

# Marshall Memo 585

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

May 4, 2015

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## Quotes of the Week

“[E]ven in poorest Baltimore, there once were informal rules of behavior governing how cops interacted with citizens – when they’d drag them in and when they wouldn’t, what curse words you could say to a cop and what you couldn’t. But then the code dissolved. The informal guardrails of life were gone, and all was arbitrary harshness. That’s happened across many social spheres – in schools, families, and among neighbors. Individuals are left without the norms that middle-class people take for granted. It is phenomenally hard for young people in such circumstances to guide themselves.”

David Brooks in “The Nature of Poverty” in *The New York Times*, May 1, 2015; the first four lines paraphrase a recent Bill Keller interview with David Simon of “The Wire.” <http://nyti.ms/1OUfq4M>

“We can easily support our beloved superstitions, spurious correlations, and bogus connections. The natural tendency of the human mind hinders competent decision making.”

Emre Soyer and Robin Hogarth (see item #1)

“Many students enter the Algebra I classroom holding misconceptions that have the strong potential to derail new learning.”

Suzanne Donovan et al. (see item #3)

“Numeracy isn’t a sign of geekiness but a basic requirement for intelligent discussions of public policy... Statistical literacy should be part of every citizen’s tool kit.”

Nicholas Kristof (see item #2)

“Kids can spot a phony a mile away with blindfolds on.”

Virginia high-school teacher David Webb (see item #7)

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## 1. Four Cognitive Biases That Can Undermine Success

“Experience seems like a reliable guide, yet sometimes it fools us instead of making us wiser,” say Emre Soyer (Ozyegin University/Istanbul) and Robin Hogarth (Universitat Pompeu Fabra/Barcelona) in this *Harvard Business Review* article. “The problem is that we view the past through numerous filters that distort our perceptions. As a result, our interpretations of experience are biased, and the judgments and decisions we base on those interpretations can be misguided.” Soyer and Hogarth have identified three ways this happens:

- *Outcome bias* – Two NBA teams use the same strategy. One gets lucky and wins while the other has some bad breaks and loses. Winning coaches tend to celebrate success and keep using the strategy they think got them there, while losing coaches often discard the strategy just because they lost. A better approach for both coaches is to look more closely at the underlying causes and make necessary adjustments. It’s especially important to deconstruct the causes of failures.

Outcome bias can affect moral judgments. If everything turns out well, say Soyer and Hogarth, “we’re more likely to think that the decision was not just effective but also morally sound.” And it can also make us praise those who solve problems – even preventable problems – more than those who see problems coming and successfully prevent them. Here are some antidotes to outcome bias:

- Deliberately study failures.
- Conduct postmortems on decision processes, even those that led to success.
- Learn from near misses; there are often important clues to improving performance.
- Reward people who prevent problems from occurring.

- *Availability bias*. We tend to act on the information that’s at our fingertips, but this may be filtered by our own imperfect memories or by colleagues who feel pressure to conform or agree with the leader. “Executives who are surrounded by people who agree with them may also experience decreased creativity and problem-solving abilities,” say Soyer and Hogarth. “Conceiving an idea, a strategy, or a methodology is rarely a solo act. A successful creative endeavor involves input from a diverse set of people. If everyone is simply trying to conform, the group cannot benefit from people’s backgrounds, perspectives, and experiences.” Some antidotes to availability bias:

- Build a leadership team with differing backgrounds, experiences, and points of view.
- Find a confidant who will disagree with you. Peter Drucker once wrote, “The first rule in decision making is that one does not make a decision unless there is disagreement.”

- Create risk-free, anonymous reporting channels.

• *Confirmation bias* – “Our own reasoning abilities can sabotage how we collect information and evaluate evidence,” say the authors. “One issue is that we tend to search for and use evidence that confirms our beliefs and hypotheses, and we gloss over or ignore information that contradicts them... We can easily support our beloved superstitions, spurious correlations, and bogus connections. The natural tendency of the human mind hinders competent decision making.” Some antidotes to confirmation bias:

- Actively look for disconfirming evidence.
- Imagine the decision went badly, then figure out probable reasons.
- Don't tell your data experts what conclusions you're hoping to see.

• *Ego bias* – Finally, there's the problem of trusting our faulty memories, our limited experience, and the misguided belief that the future will resemble the past. We need to be humble and acknowledge, say the authors, that “just because something seems obvious after the fact does not mean it could have been predicted.” Some antidotes to ego bias:

- Seek out caveats that could endanger your mission.
- Imagine more than one possible scenario.
- Acknowledge the role of luck.
- Embrace serendipity.

“Fooled by Experience” by Emre Soyer and Robin Hogarth in *Harvard Business Review*, May 2015 (Vol. 93, #5, p. 72-77), <https://hbr.org/2015/05/fooled-by-experience>

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## 2. Stepping Up Our Game in Mathematical Literacy

In this *New York Times* column, Nicholas Kristof quotes several eighth-grade math problems on which U.S. students did worse than those in other countries:

- *What is the sum of three consecutive whole numbers with  $2n$  as the middle number?*

Only 37 percent of American eighth-graders answered correctly, lagging behind South Korea, Iran, Indonesia, and Ghana.

- *How many degrees does a minute hand of a clock turn through from 6:20 a.m. to 8 a.m. on the same day?*

Only 22 percent of American students answered correctly, behind Palestinians, Turks, and Armenians.

- *A piece of wood was 40 centimeters long. It was cut into 3 pieces. The lengths in centimeters are  $2x - 5$ ,  $x + 7$ , and  $x + 6$ . What is the length of the longest piece?*

Only 7 percent of Americans got it right, compared to 53 percent in Singapore.

“This is the generation that will be in the labor force for the next half-century,” says Kristof, “struggling to compete with citizens of other countries. It's not just that American results are dragged down by poverty. Even American millennials with graduate degrees score near the bottom of international ranks in numeracy.”

What's going on here? Kristof believes we have a societal attitude problem with numerical literacy – and we need to get over it. “Numeracy isn't a sign of geekiness,” he says,

“but a basic requirement for intelligent discussions of public policy. Without it, politicians routinely get away with using statistics, as Mark Twain supposedly observed, the way a drunk uses a lamppost: for support rather than illumination... Statistical literacy should be part of every citizen’s tool kit.” And maybe we should deemphasize calculus.

Yes, some people are exceptionally gifted at math. “But let’s not use that as an excuse to hide from the rigor of numbers,” says Kristof. “Countries like Singapore manage to impart extraordinary math skills in ordinary children because they work at it.”

“Are You Smarter Than An 8<sup>th</sup> Grader?” by Nicholas Kristof in *The New York Times*, April 26, 2015, <http://nyti.ms/1cdAQbP>

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### **3. “Worked Examples” As a Strategy for Improving Algebra Achievement**

“Many students enter the Algebra I classroom holding misconceptions that have the strong potential to derail new learning,” say Julie Booth (Temple University) and five colleagues in this *JESPAR* article. Some common conceptual glitches:

- The equals sign is an indicator of operations to be performed.
- Negative signs represent only the subtraction operation and do not modify terms.
- Subtraction is commutative.
- Variables cannot take on multiple values.

“For many students,” say the authors, “these misconceptions persist even after traditional classroom instruction on the relevant topic. A persuasive body of evidence from a variety of content areas suggests that dislodging misconceptions can be devilishly difficult, and often requires directly drawing out and confronting the flawed thinking head on.”

How can that be done? Booth et al. describe their year-long study of an effort to improve algebra results, with a special focus on boosting the performance of African-American, Hispanic, and low-achieving students and narrowing the achievement gap. The school districts taking part in the study made three interesting decisions up front:

- The intervention would take place during the regular school day, not in after-school or summer programs (which were the most vulnerable to budget cuts).
- They would supplement the regular curriculum rather than introducing an entirely new program (for financial reasons and because implementing something new would reduce teachers’ sense of control and distract them from their struggling students).
- The program would not pull out or explicitly target minority-group and low-achieving students (this would reinforce their tendency to self-identify as “not good at math”).

Leaders theorized that the likelihood of successfully improving Algebra I student achievement was highest with a “back-door” strategy – “an unobtrusive approach that would demonstrate the benefit of a new practice without having the primary routines of current practice upended.”

What materials would be teacher-friendly and fit seamlessly into regular classroom instruction? The researchers decided to try AlgebraByExample, a set of 42 Algebra I assignments containing interleaved worked examples that highlight common misconceptions and errors (available free at [http://math.serpmedia.org/algebra\\_by\\_example](http://math.serpmedia.org/algebra_by_example)). The worked

examples (math problems with worked-out solutions provided) are embedded throughout each problem set, alternating between examples and problems that students solve.

AlgebraByExample proved to be an efficient and effective way for students to get corrective feedback on their mistakes, immediately see correct solutions, integrate various pieces of knowledge, self-explain, generate inferences to fill gaps in their knowledge, and make explicit the new knowledge and connections they generated.

At the heart of this process, say Booth et al., is *cognitive conflict*. When students notice the errors in the examples, they “see the differences between the presented problem and others where a procedure does work, which in turn strengthens the likelihood of causing conceptual improvement.” In fact, incorrect examples may be more important than correct examples for promoting students’ conceptual understanding. For example:

- We combine two terms by adding the numbers:  $4x + 3x$  is  $7x$
- Students may be confused about the nature of variable versus constant terms.
- This becomes apparent when they see that  $4x + 3$  is not  $7x$ .

“When students study and explain incorrect examples, they directly confront these faulty concepts,” say Booth et al. “They are less likely to acquire or maintain misconceptions because they have identified what is wrong, and explained why it is wrong.”

What were the results of the study? AlgebraByExample produced a significant boost in students’ performance, especially those who had been having the most difficulty. In conceptual understanding (using released state test items), the lowest-performing students outperformed the control group by 10 percentage points, which is remarkable since teachers didn’t pay special attention to the struggling students. The full group of treatment students did 7 percentage points better than controls. Teachers reported that students needed less teacher support to complete assignments, and the materials got teachers constantly rethinking their own practice in response to students’ positive experiences with the worked examples.

“Design-Based Research Within the Constraints of Practice: AlgebraByExample” by Julie Booth, Laura Cooper, Suzanne Donovan, Alexandra Huyghe, Kenneth Koedinger, and Juliana Paré-Blagoev in *Journal of Education for Students Placed at Risk*, January-June 2015 (Vol. 20, #1-2, p. 79-100), <http://www.tandfonline.com/doi/full/10.1080/10824669.2014.986674>; Donovan can be reached at [sdonovan@serpinstitute.org](mailto:sdonovan@serpinstitute.org).

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#### **4. Improving Gender Equity in Science and Engineering**

In this *New York Times* article, Lina Nilsson (University of California/Berkeley) bemoans the dismal statistics on women’s representation in STEM fields – only 20 percent of tech jobs at Apple, 17 percent at Google, and 14 percent of engineers in the national work force. A number of reasons are cited – workplace sexism, not enough female role models, stereotypes on innate ability, the challenges of juggling careers and motherhood – along with some possible remedies – mentor programs, student support groups, and targeted recruitment. But Nilsson is interested in a different solution: “If the content of the work itself is made more societally meaningful,” she says, “women will enroll in droves.” An example: a new

engineering Ph.D. minor at her university focused on solutions for low-income communities (clean drinking water, medical diagnostic equipment for neglected tropical diseases, and supporting local manufacturing in remote areas) and immediately enrolled 50 percent female students.

Nilsson contacted a number of other universities with similar programs, courses, and clubs and found the same pattern. “Women seem to be drawn to engineering projects that attempt to achieve societal good,” she says. In fact, the D-Lab at M.I.T., which develops technologies to improve the lives of those living in poverty, has a 74 percent female enrollment. At Princeton, female students make up 70 percent of the student-run Sustainable Engineering and Development Scholars program. “None of the programs, clubs, and classes were designed with the main goal of appealing to female engineers,” says Nilsson, “and perhaps this is exactly why they are drawing us in. At the core of each of the programs is a focus on engineering that is cutting edge, with an explicit social context and mission... It is not just about gender equity – it is about doing better engineering for us all.”

“How to Attract Female Engineers” by Lina Nilsson in *The New York Times*, April 27, 2015, <http://nyti.ms/1ceDxdq>

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## **5. Can More Students Benefit from a Four-Year College Education?**

In this *New York Times* article, David Leonhardt tells the story of a C+ Miami high-school student who was more interested in playing music and hanging out with his friends than school and had dreams of being a rock star. When people say, “College isn’t for everyone,” this is the kind of student they have in mind – wouldn’t he be better off in a job, a vocational program, or a community college? But this young man was talked into enrolling in Florida International University by a friend, and he fell in love with learning, worked almost full time at Starbucks to put himself through, and graduated in six years.

Leonhardt cites two recent studies that compared students with test scores just above and below college cut-off level, half of whom enrolled in college and half of whom didn’t. The conclusion: “Enrollment in a four-year college brings large benefits to marginal students.” “If you give these students a shot, they’re ready to succeed,” says Seth Zimmerman, co-author of one of the studies. On average, they have 22 percent higher incomes by their late twenties than those who didn’t attend college, and have all the other benefits associated with higher economic and social status. College graduates are healthier, happier, more likely to remain married, more likely to be engaged parents, and more likely to vote, says the research.

Interestingly, those who initially enrolled in four-year colleges and didn’t make it there were more likely to complete community college than the control group. “That is,” says Leonhardt, “those who started on the more ambitious track were able to downshift, but most of those who started in community colleges struggled to make the leap to four-year colleges. That finding is consistent with other research showing that students do better when they stretch

themselves and attend the most selective college that admits them, rather than ‘under-matching.’”

These findings go against the current notion that we shouldn’t be pushing college so hard. “On the political left and right,” says Leonhardt, “experts have taken to arguing that higher education is overrated (at least when it comes to other people’s children)... Many policy makers, for their part, prefer to emphasize an expansion of community college rather than four-year college.” Tennessee and Chicago have made community college free for most students, and President Obama has proposed doing that on a national level. Leonhardt agrees that we’ve underinvested in community colleges and vocational training, “Yet the new research is a reminder that the country also underinvests in enrolling students in four-year colleges – and making sure they graduate. Millions of people with the ability to earn a bachelor’s degree are not doing so, and many would benefit greatly from it.”

There’s another less-tangible benefit to completing a four-year college. Completing “adulthood’s first major obstacle course,” says Leonhardt, builds grit and a sense of efficacy in young people. “Doing so helps them learn how to finish other obstacle courses and gives them the confidence that they can, so long as they stay focused.” The Miami wannabe rock star is now a high-school psychologist and makes a point of getting students to visit the campus he attended to soak up the atmosphere. “You don’t even need to talk to anybody,” he tells them. “Just walk around. There is something about the energy on campus that makes you want to do better.”

Colleges like Florida International do have a very high dropout rate – 50 percent or more – and many marginal students are left with no degree and a crushing debt. Until we figure out how to reduce the dropout rate, says Leonhardt, “some people have been left to wonder whether many teenagers should simply give up on the idea of college. The answer to that question, however, seems to be a resounding no. Many community colleges have even higher dropout rates than four-year colleges. And most people with no college education are struggling mightily in the 21<sup>st</sup>-century economy.”

“Americans agree that ‘our kids’ should go to college,” Leonhardt concludes. “The debate is really about who qualifies as ‘our kids.’”

“College for the Masses” by David Leonhardt in *The New York Times*, April 26, 2015, <http://www.nytimes.com/2015/04/26/upshot/college-for-the-masses.html>

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## **6. Keys to College Success for Marginal High-School Graduates**

The nation’s 80 percent high-school graduation rate, the highest ever, “is a tribute to the teachers and administrators who have been working diligently to help students improve their academic performance,” say Joseph Sanacore (Long Island University/Post) and Anthony Palumbo (student advocate and author) in this article in *Education Week*. But a substantial number of these students are not ready for college. “Many are marginal graduates who typically enter college unaware of the demands and expectations of the college culture,” say Sanacore and Palumbo. “Regrettably, most will drop out, often burdened with loan debt.

Especially at risk are high-school seniors who are the first in their families to attempt a college education... They and their parents are less likely to be aware of unethical (and possibly illegal) practices employed on some college campuses, and more likely to be taken advantage of by smooth, articulate representatives of these institutions.”

Some colleges have shockingly low four-year graduation rates – for example, 22.9 percent at Mercy College in Dobbs Ferry (NY), 21.7 percent at Long Island University/Post, and only 8 percent at Long Island University/Brooklyn. Low rates like these “indicate few qualms about taking students’ money with an awareness that they will not graduate,” say Sanacore and Palumbo.

Thoughtful guidance by high-school counselors, teachers, and administrators can match students with the right college and prevent this scenario. The key is providing students and their families detailed information on graduation rates and support programs within each college. Sanacore and Palumbo suggest finding the answers to the following questions:

- Does the college examine the demographic backgrounds of incoming students and involve students in setting goals that are interesting, meaningful and culturally relevant?
- Does the college guide students each semester to register for courses that reflect a balance of their abilities and interests?
- Does the college get students engaged by considering their emotional and cognitive abilities as vehicles for meaningful learning?
- Does the college stress in its courses, and reinforce in its classrooms, the use of deep reading, writing, and note-taking, so that students develop the capacity to respond successfully to difficult texts, resulting in productive challenges rather than destructive frustrations?
- Does the college use office hours as a warm context for showing a genuinely caring attitude toward student learning?

“If colleges are unable or unwilling to demonstrate a solid support system for students’ success, we recommend that high-school educators steer students away from them,” say Sanacore and Palumbo.

“Graduating from High School Doesn’t Mean College Success” by Joseph Sanacore and Anthony Palumbo in *Education Week*, April 22, 2015 (Vol. 34, #28, p. 22-23, 25), <http://bit.ly/1GUGoCl>; Sanacore can be reached at [jsanac@optonline.net](mailto:jsanac@optonline.net).

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## **7. Seven Steps to Building Relationships with Teens**

In this *Virginia Journal of Education* article, award-winning high-school music teacher David Webb says he’s always believed that positive rapport with students is essential to classroom success. His suggestions:

- *Meet them where they are.* “Teenagers want desperately to be treated like adults,” says Webb. It may be true that their frontal lobes won’t fully mature for another decade and that they’re hard-wired to be impulsive and rebellious and need constant adult guidance. But an

authoritarian approach doesn't work. The best thing is to forgive teens their developmental circumstances and talk to them as equals.

- *Get to know them.* Teens crave approval or at the very least being noticed. “Engage your students in conversation,” says Webb. “Open your room/office to them during non-class time.” Chat. Eat together. Get to know more about them.

- *Don't demonize the things they think of as normal.* “Our students do not know a world in which they find information in books, have to go to the library to do research, have to wait until later to answer a question from someone not in the room, or can't simply touch a screen to get almost anything they want instantly,” says Webb. “Society will never go backward – it is our job to assimilate to their world, not vice versa.” Ditto for tattoos and piercings.

- *Your reputation precedes you.* “It is very difficult to shake a perception that people have of you based on what other people report,” he says – on the bus, in the cafeteria, online, from parents. *She's really cool. He's mean and overreacts to everything.* “What's being said about you?”

- *Know what you're talking about.* “Kids can spot a phony a mile away with blindfolds on,” says Webb. “They may not know the material you're supposed to be teaching them just yet, but they can certainly tell when you don't know it!” Admitting ignorance when you're not sure of something is an excellent strategy.

- *Teach with passion.* “Show your kids why you love what you're teaching,” he advises. “[T]hey won't be engaged by people who aren't engaged themselves.” Webb remembers the dramatic improvement in his own high-school math achievement when he moved from one math classroom to another.

- *Like them.* That doesn't mean being lax on standards, but it does mean communicating genuine acceptance and affection, being positive about expectations (“Do this” versus “Thou shalt not”), and always explaining why.

“Getting Along with Teenagers” by David Webb in *Virginia Journal of Education*, November 2014 (Vol. 108, p. 8-12), <http://www.veanea.org/home/2461.htm>, spotted in *Education Digest*, May 2015 (Vol. 80, #9)

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## **8. Preventing Reading Failure in Kindergarten and First Grade**

In this article in *The Reading Teacher*, Darrell Morris (Appalachian State University) takes note of the pendulum swings of early-reading approaches over the last 30 years: basal readers, then whole language, then intensive phonics. The outcome? Although all three approaches are logical and teach 75–80 percent of students to read by the end of first grade, 20–25 percent of students aren't successful, with higher percentages in disadvantaged communities. Why? Because of built-in disadvantages in these methods, says Morris – stilted language, uninteresting stories, and insufficient repetition of high-frequency words. The good news, he believes, is that recent research clearly points to six cardinal principles for preventing reading failure in the early grades:

- *Leveled books* – Working in guided reading circles, beginning readers should be led efficiently through an interesting, carefully leveled book curriculum. The research breakthrough came in 2004 when Cunningham, Koppenhaver, Erickson, and Spadorcia proposed that beginning readers should be taught with books that include: (a) repetition of high-frequency words like *is, were, said, girls, play*; (b) adequate repetition of decodable patterns like *hat, leg, job, sled, drop*; (c) text that leads children to anticipate upcoming words; and (d) interesting story lines. In short order, authors created hundreds of books that combined all four characteristics, with pictures to complement the story lines (Morris believes the Rigby PM collection is the best example). When skillfully taught, books like these help students develop sight vocabulary, reading fluency, and comprehension. Another feature of the new generation of early-reading books is finer gradations of text difficulty – nine or more in first grade alone – making it easier for teachers to match students with their level and for children to move up as their reading improves.

- *Phonics* – Beginning readers also need to be led through a leveled word study curriculum. Teachers take their students through the developmental continuum of phonics instruction (beginning consonants, short vowels, consonant clusters, one-syllable vowel patterns), deciding where children need to be taught on the continuum, using an effective method for teaching the various letter sounds and spelling patterns. Two phonics approaches are vying for supremacy – analytic and synthetic. Both are systematic, sequential, and aimed toward the same end goal – automatic recognition of basic spelling patterns. Whichever approach is used, says Morris, needs to be supplemented with “copious amounts of contextual reading at the appropriate difficulty level.”

- *Teacher training* – This is essential to “stir the pot” in the first two areas. Morris suggests a basic lesson plan that combines elements of Reading Recovery and Early Steps:

- Part 1: Reread two or three leveled books.
- Part 2: Teach a phonics/word study lesson.
- Part 3: Introduce a new leveled book, which is reread in the next day’s lesson.

Implementing lessons like this is not a simple matter, and teachers need initial training and expert coaching to execute the technique and pacing in ways that will bring all students to reading success.

- *Readaloud* - Teachers need to read more-challenging texts every day to stretch students’ reading skills, familiarity with language structures, vocabulary, and general knowledge. “In the long run,” says Morris, “and for many beginning readers, time spent actively listening to challenging stories is as important as time spent reading simple stories in the reading circle.”

- *Independent reading* – 20-25 minutes should be set aside every day for the whole class to read on their own, with the teacher strolling through the class and focusing especially on struggling readers, listening to them read and providing help where needed.

- *Writing* – This plays an essential role in learning to read, says Morris. “Children’s earliest writing efforts (e.g., picture captions, single sentences, short notes) help them to understand that sentences are composed of words and that words are composed of sounds that

match to letters.” Later, children tell stories, make arguments, and experiment with letter sounds, spelling patterns, and sight words.

“Preventing Early Reading Failure: An Argument” by Darrell Morris in *The Reading Teacher*, April 2015 (Vol. 68, #7, p. 502-509), available for purchase at <http://onlinelibrary.wiley.com/doi/10.1002/trtr.1346/full>; Morris can be reached at [morrisrd@appstate.edu](mailto:morrisrd@appstate.edu).

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## **9. Short Items:**

*a. Graphics on changing American attitudes* – This set of graphics by Alex Tribou and Keith Collins in *Bloomberg Business* tracks changing American positions on interracial marriage, prohibition, women’s suffrage, abortion, same-sex marriage, and recreational marijuana: <http://www.bloomberg.com/graphics/2015-pace-of-social-change/>

“This Is How Fast America Changes Its Mind” by Alex Tribou and Keith Collins in *Bloomberg Business*, April 26, 2015

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*b. Statistics on athletes* – This site has the average weight and height of athletes by sport and position:

<http://www.businessinsider.com/average-height-weight-nfl-nba-players-2014-8>

“Here’s the Ideal Body Type for Every Sport” by Tony Manfred, *Business Insider*, April 2015

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# 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 44 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 64 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:***

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## ***Core list of publications covered***

Those read this week are underlined.

American Educational Research Journal  
American Educator  
American Journal of Education  
American School Board Journal  
AMLE Magazine  
ASCA School Counselor  
ASCD SmartBrief/Public Education NewsBlast  
Better: Evidence-Based Education  
Center for Performance Assessment Newsletter  
District Administration  
Ed. Magazine  
Education Digest  
Education Gadfly  
Education Next  
Education Week  
Educational Evaluation and Policy Analysis  
Educational Horizons  
Educational Leadership  
Educational Researcher  
Edutopia  
Elementary School Journal  
Essential Teacher  
Go Teach  
Harvard Business Review  
Harvard Education Letter  
Harvard Educational Review  
Independent School  
Journal of Education for Students Placed At Risk (JESPAR)  
Journal of Staff Development  
Kappa Delta Pi Record  
Knowledge Quest  
Middle School Journal  
Perspectives  
Phi Delta Kappan  
Principal  
Principal Leadership  
Principal's Research Review  
Reading Research Quarterly  
Reading Today  
Responsive Classroom Newsletter  
Rethinking Schools  
Review of Educational Research  
School Administrator  
School Library Journal  
Teacher  
Teachers College Record  
Teaching Children Mathematics  
Teaching Exceptional Children/Exceptional Children  
The Atlantic  
The Chronicle of Higher Education  
The District Management Journal  
The Journal of the Learning Sciences  
The Language Educator  
The Learning Principal/Learning System/Tools for Schools  
The New York Times  
The New Yorker  
The Reading Teacher  
Theory Into Practice  
Time  
Wharton Leadership Digest