

Marshall Memo 774

A Weekly Round-up of Important Ideas and Research in K-12 Education
February 18, 2019

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Quotes of the Week

“We’ve been experimented on, and it didn’t work.”

Denver teacher Angela Wilson, quoted in “Where Teachers Hailed Performance-Based Pay, They’re Now on Strike Against It” by Julie Turkewitz and Dana Goldstein in *The New York Times*, February 12, 2019, <https://nyti.ms/2DLiLkw>
[There are 44 articles in the Memo archive under Teacher Evaluation: Merit Pay]

“We simply cannot understand a teacher’s practice without talking with the teacher... We must have a conversation. We must listen. We must inquire about teachers’ invisible thinking, not just their observable behavior.”

Justin Baeder in “The Observability Bias: A Crisis in Instructional Leadership” in *The Principal Center*, February 12, 2019, <https://bit.ly/2NaBjiu>

“Students who are angry often are depressed.”

Nancy Akhavan (see item #7)

“Are students in school to get a grade and graduate or are they in school to get better at something, to improve themselves, and to actually learn something?”

Tennessee teacher Mike Stein, quoted in “Exploring Ways to Say So Long to Traditional Letter Grades” by Madeline Will in *Education Week*, February 5, 2019, <https://www.edweek.org/ew/articles/2019/02/06/exploring-ways-to-say-so-long-to.html>

“America’s reading gaps are not caused by skills shortages but by knowledge vacuums. When we provide even very weak readers with a story about a topic they know, finding the main idea is a snap. By contrast, give strong readers a passage about something they know nothing about, and they can stare at it forever with little chance of finding that same idea.”

David Steiner (quoted in item #2)

1. Improving the Math Achievement of All Students

In this online article, Robert Slavin (Johns Hopkins University) says that at first he and his colleagues were baffled by the results of a study of elementary math teachers who got 90 hours of high-quality professional development, followed by 13 hours discussing videos of their lessons. These teachers' students actually did *worse* than the control group on standardized math tests!

But another study found that training teachers on cooperative learning, social-emotional learning, and classroom management produced much better student learning. Why would teachers who got PD on non-academic areas do better than teachers who got good PD on math pedagogy and curriculum?

Slavin has a theory. When teachers stand at the front of the room explaining new material (for example, fractions), their students usually fall into three categories:

- Students who already have a good grasp of the subject;
- Students who have no clue about fractions and are bored or terrified and not getting it;
- Students who will learn the new concept if it's explained in a particular way.

Teacher PD that focuses on teaching fractions in a new way (for example, using a number line rather than pizza slices) will have some impact on the third group of students but little or none on the "already got it" and "probably won't get it" groups – hence the disappointing assessment results for the whole class.

"But imagine that instead of only changing content," says Slavin, "the teacher adopts cooperative learning. Now the students are having a lot of fun working with peers. Struggling students have an opportunity to ask for explanations and help in a less threatening environment, and they get a chance to see and ultimately absorb how their more-capable teammates approach and solve difficult problems. The already high-achieving students may become even higher achieving, because as every teacher knows, explanation helps the explainer as much as the student receiving the explanation."

That's why teacher training on changing classroom structure and motivation can have such a positive impact on student achievement. The same principle applies to teacher professional development. Some teachers already get it, some have tuned out, and some will benefit from good training. PD has to embrace the same approaches as good classroom instruction: getting teachers interacting, trying things out, talking in groups, and learning from each other as they master new classroom management ideas as well as effective approaches to curriculum and pedagogy.

“A Mathematical Mystery” by Robert Slavin in Robert Slavin’s Blog, February 16, 2019, <https://robertslavinsblog.wordpress.com/2019/02/14/a-mathematical-mystery/>; Slavin can be reached at rslavin@jhu.edu.

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2. Taking Inventory of the Knowledge Required for Student Success in ELA

In this *Education Gadfly* article, Robert Pondiscio says the problem with aligning an ELA curriculum with Common Core standards is that the ELA standards are content-neutral: schools are asked to focus on skills like “finding the main idea,” “reading closely to make logical inferences,” and “comparing and contrasting.” The content knowledge so vital to reading comprehension is not included in the Common Core, except in a general exhortation.

Pondiscio quotes a recent statement by David Steiner, an advocate of content-*dependent* teaching and assessment: “America’s reading gaps are not caused by skills shortages but by knowledge vacuums. When we provide even very weak readers with a story about a topic they know, finding the main idea is a snap. By contrast, give strong readers a passage about something they know nothing about, and they can stare at it forever with little chance of finding that same idea.”

Pondiscio describes the “knowledge mapping” work that Steiner and Ashley Berner are working on at the Johns Hopkins Institute for Education Policy, in partnership with Chiefs for Change. The idea is to analyze an ELA curriculum to see if it includes a coherent, cumulative building of knowledge through the fiction and non-fiction works being studied. By looking systematically at coverage of key domains (for example, U.S. history before 1865) and topics (dystopian literature), this analysis can pick up gaps that aren’t apparent in superficial observations of classrooms and curriculum maps.

“‘Knowledge Map’ Your ELA Curriculum” by Robert Pondiscio in *The Education Gadfly*, February 13, 2019 (Vol. 19, #7), <https://edexcellence.net/articles/knowledge-map-your-ela-curriculum>

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3. Getting the Most from Instructional Coaches

In this *Education Gadfly* article, Michael Petrilli says that improving day-to-day classroom practices “is a slow, steady, and *social* grind...” He cites a 2013 article by Atul Gawande [summarized in Marshall Memo 500] on the way improved medical procedures in third-world countries spread most rapidly when practitioners work with people one on one. The analogy in K-12 schools, says Petrilli, is instructional coaches doing peer-to-peer work with classroom teachers. The coaching role is increasingly popular in schools and shows great promise. Three quarters of all primary schools and two-thirds of high-poverty schools now have instructional coaches.

As always, the devil is in the details. “The coaches themselves need to be highly effective educators – both of students and fellow teachers,” says Petrilli. “Helping other instructors improve their craft takes a high degree of social and emotional skill, technical

expertise, and patience. It can't be generic, lest it will prove no more effective than conventional professional development. Coaching tied to specific, high-quality curricula is probably best."

To maximize the impact of instructional coaches, Petrilli suggests that school and district leaders ask themselves:

- Are we using classroom coaches effectively?
- Have we picked the best people?
- Have they been well trained, including on the curriculum being implemented?
- Do coaches have a manageable caseload of teachers?
- Is there a way to get feedback from them to tweak curriculum and policy?

"Instructional Coaches: The Heroes of the Golden Age of Educational Practice" by Michael Petrilli in *The Education Gadfly*, February 13, 2019 (Vol. 19, #7), <https://bit.ly/2NdfIWX>

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4. Coaching a Stressed-Out Teacher

In this article in *Education Week Teacher*, author/instructional coach Elena Aguilar says many of the teachers she's working with seem tired, overwhelmed, and stressed – there's just too much to do and too much pressure to do it all. Here are Aguilar's suggestions for coaching teachers in this predicament:

- Ask teachers to describe their state of mind. Aguilar says that "it's useful to remember that emotions can be guides to self-understanding. They are a normal part of being a human being, and strong emotions show up to get us to pay attention to what's going on."

- Have them recall previous experiences. Where did it fall on a 1-to-10 stress scale? What worked last time to make things better? Were there helpful internal or external resources?

- Identify a next step that is manageable. "Small bites, small steps," says Aguilar.

- Plan for action. This might be something as simple as getting a good night's sleep, grading three of the 30 essays on the pile, asking a parent to volunteer to help straighten out the classroom, or making a comprehensive to-do list.

"When coaching someone experiencing strong emotions," Aguilar concludes, "it's important to know the signs and indicators of depression and anxiety disorders." In some cases, expert help is required.

"How to Coach the Overwhelmed Teacher" by Elena Aguilar in *Education Week Teacher*, February 14, 2019, <https://bit.ly/2IuEp2q>

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5. Effective Nurturing of Student Teachers

In this article in *Education Week Teacher*, Arkansas elementary teacher Justin Minkel has suggestions on being a good mentor to a student teacher:

- *Make your thinking visible.* For example, how you form reading groups, what struck you in individual student conferences, how you chose a particular book. Novice teachers need to know the creativity, problem-solving, reflection, and action research based on daily practice.

- *Don't assume prior knowledge.* Scott Shirey of the KIPP Delta Schools says of student teachers, "Assume they know nothing but can learn anything." Some mistakes can be prevented by good mentoring, but others will inevitably happen and hopefully be instructive, not destructive. "Better they attempt an ambitious lesson," says Minkel, "– a deep discussion of literature with third graders, a mini-engineering project with six-year-olds – than play it safe with worksheets."

- *Model humility.* Be honest about your mistakes and imperfections, advises Minkel. This might be expressing regret about raising your voice at a student, or identifying an improvement on current pedagogy learned from a PD session. When novice teachers see a respected veteran learning and growing, they're more likely to be open about their own mistakes – and take risks.

- *Practice work-life balance.* "Teachers are notorious for doing everything in our power to meet our students' needs while completely neglecting our own," says Minkel. "We should model dedication to our students and our practice, but we should also model how to take care of ourselves so we don't burn out." This is important if we are to turn around the distressing fact that 44 percent of new teachers leave the profession within five years.

"We know how long it takes to become competent, let alone skillful, at the profession that makes all others possible," Minkel concludes. "We can't tell future teachers how to walk their path, but we can walk it with them. This work is too important to do alone."

"How to Be a Better Mentor to Your Student Teachers" by Justin Minkel in *Education Week Teacher*, December 11, 2018, <https://nyti.ms/2DLiLkw>

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6. Insights on Teenage Behavior

In this *Edutopia* article, Stephen Merrill says that recent research has given us important new information on the adolescent brain.

- The limbic system (the seat of primal instincts like fear, hunger, lust, and pleasure) is hyperactive during adolescence, while the prefrontal cortex (the seat of self-control, planning, and self-awareness) is still developing. "It's not youthful irrationality or a flair for the dramatic at work," says Merrill; "teenagers actually experience things like music, drugs, and the thrill of speed more powerfully than adults do."

- The brain's neuroplasticity at this stage of life makes kids sponges for learning. "The same emerging circuitry that makes teenagers vulnerable to risky behavior and mood swings also confers significant advantages on adolescent learners," says Merrill.

- Being with peers increases risk-taking, most dangerously with automobiles and alcohol consumption. "It's never been a question of feeling invulnerable," says Merrill; "for teenagers, there's just something about the presence of peers that is transfiguring. They understand the risks, and take them anyway."

- Kids at this age respond well to direct explanations. “Talking to teenagers frankly about their brain development can provide useful context for their emotional worlds,” says Merrill, “and reset their expectations about their potential for continued intellectual growth.” This includes explaining the limbic system, the malleability of their brains, and the peer effect.

- Similarly, teens are receptive to learning about self-regulation, managing stress, and considering the feelings of others. Instruction in these areas is more effective than trying to scare kids about risky behaviors.

- Peer culture and teens’ keen sense of fairness and justice can be powerful levers. Preaching about smoking’s health consequences is usually ineffective, but talking about bad breath, peer disapproval, impact on younger children, and the way the tobacco industry hooks and exploits people can change teens’ attitudes and behavior.

“Decoding the Teenage Brain (in 3 Charts)” by Stephen Merrill in *Edutopia*, January 31, 2019, <https://www.edutopia.org/article/decoding-teenage-brain-3-charts>

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7. Dealing Wisely with Student Depression

In this article in *School Administrator*, former school leader Nancy Akhavan (now at Fresno State University) tells how the searing experience of her own teen daughter’s attempted suicide changed her thinking about how schools should address the issue of depression. Her suggestions:

- *It’s not just fate.* “Well, these things just happen,” is the wrong mindset, says Akhavan: “School leaders should work closely with school counselors and faculty to understand suicide can be prevented.” This includes training on warning signs, outreach to families and community agencies, procedures when a student threatens suicide, and protocols for helping survivors reenter school.

- *Make it okay to not be okay.* About one in 13 adolescents suffers from depression, and suicide is the leading cause of death between ages 10 and 24 – and yet there’s still a stigma attached to talking about mental illness.

- *Depression may show up in odd ways.* Rule-breaking, risky behaviors, and apathy can all be signs of underlying depression. “Preparing to use restorative practices can give educators time to observe the student and consider what support services may be needed,” says Akhavan.

- *Build mental health awareness in staff.* Because of the shortage of counselors in most schools, all adults need to understand mental health issues, especially the signs of depression. “Do not allow the depressed student to fade away or hide behind inappropriate anger or behavioral outbursts,” says Akhavan. “Students who are angry often are depressed.”

- *Be proactive.* This might include setting up a mental health awareness club and providing instruction on a “mental health toolbox” that students can use to understand their own issues and develop empathy for differences in others.

Akhavan reports that her daughter is now in college. “This has not been an easy road for her,” says Akhavan. “She daily must manage her symptoms. She has learned her depression

is a chronic illness and must be treated like any other chronic illness – without stigma attached.”

“Believe in Fate No Longer” by Nancy Akhavan in *School Administrator*, February 2019 (Vol. 76, #2, p. 26-29), <https://my.aasa.org/AASA/Resources/SAMag/2019/Feb19/Akhavan.aspx>; Akhavan can be reached at nakhavan@mail.fresnostate.edu.

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8. Effective Use of Therapy Dogs in Schools

In this article in *School Administrator*, freelance writer Bill Graves reports that in the aftermath of the February 2018 school shooting at Marjory Stoneman Douglas High School in Florida, returning students were greeted by 60 therapy dogs. For many students and adults, the reassuring presence of these dogs was vital to their returning to the scene of such severe trauma. Therapy dogs are trained not to bark, bounce, or disrupt, but to be calm and attuned, ready to be petted and hugged. Similarly, dogs played an important part after the 2012 tragedy at Sandy Hook Elementary School in Newtown, Connecticut. In both schools, therapy dogs are still playing a role in helping students and adults deal with the strong emotions they continue to feel.

Therapy dogs are increasingly used by school counselors as they work with students in one-on-one settings and classrooms. Studies show that petting dogs has a calming effect on students (their blood pressure even drops), and interacting with dogs can improve person-to-person interactions and academic performance (although research on this last area is not yet definitive).

“Comfort in Crisis” by Bill Graves in *School Administrator*, February 2019 (Vol. 76, #2, p. 36-40), <https://bit.ly/2SHzv6F>; Graves can be reached at billgraves7@gmail.com.

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9. How the Experts Were Marginalized in the Debate on Value-Added

In this article in *Educational Researcher*, Glory Tobiason (University of California/Los Angeles) explores the rhetoric used to discount researchers’ concerns about the use of value-added models (VAM) for high-stakes teacher evaluation. Tobiason identifies three strategies that have been used to justify continuing with a highly problematic practice:

- *Making it appear that technical concerns can be (or have been) resolved* – The strategy is to state a criticism of VAM and then say, “but...” or “however...” or “others say...” and cite research that seems to answer the concern. “This move distorts the truth, but not by fabricating research findings,” says Tobiason. “Rather, the crux of the truth distortion is that the misaligned scientific finding is presented as if it resolves the technical concern when, in fact, it does not.”

Here’s an example from a *New York Times* article. “[VAM] scores tend to bounce around for a given teacher from year to year and class to class. But looking at an individual’s value-added score for three or four classes, the researchers found that some consistently

outperformed their peers.” A reader with background knowledge about VAM would notice the misalignment of the second sentence with the first – that it applies only to teachers for whom a lot of data are available or teachers at the top of the score distribution. But for most readers, hearing the “yellow light” (technical caution), then the “green light” (special-case findings) leaves the impression that everything is okay.

Consider the different takeaway if the sequence is reversed, with the red light coming second: “Looking at an individual’s value-added score for three or four classes, the researchers found that some consistently outperformed their peers. But VAM scores tend to bounce around for a given teacher from year to year and class to class.”

- *Ignoring important technical concerns* – The second tactic is to raise only nontechnical concerns with VAM. “This keeps technical concerns off the table and maintains the appearance of a fair and balanced discussion of the debate,” says Tobiason. “When expert caution is left out of the discussion, the implication is that it is not a key factor in decision making about VAM-based teacher evaluation. In this way, the reader is given license to opine about the policy without consulting the research community.”

Here’s an example from a news article in *Time* about then-Washington D.C. school chancellor Michele Rhee on the district’s VAM-based teacher evaluation process: “‘People say, ‘Well, you know, test scores don’t take into account creativity and the love of learning,’ [Rhee] says with a drippy, grating voice, lowering her eyelids halfway. Then she snaps back to herself. ‘I’m like, you know what? I don’t give a crap. Don’t get me wrong. Creativity is good and whatever. But if the children don’t know how to read, I don’t care how creative you are. You’re not doing your job.’”

- *Suggesting that opposition to VAM is morally suspect* – This tactic appeals to the reader’s or listener’s sense of right and wrong, with the VAM controversy framed as an ethical struggle with opponents occupying inferior ground. There are four variants:

- Opponents are avoiding reality. For example, then-New York City schools chancellor Joel Klein said in 2010: “[A] poorly performing teacher can hold back hundreds, maybe thousands, of students over the course of a career. Each day that we ignore this reality is precious time lost for children.”

- Opponents fear change. In a 2010 speech to the NEA, then-U.S. education secretary Arne Duncan said, “Now, let’s talk about data. I understand that word can make people nervous.”

- Opponents are withholding information. Here the issue is framed as “the public’s right to know” and transparency in government. But, says Tobiason, “Technical concerns bear directly on this debate because publishing imprecise, inconsistent, or inaccurate information about an individual is understood by some to be a form of libel.”

- Opponents have an ulterior motive. This approach impugns the motives and credibility of VAM skeptics by associating them with other actors – notably teacher unions – who have a political agenda. A *New York Daily News* editorial said, “Teachers union boss Michael Mulgrew has demagogued the ratings effort. Nitpicking the methodology and mocking the complex formula, he says the reports should have been withheld.”

“What makes the case of VAM so interesting,” Tobiason concludes, “is that a highly technical research tool is nestled into a warren of deeply non-technical issues. The purpose of education, the importance of different kinds of learning, the responsibilities of teachers – these questions draw on values and beliefs and thus belong in the jurisdiction of the broadest possible sweep of stakeholders.” But psychometricians have a critically important role in this debate: first, they understand the technical limitations of VAM; second, they can advise non-experts on when technical issues override political, social, ethical, and other considerations. Of course, experts should be humble in areas where they don’t have expertise, but they need to be assertive in areas where they do. The serious technical problems with using VAM for high-stakes teacher evaluation is one such area.

“Talking Our Way Around Expert Caution: A Rhetorical Analysis of VAM” by Glory Tobiason in *Educational Researcher*, January/February 2019 (Vol. 48, #1, p. 19-30), <https://journals.sagepub.com/doi/abs/10.3102/0013189X18797618>; Tobiason can be reached at tobiason@cresst.ucla.edu. There are 86 articles in the Memo archive on value-added (a subtopic under Teacher Evaluation).

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10. Similes for Essential Questions

In this online post, Christie Jorgenson compiles similes for essential questions on curriculum units (defined by Jay McTighe as “open-ended questions designed to engage thinking, spark inquiry, and to be explored over time”). Here is a sampling, with the names of the teachers who created each one:

- *Essential questions are like bridges, in that they help students make connections that can take them to new places.* Laurie Johnson
- *Essential questions are like eyes, in that they help us to focus our units on the right thing.* Rachel Evenhouse
- *Essential questions are like a work of art, in that they spark different opinions and discussion from a variety of perspectives.* Jenn Cornell
- *Essential questions are like an archaeologist’s pick and brush, in that they chip away until they completely reveal treasures that lead to understanding what we are digging into.* Tim Davis
- *Essential questions are like a sieve, in that they filter out the smaller ideas and plans and leave the good stuff behind.* Anna Simpson
- *Essential questions are like an Italian soda, in that every time you revisit them you have a chance to add a new flavor.* Suzy Rainey
- *Essential questions are like Sunday drives, in that you never know where they might take you.* Brenda Dunstan
- *Essential questions are like bunnies, in that they help us hop through our learning experiences.* Kim Nixon
- *Essential questions are like coaches, in that they guide and train but they don’t do the work for you; you have to get there yourself.* Julie Howerzyl

“Essential Question Similes” by Christie Jorgensen, February 5, 2019,
<https://www.smores.com/pc6zx-essential-question-similes>

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11. Short Items:

A panel discussion of the Boston Valedictorian Project – This video is a 90-minute discussion with *Boston Globe* reporters Meghan Irons and Malcolm Gay and three former Boston valedictorians, Abadur Rahman, Delcy Miranda, and Celia Brown, featured in the recent *Globe* report on ten-years-later status of former first-in-class students (see Memo 771, #1): <https://www.bostonglobe.com/metro/2019/02/14/valedictorians-project/smpMVgnj5mMwC0YVUhziWN/story.html?arc404=true>

“The Valedictorians Project: Where Do We Go From Here?” February 14, 2019

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*If you have feedback or suggestions,
please e-mail kim.marshall48@gmail.com*

About the Marshall Memo

Mission and focus:

This weekly memo is designed to keep principals, teachers, superintendents, and other educators very well-informed on current research and effective practices in K-12 education. Kim Marshall, drawing on 48 years' experience as a teacher, principal, central office administrator, writer, and consultant lightens the load of busy educators by serving as their "designated reader."

To produce the Marshall Memo, Kim subscribes to 60 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). Every week there's a podcast and HTML version as well.

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Core list of publications covered

Those read this week are underlined.

All Things PLC
American Educational Research Journal
American Educator
American Journal of Education
American School Board Journal
AMLE Magazine
ASCA School Counselor
District Management Journal
Ed. Magazine
Education Digest
Education Next
Education Update
Education Week
Educational Evaluation and Policy Analysis
Educational Horizons
Educational Leadership
Educational Researcher
Edutopia
Elementary School Journal
English Journal
Essential Teacher
Exceptional Children
Go Teach
Harvard Business Review
Harvard Educational Review
Independent School
Journal of Adolescent and Adult Literacy
Journal of Education for Students Placed At Risk (JESPAR)
Kappa Delta Pi Record
Knowledge Quest
Language Arts
Literacy Today (formerly Reading Today)
Mathematics Teaching in the Middle School
Middle School Journal
Peabody Journal of Education
Phi Delta Kappan
Principal
Principal Leadership
Reading Research Quarterly
Responsive Classroom Newsletter
Rethinking Schools
Review of Educational Research
School Administrator
School Library Journal
Social Education
Social Studies and the Young Learner
Teachers College Record
Teaching Children Mathematics
Teaching Exceptional Children
The Atlantic
The Chronicle of Higher Education
The Education Gadfly
The Journal of the Learning Sciences
The Language Educator
The Learning Professional (formerly Journal of Staff Development)
The New York Times
The New Yorker
The Reading Teacher
Theory Into Practice
Time Magazine