Marshall Memo 1046

A Weekly Round-up of Important Ideas and Research in K-12 Education
July 22, 2024

In This Issue:

Quotes of the Week

"For a romantic relationship to work, it must have shared communication that includes a regular exchange of ideas. Without that, you might as well be roommates."
Dr. Ruth Westheimer (see item #1)

"When processing information, students must actively recall material *from memory*. Superficial strategies that require less effort, like rereading, highlighting, or copying, are typically far less productive."
Youki Terada and Stephen Merrill (see item #2)

"Brain breaks aren't just ways to cool off and re-energize; they're an integral part of memory consolidation and may even play a role in developing new insights."
Youki Terada and Stephen Merrill (*ibid*.)

"I have a dream that inclusion becomes so commonplace that we no longer need to use the word."
Michael Haynes in "A Case for Universal Inclusion" in *ImpassionEd*, July 11, 2024; Haynes can be reached at m1chael.haynes@aol.com.

"Fear looms large for all of us, but especially for early-career teachers."
Henry Seton (see item #4)

"Hey, it's 4:59 p.m. and still no crisis! What's wrong?"
David Perlmutter in a tongue-in-cheek e-mail to a fellow administrator (see item #3)

"You don't have to do everything, everywhere, all at once."
David Perlmutter (*ibid*.)

1. A Tribute to Dr. Ruth

Ruth Westheimer, the grandmotherly sex advice-giver, TV and radio call-in host, and author, died on July 12th at 96. "Frank and funny," said Daniel Lewis in the *New York Times* obituary, "the taboo-breaking therapist said things on television and radio that would have been shocking coming from almost anyone else." Candid as she was, Dr. Ruth always stressed respectful relationships and safety, not just the mechanics of intimacy.

Westheimer spent her early years in Germany, but as the Holocaust loomed, her parents sent her to Switzerland in the Kindertransport (they both died in Auschwitz). The petite Westheimer (4 feet, 7 inches) served in Israel's war of independence in the late 1940s and although she never saw combat, her legs were severely injured in an explosion. She emigrated to the U.S. in 1956, married and divorced twice, raised a son and daughter as a single mother, and found happiness in a third marriage.

Westheimer earned her doctorate and built a career as an ebullient and plain-spoken educator and author about sexuality. In 2023, New York Governor Kathy Hochul named her the state's Ambassador to Loneliness, saying that she helped "New Yorkers of all ages address the growing issue of social isolation, which is associated with multiple physical and mental health issues." Here are some notable Dr. Ruth quotes:

- I do remember all the songs of my childhood and they helped us to cope with being orphans. But the memories of my parents in my early childhood and the solid foundation of socialization and strong values that they gave me never left me for one day.
- I lived, while 1½ million Jewish children died. So I have an obligation to repair the world… I have in my bones, and in my blood, the knowledge that you have to help the people who are persecuted.
- The question is, how can my head be filled with such sad memories and yet I am still able to make people laugh? It's not always easy, but the secret is to compartmentalize the various sections of your brain. I can put aside the sad memories when I have to, but they're always lurking around somewhere, and sometimes they pop up when I least expect it. The more you practice, the easier it becomes. But to allow the joy to come front and center in your life, you also have to feel your emotions, even the sad ones. You have to mourn, let the tears pour out.
- You can't be a risk taker and expect to win each and every time. If you could control the future, then you wouldn't be taking any risks. And while failure leaves a bitter taste

in your mouth, the sweetness of winning more than makes up for it. You'll never win at anything unless you take a risk in the first place.

- When I came to this country, people told me that if I wanted to teach and work here, I would have to take speech lessons to lose my accent. But it helped me greatly, because when people turned on the radio, they knew it was me.
- I am promoting sexual literacy in a time of unprecedented sexual freedom.
- Part of my success is because I'm very old-fashioned.
- In today's world, there's a little bit of a danger in that people don't really talk to each other. You see couples walking in the street, each one of them texting someone else. That worries me.
- Remember, attraction is only one part of a relationship. Loyalty, commitment, responsibility, and maturity make up the rest.
- For a romantic relationship to work, it must have shared communication that includes a regular exchange of ideas. Without that, you might as well be roommates.
- I'm never embarrassed to say, "I don't know."
- If a professor leaves his students laughing, they will walk away remembering what they have learned.

Back to page one

2. Key Insights from the Year's Education Research

In this *Edutopia* article, Youki Terada and Stephen Merrill highlight what they believe are the most important research insights from 2023-24 (click the article link below for the ten studies they cite):

• *The power of low-stakes memory retrieval* – When students recall key factual information and foundational concepts (in practice quizzes, ungraded free-recall tests, actual or virtual flashcards, practice problems in textbooks, explaining information to classmates, and active question-and-answer sessions), long-term memory is solidified. "When processing information," say Terada and Merrill, "students must actively recall material *from memory*. Superficial strategies that require less effort, like rereading, highlighting, or copying, are typically far less productive." Strategic spacing of retrieval – longer and longer intervals – makes it possible to remember something for years.

• *Mixing direct instruction and inquiry* – The trick is knowing when to use each instructional approach, say Terada and Merrill. Direct instruction is the most effective strategy when presenting new information (for example, the chemical formula for water) or teaching a straightforward operation (how to calculate the number of atoms in 118 grams of water). With an open-ended learning challenge where students need to apply learning in a new context (How does water's boiling point change with altitude?), inquiry-based learning is the best way to foster deep conceptual understanding.

Teachers should be flexible about switching between the two modes, say Terada and Merrill: "Combine direct instruction, such as lectures, demonstrations, and closely-guided practice, with inquiry-based approaches that promote deeper comprehension and transfer, such

as open-ended questions, self-directed research, and projects. Be flexible and let the needs of your students and your learning goals guide your decisions."

• *The key role of background knowledge* – Several recent studies demonstrate once again that when students know factual information about a topic, their reading comprehension improves significantly. Teachers should identify the big ideas, new knowledge, and vocabulary in each curriculum unit, say Terada and Merrill, and systematically expose students to it in videos, reading, and hands-on experiences.

• *Sketchnotes as a memory facilitator* – "In recent years," they report, "cognitive scientists have endorsed the notion that drawing is a powerful way to learn, since students encode the material more deeply – processing information visually, kinesthetically, and semantically." Kids don't need to be artists to put this insight to work; they can be guided and encouraged to use rough sketches, arrows, flow charts, and mind maps to create vivid links between concepts and factual information, creating coherent mental models of the big picture to learn more deeply.

• *Building in breaks* – Sustained student seat time doesn't necessarily translate into better learning, say Terada and Merrill. A new study shows that during a short break between learning sessions, people's brains unconsciously replay what they have been learning, which leads to improved performance. "The takeaway," say the authors: "Brain breaks aren't just ways to cool off and re-energize; they're an integral part of memory consolidation and may even play a role in developing new insights. When planning lessons – particularly those that cover new material – consider blocking off intervals of rest, relying on simple activities like letting kids listen to music, chat for a minute or two with friends, or take a quick walk around the room."

"10 Studies Every Teacher Should Know About" by Youki Terada and Stephen Merrill in *Edutopia*, July 19, 2024; see Memo 1015 for last year's collection of key research.

Back to page one

3. Preventing Leadership Burnout

In this *Chronicle of Higher Education* article, David Perlmutter (Texas Tech University) says that being a university administrator is much more challenging now than it was ten or twenty years ago. He offers advice on how administrators can "get through the day and semester without crushing your health and spirit." How many of these tips apply to K-12 school leaders?

• *You don't have to do everything, everywhere, all at once*. The key, says Perlmutter, is identifying what is both urgent and important, what can be delegated to others, and what can be put on the backburner. (It's certainly helpful to have a strong team in place.) He tells about a department chair who humbly reached out to colleagues when he was dealing with a crisis and was delighted that they stepped up and took care of some of his routine duties so he could focus on the big challenge for a few days.

• *Schedule breaks, transition periods, and reaction intervals*. "Knowing when *not* to schedule something is vital," says Perlmutter. Whoever is organizing the administrator's

calendar needs to build in time to get from one meeting to another, a cushion in case a meeting runs overtime or there might be a need for some follow-up work or time to clear your mind. But sometimes having another meeting scheduled can help bring closure to one you'd like to escape.

• *Accept that crises and disruptions are part of the job*. As part of his graduate studies, Perlmutter shadowed police officers and came to understand a job that consists of a string of small and large emergencies, with occasional downtime. He says that being an academic administrator has a similar dynamic, although the crises and interruptions aren't as life-threatening. Perlmutter once jokingly e-mailed a dean friend, *Hey, it's 4:59 p.m. and still no crisis! What's wrong?* "How good you are at managing a crisis is a separate issue," he says. "But they are going to happen, not infrequently at 4:59 p.m. on a Friday." A lot of administrators haven't learned this lesson and resent unexpected intrusions on their tidy calendars, resulting in constant stress.

• *Don't let ego drive you to intervene too fast*. "There's a normal human inclination," says Perlmutter, "– and it seems to swell when you become an administrator – to exaggerate your own importance in solving a problem. In our age of overcommunication, people expect an immediate response. But get in the habit of giving yourself a little time to think… Not reflexively jumping into the fray 'to save the day' can preserve your sanity and even help create an atmosphere of more individual responsibility. It will also lessen your workload and stress level." Some issues will get worse if you don't get involved right away; others resolve themselves with a little strategic procrastination.

The workload of administrators is "huge and unavoidable," concludes Perlmutter. "But your organization of that labor, your attitude toward it, and your philosophy about it can affect its quality and sometimes its quantity. You don't have to burn out if you commit to pragmatism."

"4 Ways to Counter Leadership Burnout" by David Perlmutter in *The Chronicle of Higher Education*, July 19, 2024 (Vol. 70, #23, pp. 39-41); Perlmutter can be reached at david.perlmutter@ttu.edu.

Back to page one

4. Addressing Teachers' Classroom Fears

(Originally titled "Farewell, New Teacher Nightmares")

In this *ASCD* article, Henry Seton lists the fears he still has as a veteran educator: an out-of-control class, losing his temper, being disliked by students, no lesson plan, keeping up with grading, committing a racial microaggression. "Fear looms large for all of us," he says, "but especially for early-career teachers," undermining a trusting, safe classroom. How can teachers be buoyant and unflappable, maintaining "unconditional positive regard," when students misbehave? Seton's suggestions:

• *Set and maintain high expectations*. Consequences and follow-up for misbehavior and sub-par work must be clear and unwavering.

• *Get coaching*. A mentor can validate fears, help plan for predictable scenarios, and practice so you can execute with calm authority.

• *Establish routines*. This includes agreed-upon signals for getting students' attention and brief verbal redirects. "The key," says Seton, "is finding that concise balance of words, tone, and facial expression that conveys both love and meaning business."

• *Get to know students*. In the first week, learn names and correct pronunciations, where students excel, and other pertinent information. "Have an inside joke with every single student," says Seton, "– something secret to laugh about – so they know they are special in your eyes."

• *Lean into feedback*. "The best feedback is in the moment," he says, "as you look over their shoulders during independent work." Returning written work quickly is essential, as is soliciting student feedback and following up.

• *Take care of yourself*. Martyrdom is not a good place to be, says Seton. Midweek exercise has helped him, and ten-minute meditation sessions or naps during planning periods.

• *Don't despair*. "By bouncing back resiliently the next day," he concludes, "owning our mistakes, and extending compassion to ourselves, we can model for students how to respond to setbacks in their own lives… Students will see that we will not give up looking for and seeing their potential. And in doing so, we will help all our students – even our most challenging ones – to see what is lovable inside of them and learn how to extend this compassion to others."

"Farewell, New Teacher Nightmares" by Henry Seton in *ASCD Online*, July 18, 2024; Seton can be reached at hseton@gmail.com.

Back to page one

5. A Rookie Teacher Responds to Critical Feedback

In this *Mathematics Teacher* article, Georgia middle-school teacher Corey Gray describes getting some blunt feedback from his principal in October of his first year. Gray thought he had taught an excellent lesson as the principal sat with her laptop at the back of the room: a clear explanation of the distributive property, students turning and talking about their strategies, then using manipulatives. But when Gray nervously took a seat in the principal's office that afternoon, she said, "You are an amazing math teacher. However, your expectations for a one-size-fits-all type of perfection leads to your own frustration in the classroom and clouds your vision of your students' mathematical genius." She used the analogy of trying to put square pegs into round holes.

Gray was taken aback but soon realized the principal was right. His very structured classroom management and one-right-answer approach to math procedures "was creating an environment riddled with fear and fraught with comparison," he says. "I asked for answers, rather than asking for pathways to solutions. I confirmed correct answers only, rather than affirming thinking and productive struggle. I did not take the time to truly understand, appreciate, and value my students for who they were…" Students were *doing math* rather than

thinking about math, resulting in disappointing and inequitable outcomes. Gray's takeaway from the conversation boiled down to three lessons:

• *Know that you are on a journey*. "This journey is not easy," he says, "but it is necessary to develop our teaching abilities and character… Embracing this truth allows you to welcome and seek out community…"

• *No one knows everything, but surround yourself with educators who know a lot*. Collectively, you and your fellow teachers need to take risks, seek out the best methods and materials, and figure out what works best for which students.

• *Don't let perfection be the enemy of the good*. "For me," says Gray, "my desire to create the perfect educational environment for my students, anchored in problem-solving and student choice, fuels me, but at times it can become a burden because I often feel alone and burnt out… I remind myself daily to give myself grace, as I am not alone in this quest."

"Teaching Is a Journey: Square Pegs, Round Holes" by Corey Gray in *Mathematics Teacher: Learning & Teaching PK-12,* July 2024 (Vol. 117, #7, pp. 530-532); Gray can be reached at corey.gray@uga.edu.

Back to page one

6. Using Open-Ended Math Questions to Differentiate Instruction

In this *Mathematics Teacher* article, teacher/consultant/author Marian Small says "too many students sit in a mathematics class where the material being taught is just not quite at the right level for them" – either too easy or too difficult. The best way to engage all students, Small believes, is asking open-ended questions. Some examples:

- Instead of asking fifth graders to multiply 42 x 37, pose this problem: *You multiply two numbers that are 5 apart. What could the product be? I hope some of you use small numbers and some larger numbers*. Some students might multiply 3 x 8 while others multiply 92 x 97.
- *There are ___ students in one school and ___ in another school. Choose values that make sense to you for both blanks and tell how many there are in both schools together.*
- *You multiply two numbers and the tens digit of the product is 8. What could you be multiplying?* One student might multiply 40 x 2 while another multiplies 140 x 2 and the class discusses the connections.
- *A number is a lot like 50. What might it be? What's a number that you think is very different from 50?* The teacher follows up by asking what 25 and 50, for example, have in common, or how 49 and 50 are different.
- *You evaluate an algebraic expression. If you increase the value of the variable just a little, the value of the expression increases a lot. What might the expression be?*
- *The answer to a question is the word quadratic. What could the question be?*

Small says there are at least four benefits to posing open-ended rather than right-answer questions:

- More students are engaged because there will be a variety of unique answers.
- Because it's easier to be right, students' confidence increases.

- A variety of responses produces a richer mathematical conversation.
- There's the potential to change students' beliefs about the nature of mathematics.

"The Power of Open-Ended Questions" by Marian Small in *Mathematics Teacher: Learning & Teaching PK-12,* July 2024 (Vol. 117, #7, pp. 528-529)

Back to page one

7. Comparing One-to-One with Small-Group Online Tutoring

In this Annenberg EdWorking Paper, Matthew Kraft and Virginia Lovison (Brown University) report on their comparison of one-on-one and small-group tutoring in a study conducted in Maryland, California, and North Dakota schools. Because individual tutoring is an expensive intervention, Kraft and Lovison wanted to know if its well-documented benefits, especially for struggling students, still held when tutors were working with groups of three. They conducted the study during a 10-week middle-school online math tutoring program offered during the school day.

The conclusion? Looking at student achievement and surveys of teachers, Kraft and Lovison found that one-on-one tutoring was significantly more effective than working with groups of three students. Students who were tutored one-on-one showed "substantially more effort, excitement, focus, and improvement than students assigned to 3:1 tutoring," say the researchers. Tutors reported the following advantages to one-on-one online sessions:

- They were able to personalize each lesson and customize the pacing.
- They built better relationships with students.
- They moved at a faster pace because there were fewer distractions and they didn't have to accommodate several students' pacing needs.
- One-on-one created a space where students felt special, could be themselves, ask questions, and weren't afraid to make mistakes.

Working with online groups of three, tutors said, was challenging in terms of personalizing instruction, developing relationships, fostering participation, and managing student behavior. There were some benefits – discussions among peers, sharing ideas, and using competition to motivate students – but on balance, one-on-one tutoring was significantly better, both academically and interpersonally.

"The Effect of Student-Tutor Ratios: Experimental Evidence from a Pilot Online Math Tutoring Program" by Matthew Kraft and Virginia Lovison, An Annenberg EdWorking Paper, June 2024; Kraft can be reached at mkraft@brown.edu.

Back to page one

8. Building Students' Statistical Literacy with a Weekly Online Graph

In this article in *Mathematics Teacher*, Liza Bondurant (Mississippi State University) and Stephanie Somersille (tutor and consultant) say that critical statistical literacy – the ability

to make sense of graphic data displays – is "a vital skill that needs to be learned and reinforced with students early and often."

To build this skillset, they recommend the free online resource, What's Going On in This Graph?, a collaborative effort of the American Statistical Association and *The New York Times*. Some recent graphs: college admissions, temperature fluctuations, global population trends, electric cars, football and C.T.E., teens and social media, brides' last names, the price of eggs, and parents' involvement with their children.

Each Friday, WGOITGraph challenges people (most users are students 13-18) to discuss a new graph individually, with their classmates, or asynchronously online, using these four prompts:

- What do you notice?
- What do you wonder?
- How does this relate to you and your community?
- Create a catchy headline that captures the graph's main idea.

The following Wednesday, the website hosts synchronous moderation of the online discussion by high-school and college math instructors, followed the next day by a concluding post with the graph, background information on the topic, follow-up questions, and shout-outs to the most creative headlines.

"Cultivating Critical Statistical Literacy in the Classroom" by Liza Bondurant and Stephanie Somersille in *Mathematics Teacher: Learning & Teaching PK-12,* July 2024 (Vol. 117, #7, pp. 507-511); Bondurant can be reached at LBondurant@colled.msstate.edu.

Back to page one

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 54 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 HTMI version as well.

Subscriptions:

Individual subscriptions are $50 for a year. Rates decline steeply for multiple readers within the same organization. See the website for these rates and how to pay by check, credit card, or purchase order.

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
- Article selection criteria
- Publications (with a count of articles from each)
- Topics (with a count of articles from each)
- Headlines for all issues
- Reader opinions
- 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 (Word and PDF) and podcasts
- An easily searchable archive of all articles so far
- The "classic" articles from all 20 years

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
ASCD SmartBrief
Cult of Pedagogy
District Management Journal
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
English Journal
Exceptional Children
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
Kappan (Phi Delta Kappan)
Knowledge Quest
Language Arts
Learning for Justice (formerly Teaching Tolerance)
Literacy Today (formerly Reading Today)
Mathematics Teacher: Learning & Teaching PK-12
Middle School Journal
Peabody Journal of Education
Principal
Principal Leadership
Psychology Today
Reading Research Quarterly
Rethinking Schools
Review of Educational Research
School Administrator
School Library Journal
Social Education
Social Studies and the Young Learner
Teachers College Record
Teaching Exceptional Children
The Atlantic
The Chronicle of Higher Education
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
Urban Education