avoid the problem of online cheating (“hired scholars” who take exams for a fee) by creating exams that require knowledge of lectures. At first, Hartz required students to come to campus and show a photo ID before taking exams, but he’s now using online exams and sees no evidence of cheating. He’s found that students do about the same amount of work in his “live” and online courses, and the grade distribution is similar.

- Hartz is now less worried about the lack of in-person contact. “I had direct e-mail exchanges with students on the course’s discussion board, and they often had illuminating conversations with one another there,” says Hartz. “I set up an option for students to write to me confidentially if they wanted to. And they did – sometimes about personal matters I would never have heard about otherwise. Again, the Internet provided a comfortable setting in which trust could develop.”

Hartz teaches both traditional and online courses and finds there’s a useful symbiosis between the two formats. Material he’s developed for traditional classes transfers over to the online “show”, and online video clips and visuals work well in his in-person classes.

“So, do I like online courses?” he asks. “My answer is that it doesn’t matter. The students like them, and we have to adjust to their demands.”

“Why I Changed My Mind About Teaching Online” by Glenn Hartz in *The Chronicle of Higher Education*, Oct. 5, 2012 (Vol. LIX, #6, p. B26), <http://chronicle.com/article/Why-I-Changed-My-Mind-About/134674/>

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## 9. Salman Khan on His Evolving Vision

In this *Education Week* article, online curriculum guru Salman Khan sympathizes with how difficult it is for teachers to work with students who walk into their classrooms with widely differing needs. “Some are ready for grade-level content, while others have not fully mastered the prerequisites,” he says. “Still others have already learned the grade-level material and are ready to move on to more advanced concepts.” Many teachers perform heroics trying to help all students by creating and grading assignments at multiple levels.

But a more effective approach, Khan believes, is using technology to assess students’ needs, having them work on appropriate online tasks at home (the flipped classroom) and in class, and using precious classroom time more effectively and flexibly. “When students are learning at a pace and level appropriate to their individual needs,” he says, “they are less likely to disengage or act up.” Instead of creating and correcting scores of worksheets, teachers can focus on designing engaging explorations and rooting out struggling students’ misconceptions.

Will computer-based instruction replace face-to-face teaching? “I think this idea is absolutely wrong,” says Khan. “Technology will never replace teachers; in fact, it will make teachers even more important. Technology will give teachers valuable real-time data to diagnose students’ weak points and design appropriate interventions. It will enable teachers to more quickly gauge students’ comprehension of new topics so they can adjust their lesson plans on the spot.”

Khan says the Khan Academies website is being redesigned to make it more flexible and comprehensive. The mission: *A free, world-class education for anyone, anywhere.*

“The Rise of the Tech-Powered Teacher” by Salman Khan in *Education Week*, Oct. 3, 2012 (Vol. 32, #6, p. 28, 25), [http://www.edweek.org/ew/articles/2012/10/03/06khan\\_ep.h32.html](http://www.edweek.org/ew/articles/2012/10/03/06khan_ep.h32.html)

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## 10. A Critic Tees Off on Salman Khan

In this *American Educator* article, former math teacher and coach Karim Kai Ani (founder of the curriculum company Mathalicious) praises Salman Khan for creating such a large collection of instructional videos and sharing them for free – but has several criticisms:

- Khan’s style of instruction is very traditional – *Do this, then do this* – which presents math as a “meaningless series of steps,” says Ani.

- Khan says he does “two minutes of research on Google” to get ready for each video he records, doesn’t use a script, and admits, “I don’t know what I’m going to say half the time.” Ani says, “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.”

- Some of the videos are flawed. For example, Khan’s explanation of slope is “rise over run,” which is actually a way to calculate it. “In fact,” says Ani, “slope is a rate that describes how two variables change in relation to one another... To the layperson, this may seem like a trivial distinction, but slope is one of the most fundamental concepts in secondary math.” In June, two math professors pointed out errors in Khan’s lesson on negative numbers, and Khan revised the video.

- Ani is bothered by Khan’s reaction to criticism, which he’s labeled “nitpicking” and driven by jealousy.

- Khan Academy is not the silver bullet it’s hyped to be, says Ani. The real work of improving classroom instruction is providing teachers with PD and resources and giving teams the time to collaborate and create content that will engage students and teach them at a conceptual level. “We face challenges in K-12 education,” Ani concludes, “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.’”

“Khan Academy: The Hype and the Reality” by Karim Kai Ani in *American Educator*, Fall 2012 (Vol. 3, #3, p. 3), <http://www.aft.org/pdfs/americaneducator/fall2012/Notebook.pdf>; a longer version of this article appeared in *The Answer Sheet*, a *Washington Post* blog, and can be seen at [www.wapo.st/My6i4i](http://www.wapo.st/My6i4i); to read Sal Khan’s response and Ani’s rejoinder, click here: <http://wapo.st/QFWKqr>

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*If you have comments or suggestions, if you saw an article or web item in the last week that you think should have been summarized, or if you would like to suggest additional publications that should be covered by the Marshall Memo, please e-mail: [kim.marshall48@gmail.com](mailto:kim.marshall48@gmail.com)*

# About the Marshall Memo

## ***Mission and focus:***

This weekly memo is designed to keep principals, teachers, superintendents, and others very well-informed on current research and effective practices in K-12 education. Kim Marshall, drawing on 43 years' experience as a teacher, principal, central office administrator, and writer, lightens the load of busy educators by serving as their "designated reader."

To produce the Marshall Memo, Kim subscribes to 44 carefully-chosen publications (see list to the right), sifts through more than a hundred articles each week, and selects 5-10 that have the greatest potential to improve teaching, leadership, and learning. He then writes a brief summary of each article, pulls out several striking quotes, provides e-links to full articles when available, and e-mails the Memo to subscribers every Monday evening (with occasional breaks; there are 50 issues a year).

## ***Subscriptions:***

Individual subscriptions are \$50 for the school year. Rates decline steeply for multiple readers within the same organization. See the website for these rates and information on paying by check or credit card.

## ***Website:***

If you go to <http://www.marshallmemo.com> you will find detailed information on:

- How to subscribe or renew
- A detailed rationale for the Marshall Memo
- Publications (with a count of articles from each)
- Article selection criteria
- Topics (with a count of articles from each)
- Headlines for all issues
- Reader opinions (with results of an annual survey)
- About Kim Marshall (including links to articles)
- A free sample issue

Subscribers have access to the Members' Area of the website, which has:

- The current issue (in Word or PDF)
- All back issues (also in Word and PDF)
- A database of all articles to date, searchable by topic, title, author, source, level, etc.
- How to change access e-mail or log-in

## ***Publications covered***

*Those read this week are underlined.*

American Educational Research Journal  
American Educator  
American Journal of Education  
American School Board Journal  
ASCD, CEC SmartBriefs, Daily EdNews  
Better Evidence-Based Education  
EDge  
Education Digest  
Education Gadfly  
Education Next  
Education Week  
Educational Leadership  
Educational Researcher  
Elementary School Journal  
Essential Teacher (TESOL)  
Harvard Business Review  
Harvard Education Letter  
Harvard Educational Review  
JESPAR  
Journal of Staff Development  
Kappa Delta Pi Record  
Language Learner (NABE)  
Middle Ground  
Middle School Journal  
New York Times  
Newsweek  
PEN Weekly NewsBlast  
Phi Delta Kappan  
Principal  
Principal Leadership  
Principal's Research Review  
Reading Research Quarterly  
Reading Today  
Rethinking Schools  
Review of Educational Research  
Teachers College Record  
Teaching Children Mathematics  
The Atlantic Monthly  
The Chronicle of Higher Education  
The Language Educator  
The New Yorker  
The Reading Teacher  
The School Administrator  
Theory Into Practice