

Marshall Memo 870

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

January 18, 2021

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Quotes of the Week

“Be gentle with yourself. Of course this is hard. The world is struggling with a disaster, and you are doing a hard job in a hard time. You are not losing your mind because you are grouchy or forgetting things. How else could it be?”

Brendan Hickey (see item #2)

“Your students want to see your eyes, hear your voice, watch what your hands are doing, and know your heart. All of that is difficult at the moment, but remote learning has presented us with a perfect example of how constraints such as not being in the same room together can unleash creativity.”

Alex Pearson in [“Bringing More of a Classroom Feel to Distance Learning”](#) in *Edutopia*, January 11, 2021

“Learning the fine art of speaking with the possibility of being heard, and listening with the possibility of being changed, is a practical contribution to finding one’s way in a wildly diverse democracy.”

Bill Ayers (quoted in item #6)

“Let me tell you something, when someone loves you, and sees more in you than you see in yourself, you cannot put a price on that. That was every single one of my teachers in high school, in the Upward Bound program, in Summer in the City.”

Viola Davis, quoted in “The Prime of Ms. Viola Davis” by Meg Grant in *AARP Magazine*, December 2020/January 2021 (Vol. 64, #IC, pp. 30-33, 78)

“Real equity work is attempting to undo and heal generations of violence, trauma, and racial and economic inequities.”

Bettina Love in [“How to Make Anti-Racism More Than a Performance”](#) in *Education Week*, January 12, 2021

1. Boosting Teacher Morale During the Height of the Pandemic

In this online article, teacher/writer Dave Stuart cites a December 2020 survey showing that 86 percent of U.S. teachers said morale was lower than before the pandemic. Motivation is key to morale and classroom effectiveness, says Stuart, and cites five positive beliefs – each of which is currently being undermined:

- Value – This work really matters – but am I contributing with remote teaching?
- Belonging – Teaching is my profession – but I’m having doubts.
- Effort – I’m a continuous improver – but now I’m overwhelmed.
- Efficacy – I’m skillful in the classroom – but I can’t succeed in this format.
- Credibility – My principal is competent, cares about me, and is into the work as much as I am – but right now, not so much.

“When a teacher knows those five things to be true,” says Stuart, “that is a teacher who will work hard and with joy, even amidst adversity.” But during the pandemic, each is being seriously challenged.

The good news, says Stuart, is that if school leaders keep the five beliefs in mind, they can address low teacher morale by bringing “some basic, loving practices to bear on people who need it.” Here are his suggestions:

- Make a genuine connection with each staff member – once a week in small schools, every two weeks with a bigger staff. In these meetings, teachers need to know that they are valued, known, and respected.

- Demonstrate competence by solving a problem that everyone is having and closing the loop with colleagues when it’s done. “It doesn’t take a huge amount of time to follow up,” says Stuart, “but the impact on a teacher’s perception of your competence is significant.”

- Demonstrate passion for your work by frequently using 2-3 shorthand phrases about the mission of the school or how much you enjoy working with your team.

- Focus on repairing frayed or fraying relationships. Any situation where a colleague feels offended, embarrassed, or belittled will undermine a leader’s credibility and needs to be fixed as soon as possible.

- In a midyear staff meeting, ask teachers to spend a few minutes writing down 2-3 things about teaching that they value, and why those are important to them. Then ask people to share in small groups, and have the whole staff hear a few read aloud. Research has shown that reflecting on the fundamentals of the work and how our hearts engage with them can have a very positive impact.

- In a different staff meeting, ask teachers to brainstorm connections between their outside-school lives and things they've been learning and practicing in their classrooms. Connecting hobbies, interests, and life goals can motivate students – and enhance the value teachers see in their work.

- *Shark Tank*, content area edition – Ask a few of your more outgoing staff members to make 60-second pitches to the whole staff on why their content area is worthy of study (without denigrating other subject areas). “The award for a good pitch,” says Stuart, “is applause and smiles and laughter.”

- Show videos about classroom problems being solved and discuss as a staff. The best scenario is where respected teachers admit to having a classroom problem and describe how they solved it – and others can connect the process to their own experience.

- Give “magical” feedback to individuals. This is preceded by this statement: “I’m giving you these comments because I have very high expectations and I know that you can reach them.” This communicates that the leader cares, that the work is valuable, and that with effective effort the teacher can be successful. The statement neutralizes the worries teachers have when there’s critical feedback: *Wait, am I bad at teaching? Does my boss think I’m a bad teacher? Is the principal out to get me?*

- Make “wise effort” as clear as you possibly can. A common misconception with growth mindset, says Stuart, is that effort is everything. But “the last thing we want teachers to do is try harder at things that are inefficient or self-defeating,” he says – for example, a teacher slogging through grading every student assignment. Now more than ever, efficient and effective practices are in order.

[“Ten Things Leaders Can Do to Improve Teacher Morale in Early 2021”](#) by Dave Stuart, January 15, 2021; Stuart can be reached at dave@davestuartjr.com.

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2. Covid-Time Insights from Emergency Managers

In this article in *Communiqué*, Brendan Hickey shares lessons from emergency management that are relevant to K-12 schools during the pandemic. Our work really is harder now, he says; there’s lots of personal and professional stress, and some people are suffering from what’s called *helmet fire* – a condition that occurs when people are working hard for long hours under lots of pressure, making decisions under time constraints, analyzing too much information, and dealing with uncertainty. This can result in:

- Shutting down entirely;
- Being busy with unproductive work – for example, organizing and reorganizing – and avoiding key tasks;
- Sticking to initial decisions even when conditions have changed;
- Focusing on one thing to the exclusion of everything else.

Hickey shares these suggestions from agencies that deal with emergencies:

- *Carve out a positive zone.* Identify areas of your home and workspace where you don't think about the pandemic, that "give you the chance to stand down from your fight-flight-freeze response and experience the rest and recovery response."

- *Use situational awareness.* Be aware of the way the pandemic is affecting you and those around you, perhaps using the U.S. Navy's okay-to-crisis stress continuum: Green, Yellow, Orange, and Red.

- *Keep moving.* "Everyone is already tired, yes," says Hickey, "but there is a saying in the world of disaster response: *Action binds anxiety.*" This is not a call for random activity or busywork; rather, it points to the wisdom of regular aerobic exercise.

- *Nurture adaptive character traits.* One researcher found that those who survive and thrive in emergency situations show playfulness, curiosity, flexibility, humor, empathy, and intuition. Another study identified flexibility, adaptability, tolerance for uncertainty, being able to set priorities, working independently when needed, and attention to detail.

Hickey closes with these words: "Be gentle with yourself. Of course this is hard. The world is struggling with a disaster, and you are doing a hard job in a hard time. You are not losing your mind because you are grouchy or forgetting things. How else could it be? Be gentle with others. They are also living and working during the pandemic, in addition to whatever other losses and pain and obstacles they face. Assume good will and best effort whenever you can. Be strong, which is to say, realize how strong you already are to be doing what you do right now... Finally, be safe. The science is advancing and we are learning new things about the novel coronavirus all the time."

"Practicing School Psychology During a Pandemic: Lessons from Emergency Management" by Brendan Hickey in *Communiqué*, January/February 2021 (Vol. 49, #5, pp. 1, 25-27)

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3. Are Digital Media Helpful for Learning? It Depends

In this article in *American Educator*, Rebecca Silverman and Kristin Keane (Stanford University) say "the relationship between digital media use and language and literacy learning is complex, and there are, in fact, arguments both *for* and *against* the use of digital media in education." During the pandemic, with students spending countless hours on digital devices, it's more important than ever for teachers and families to make wise decisions.

Silverman and Keane define digital media as content delivered through technology: text, images, audio, animations, video, and interactions. Digital sights and sounds can overtax students' ability to focus on, process, and learn important information. On the other hand, digital media can boost learning if age-appropriate material is presented in ways that are coherent, focused, and compelling. For example, in a lesson about coral reefs, an animated video of fish singing about reefs and dancing along with the music may leave students with little understanding, wasting instructional time. But a live-action video of plants and animals in a coral reef swaying gently under the waves, with a clear explanation of reefs and the plants and animals that live in them, will help students understand this habitat.

Digital media can never replace teacher-student interactions, often accompanied by high-quality print materials, say Silverman and Keane. But research suggests that at their best, media can enhance and provide practice on skills and concepts teachers are presenting. A key factor is how digital material is presented and scaffolded. “Without modeling and guidance,” say Silverman and Keane, “children might focus on the bells and whistles.” When choosing materials, here are some unhelpful aspects to watch for:

- Distracting hypermedia;
- Extraneous hot spots and pop-ups;
- Unrelated information.

Some positive digital media features:

- Aligned to grade-appropriate curriculum content;
- Diverse characters and content;
- Embedded, relevant definitions, pronunciations, and translation;
- Comprehension prompts;
- Text-to-speech features.

Importantly, say the authors, well-chosen digital material can support equity and inclusion by providing more-diverse images than standard texts, which increases the engagement of students of color, language learners, and students with disabilities. The best digital media encourage interaction among students and nurture home-school connections with the curriculum.

[“The Power of ‘Screen Time’”](#) by Rebecca Silverman and Kristin Keane in *American Educator*, Winter 2020-2021 (Vol. 44, #4, pp. 20-25, 40); Silverman can be reached at rdsilver@stanford.edu.

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4. Twitter and Front-Line Educators

“The continuous professional development of teachers is a pivotal element in the provision of high-quality education,” say Martin Rehm (Pädagogische Hochschule Weingarten), Frank Cornelissen (University of Amsterdam), Alan Daly (University of California/San Diego), and Miguel de Fresno García (Universidad Nacional de Educación a Distancia) in this *American Journal of Education* article. The question the researchers explored was whether informal online social-networking sites – specifically Twitter – can be an effective supplement for formal PD in their schools and help alleviate many educators’ isolation from colleagues and the world of ideas – what’s been called “death by distance.”

Three years ago, an average of 456,000 tweets were shared by Twitter users worldwide *each minute*. This volume led one researcher to say that collecting information via Twitter is like “drinking from a firehose.” Is it possible for like-minded groups of educators to use Twitter discourse – direct messages, mentions, replies, and hashtags – to communicate with colleagues far and wide, reflect on their practice, and get helpful information and insights to improve their daily work?

The researchers explored this question by studying one hashtag conversation - #observeme – which was created by a California teacher who was intrigued with the idea of teachers posting a sign on their classroom door inviting anyone to drop in, observe, and give them feedback on how they are doing. This hashtag has spread rapidly through the teaching community, and has been mentioned in online publications (including *Education Post* and *Edutopia*), funding agencies (among them the Gates Foundation), and preservice teacher training programs.

What did Rehm, Cornelissen, Daly, and García find? By “scraping” and analyzing online data, they concluded that, at least with this hashtag, there was a huge amount of communication among like-minded educators, many spin-offs to other hashtags, and evidence of real substance being discussed and taken away. “Based on the results of our social network,” they conclude, “we are able to show that participants shared information, got connected, and thereby contributed to their own social capital and that of others.” The researchers note that the #observeme hashtag is specifically designed to bridge gaps between the cloud and the classroom, and they call for further research on the efficacy of educators using online social-networking sites.

[“Drinking Water from the Firehose: The Structural and Cognitive Dimensions of Sharing Information on Twitter”](#) by Martin Rehm, Frank Cornelissen, Alan Daly, and Miguel de Fresno García in *American Journal of Education*, November 2020 (Vol. 127, #1, pp. 77-105); Daly can be reached at ajdaly@ucsd.edu.

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5. Cultural Proficiency in the Mathematics Classroom

In this article in *Mathematics Teacher: Learning and Teaching PK-12*, Emily Bonner (University of Texas/San Antonio) suggests five “cornerstones” of culturally responsive mathematics teaching:

- *Knowledge* – In addition to pedagogical content knowledge, says Bonner, culturally responsive teachers make it their business to know students and their families, their culture, the community, its religious organizations, and the way mathematics knowledge and skills might connect to any and all of those – which might include using math to solve a community problem. Teachers gain this kind of knowledge by reading the literature, surveying students, asking students to write “mathographies” in which they tell their personal experiences with the subject, and making math classes a place where students feel comfortable sharing what they know and don’t know. It’s also helpful to acknowledge a student’s unique solution to a problem and then calling it out: “That’s Rose’s solution.”

- *Communication* – The words teachers use to talk about mathematics make a difference, especially for English language learners, for whom abstractions can be a barrier to understanding and appreciating math. Another key, says Bonner, is being a “warm demander” – expecting a lot of students, convincing them of their ability, and helping them reach their potential in an orderly and structured environment. In certain cultures, choral responses may be one of the best forms of communication, echoing the style of a church.

• *Relationships and trust* – Culturally responsive teachers continuously forge connections with students, parents, community members, colleagues, and administrators. That helps to overcome negative feelings about mathematics that many people have – and builds trust. “This type of trust,” says Bonner, “situates the mathematics teacher as a central part of the community and helps make mathematics more accessible to everyone.”

• *Reflection and revision* – Constant fine-tuning of instruction is often based on noticing as students grapple with a math problem and seeing where an instructional approach is not getting through. “This often happens informally,” says Bonner, “on a moment-to-moment basis in the course of instruction, and formally over the course of a day, a year, or a series of years.” Teachers may realize how their own way of learning, the way they were taught, or their cultural background, need to be set aside in favor of an approach that works better for the students in front of them.

• *Power* – “Consider that many students often feel disempowered in the mathematics classroom,” says Bonner, “for reasons related to the culture, content, and other factors.” Culturally responsive teachers find ways of “returning power” to students. This might happen by making connections to students’ interests, to events in the community, or to ways students can take action based on what they know or have learned. Teachers can empower students by:

- Getting students doing the “sense making” in math classes, actively discussing problems, and presenting solutions that make sense to them.
- Using “talk moves” such as revoicing, building on, making connections, asking for justification, and extending.
- Using scaffolding and students’ home languages to make mathematics understandable and accessible to all students – and then gradually releasing those supports to make students increasingly self-sufficient.

[“Practicing Culturally Responsive Mathematics Teaching”](#) by Emily Bonner in *Mathematics Teacher: Learning & Teaching PK-12*, January 2021 (Vol. 114, #1, pp. 6-15); Bonner can be reached at emily.bonner@utsa.edu.

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6. Keys to Productive Science Conversations

“Teacher-centered instruction dominates most typical elementary science classrooms, with teachers positioned as the authority on what knowledge is valued or ‘correct,’” say Ashley Hunt and Sara Rimm-Kaufman (University of Virginia), Eileen Merritt (Virginia Tech), and Nicole Bowers (Arizona State University) in this *Elementary School Journal* article. “These conditions create classrooms where students are seldom challenged to think like scientists.” This is a problem, say the researchers, especially since the Next Generation Science Standards call for higher-level thinking and deeper understanding.

Hunt, Rimm-Kaufman, Merritt, and Bowers explored this challenge by studying fourth graders engaging in small-group discussions of grade-level science content (renewable versus nonrenewable energy sources and animal adaptations). The intervention groups used the Connect Science curriculum, which combines social-emotional learning with science content,

while the control groups used a standard science textbook. The question was whether combining three argumentative practices (used by the control groups):

- Making claims
- Using evidence
- Asking questions

with social-skills “gestures” (used in combination with argumentation practices in the intervention groups):

- Agreement
- Disagreement
- Assertive speech
- Prosocial speech

would produce productive science conversations – all students participating in a civil way and delving into a deep understanding of the content.

The researchers found that fourth graders were capable of having productive, high-quality science discussions, but only if certain conditions were met:

- A clearly articulated discussion question with no “right” answer;
- Discussions structured with high-quality materials – for example, intervention students were given cards with pros and cons of different energy sources and graphic organizers of animals’ adaptations.
- Students with sufficient understanding of how the content relates to their world;
- Collaborative knowledge building as the outcome (versus a physical product);
- Students have learned how to use social gestures to sustain a dialogue – for example, “What’s your evidence for that?” “Hey, Krista, what do you think?” “Is there only one right answer?” “Lee, that’s a really good point.”

When these conditions were not present (that is, in the control groups), conversations centered on the logistics of the assignment (producing the poster or filling out the worksheet), there wasn’t good communication about the content, and students talked over one another.

The authors approvingly quote Bill Ayers: “Learning the fine art of speaking with the possibility of being heard, and listening with the possibility of being changed, is a practical contribution to finding one’s way in a wildly diverse democracy.”

[“Because the Sun Is Really Not That Big’: An Exploration of Fourth Graders Tasked with Arguing from Evidence”](#) by Ashley Hunt, Sara Rimm-Kaufman, Eileen Merritt, and Nicole Bowers in *Elementary School Journal*, December 2020 (Vol. 121, #2, pp. 256-282); Rimm-Kaufman can be reached at serk@virginia.edu.

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7. Middle-School Students Generate Questions As They Read

In this *Journal of Adolescent and Adult Literacy* article, Elizabeth Stevens (Georgia State University/Atlanta) and Christy Murray, Sarah Fishstrom, and Sharon Vaughn (University of Texas/Austin) describe the difficulty many middle-school social studies and science teachers have getting students engaged in content material that is often above their

reading level. What's hardest is getting students to actively construct meaning and learn new content, which involves:

- Synthesizing information;
- Evaluating arguments;
- Understanding multiple perspectives;
- Assessing the credibility of information sources.

These, of course, are the very skills students must have to be successful in high school and gain access to higher education and well-paying jobs.

In too many content-area classrooms (and in ELA classes as well), students view reading as a task to complete, plodding through difficult passages, engaging in low-level discussions, and dutifully answering the teacher's recall or main-idea questions. In an effort to support students, content-area teachers often scaffold difficult reading passages by providing summaries. The result is that students get very little practice making meaning from difficult, content-rich texts.

Stevens, Murray, Fishstrom, and Vaughn asked a group of middle-school teachers to experiment with a different approach:

- Students read a passage in small groups, in pairs, or solo.
- At regular intervals (perhaps at the end of a paragraph), students pause and come up with their own questions about what they believe is worth remembering.
- In a three-column format, students write the question, the answer, and text evidence.

"This practice," say Stevens, Murray, Fishstrom, and Vaughn, "requires a higher level of thinking and engagement with the text, and students who are more engaged while reading are more likely to understand and remember what they read."

Working with content teachers, the researchers suggested ways to introduce question generation with students, guiding them to come up with two types of questions:

- Specific, "right there" questions involving fact recall: who, what, when, where, why, how – for example, *What is the largest ocean? What do cumulus clouds look like? How many original colonies were there?*

- Wider, "think and search" questions drawing on more than one part of the text and involving inferences: who, what, when, where, why, how, describe, explain, summarize – for example: *How was the experience of the Jamestown colonists different from what they expected? Why did people want to travel west? Why was travel from the east to the west so difficult? Describe some of the dangers associated with earthquakes. Why are drops of water usually too small to see in the sky? What is the difference between mass and weight?*

When first introducing question generation to students, Stevens, Murray, Fishstrom, and Vaughn suggest using straightforward texts at students' reading level, having students do guided practice with the two types of question, and then gradually removing the scaffolding and getting students working with more challenging passages.

["Using Question Generation to Improve Reading Comprehension for Middle-Grade Students"](#) by Elizabeth Stevens, Christy Murray, Sarah Fishstrom, and Sharon Vaughn in *Journal of Adolescent and Adult Literacy*, November/December 2020 (Vol. 64, #3, pp. 311-322); the

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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 50 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 Teacher: Learning & Teaching PK-12
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