Marshall Memo 640

A Weekly Round-up of Important Ideas and Research in K-12 Education
June 6, 2016

In This Issue:

Quotes of the Week

"I'm so fast that last night I turned off the light switch in my bedroom and was in bed before the room was dark."

Muhammad Ali, who died last week at 74

"School architecture is often placed on the altar of efficiency. While efficiency is an important consideration in an environment of scarcity, schools do not exist to save money. We build schools to educate and inspire children – and we need the architecture to support our end goals."

Daniel Allen (see item #1)

"Whether specialization can increase productivity in schools is an important open question in the design of primary and secondary schooling."

Roland Fryer (see item #2)

"Despite many accountability policies and resulting interventions focusing on schools… the majority of variability in student scores is between students *within schools*."

Jill Adelson, Emily Dickinson, and Brittany Cunningham in "A Multigrade, Multiyear Statewide Examination of Reading Achievement: Examining Variability Between Districts, Schools, and Students" in *Educational Researcher*, May 2016 (Vol. 45, #4, p. 258-262), http://bit.ly/1YbfDU5

"The bottom line is that regardless of technical sophistication, the use of VAM is *never* 'accurate, reliable, and valid' and will *never* yield 'rigorously supported inferences.'"

Steven Klees (University of Maryland/College Park) in "VAMs Are Never 'Accurate, Reliable, and Valid'" in *Educational Researcher*, May 2016 (Vol. 45, #4, p. 267), http://edr.sagepub.com/content/45/4/267.extract

1. What Silicon Valley Can Teach School Leaders

In this *Edutopia* article, Daniel Allen describes what he learned from Silicon Valley during his four years as a San Francisco high-school principal:

• *Design thinking* – In the high-tech industry, says Allen, "There is a pervasive faith in the power of data analysis and informed experimentation to iterate our way toward improvement. The entire process depends on a wide aperture for ideas, and a big appetite for learning from failure." Instead of the typical K-12 paradigm of "rolling out" initiatives and "getting buy-in" for ideas originating outside the school, design thinking "assumes that the most important data live at the classroom level, and it's not just quantitative data we want." School leaders need to pay attention to what teachers and students are thinking, feeling, and doing every day in their classrooms. The leadership skillset required nowadays includes being able to empathize, facilitate, be the lead researcher, and humbly acknowledge not having all the answers.

• *Physical space* – "School architecture is often placed on the altar of efficiency," says Allen. "While efficiency is an important consideration in an environment of scarcity, schools do not exist to save money. We build schools to educate and inspire children – and we need the architecture to support our end goals. School leaders should see themselves as designers, curating powerful learning spaces and showcasing student work that reinforces aspirational learning outcomes." Silicon Valley office spaces are a good model, aligning work spaces and physical landmarks to shape organizational culture and making horizontal and vertical collaboration – within and across skill specialties – easier and more natural.

• *Connections* – Networking is more than just a way to get a job, says Allen. "In the connection economy, networking is our job. While our students may be digital natives, they do not have access to the tools that facilitate meaningful connections, nor are they necessarily strategic in the development of their online presence. We need to build student skills and social capital." At the high school that he led, students were required to complete a workplace internship to graduate, and the social benefits of their expanded professional networks were huge.

"3 Things Silicon Valley Taught Me About School Leadership" by Daniel Allen in *Edutopia*, December 16, 2015, http://www.edutopia.org/discussion/3-things-silicon-valley-taught-me-about-school-leadership

Back to page one

2. Is Elementary-School Departmentalization Effective?

In this National Bureau of Economic Research working paper, Roland Fryer (Harvard University) describes his two-year study of the efficacy of Houston Public Schools elementary teachers specializing in particular subjects. Twenty-five schools formed the control group and continued with traditional self-contained classes. Another 25 schools departmentalized using two different configurations for the 2-4 teachers at each grade level: (a) one teacher teaching reading/social studies, another teaching math/science; or (b) three teachers splitting up reading, math, and science/social studies. Principals decided which subject(s) teachers taught based on their sense of their strongest area(s). Students remained with the same classmates for all subjects.

As an economist, Fryer is familiar with the history of specialization in industry, including Henry Ford's 1913 introduction of the assembly line to produce the Model T, which reduced the time it took to produce one car from 750 minutes to 93 minutes. In his classic economic treatise, *The Wealth of Nations*, Adam Smith looked at pin factories in 18th-century England and found dramatic increases in productivity when individual workers were organized to specialize in discrete tasks.

"The basic economics is intuitive," says Fryer. "Specializing in the production of a subset of the tasks necessary to produce a final output allows workers to gain efficiency in that task." Adam Smith believed there were three reasons for this:

- Dividing a larger task into smaller tasks allows each worker to gain greater skill in his or her designated work.
- Reducing the number of tasks each worker must manage reduces transition time from one task to the next.
- Individual workers can focus their full attention on a few simple tasks, which increases the likelihood of technological innovation.

Similar advantages would seem to apply to elementary teachers specializing in particular subjects rather than trying to teach everything:

- More time to master subject-specific content and pedagogy and stay on top of developments in that field;
- Fewer lesson plans to write and therefore more time to invest in quality planning;
- Greater teacher productivity by getting teachers working in areas in which they are most experienced and competent;
- Preparing students for middle and high schools, which are almost always departmentalized;
- Less teacher attrition because of a reduced workload and less stress from teaching unfamiliar subjects.

All these reasons make teacher specialization an appealing option for improving student achievement, without having to make staffing changes and spend additional money.

"But pupils are not pins," says Fryer, "and the production of human capital is far more complex than assembling automobiles. Whether specialization can increase productivity in schools is an important open question in the design of primary and secondary schooling." He

notes that there are wide variations in the instructional models used in the 34 OECD countries, with only ten using specialization at the elementary level and six countries (Austria, Hungary, Norway, Portugal, Latvia, and Israel) using looping, with teachers working with the same students for at least three years.

What did Fryer's study show? That elementary departmentalization is "surprisingly *inconsistent* with the positive effect of specialization typically known to economists," he says. In the first year of the experiment, students in departmentalized classes did slightly worse in reading and math compared to students in control schools. "Students who might be particularly vulnerable – such as those enrolled in special education or those who are taught by inexperienced teachers – demonstrated particularly negative impacts of treatment, " says Fryer. In addition, students in treatment schools were more likely to exhibit problem behaviors and had lower school attendance.

What was going on here? To get more details, Fryer administered a questionnaire to teachers and found that their responses to items on lesson planning, relationships with students, enjoyment of teaching, and teaching strategies were very similar between treatment and control schools, with one exception: departmentalized teachers were significantly less likely to report that they provided tailored instruction to their students.

The trade-off is clear: the more teachers specialize, the more difficult it is for them to gear instruction to individual student needs. Fryer reports some possible reasons from other research:

- Teachers working with a larger number of students have less time to get to know and understand individual students' personalities and learning needs.
- When students have more transitions from class to class during the day, it's more difficult for teachers to know each child's emotional state and make differentiated judgments on the best pedagogy and interpersonal approach.
- Increased transitions reduce instructional time.
- Transitions and dealing with more students make classroom management more challenging for teachers.

"Empirically," Fryer concludes, "I find that teacher specialization, if anything, decreases student achievement, decreases student attendance, and increases student behavioral problems… These results provide a cautionary tale about the potential productivity benefits of the division of labor when applied to human capital development."

"The 'Pupil Factory': Specialization and the Production of Human Capital in Schools" by Roland Fryer, Jr., a National Bureau of Economic Research working paper, April 2016, available at http://www.nber.org/papers/w22205 with free registration; Fryer can be reached at Rolandfryer@edlabs.harvard.edu.

Back to page one

3. Teachers Making Home Visits

In this article in *Education Next*, former *Wall Street Journal* reporter June Kronholz describes home-visit programs in several districts. Research says that engaging parents in their

children's education is key, but the standard strategies – back-to-school nights, parent-teacher conferences, potlucks, helping with homework – are not reaching parents who are alienated from their children's schools. In addition, there are many barriers to the conventional avenues – schools that are miles from students' homes, transportation difficulties, security precautions – locked doors, sign-ins, ID badges.

"I had expectations of what the parents were supposed to do," said Washington, D.C. math teacher Melissa Bryant. "I had never heard what they wanted me to do."

Kronholz accompanied a team of D.C. educators on a visit to the home of a particularly troubled and unsuccessful second grader. Sitting at the dining room table with the boy's mother, who was deeply worried about him, they learned how he idolized his older brother, that he loved helping with classroom chores, that he was keenly aware that he was older than his classmates, that he felt good at math, and that he loved when his teachers texted pictures of him to his mother. Asked about her aspirations for her child, the mother said, "I want so much for my son. Him trying to succeed. Maybe not succeeding, but just trying." She agreed to visit the school to see a class project, and also consented to have her son tested for learning disabilities.

Debriefing after the visit, the teachers said the most important thing was establishing a relationship with the mother. "A lot of our families have lost trust in our system," said one teacher, "but being in her house, that was her zone." Perhaps it would turn the tide with this troubled student. Discussing another home visit, a teacher said, "The kids see the parents and the teacher interacting. They see our relationship. They see we're working together."

The Flamboyan Foundation – following in the footsteps of Montessori schools, KIPP, and other educators who routinely make home visits – trains and pays teachers to visit students' homes. Kristin Ehrgood, who launched Flamboyan in 2008, says, "Teachers are the experts in pedagogy but families are one hundred percent the experts in their children. We need one another." Flamboyan is the D.C. partner of the Parent/Teacher Home Visit Project, a Sacramento-based nonprofit established in 2002 that now has 432 participating schools in 17 states and the District of Columbia. The organization's protocol goes like this:

- Each school applying must have at least half its teachers willing to make home visits and a supportive administration (visits are voluntary for teachers).
- Teachers visit homes in pairs – for safety and so they can share impressions.
- Teachers don't take notes or even carry a notebook so they don't look like social workers or truancy officers.
- Teachers are paid at the district's hourly rate, often using Title I funds.
- Home visits are get-to-know-you style, positive, and not academically focused, except in high schools where time is spent on the mechanics of college admission.
- Teachers ask about the family's interests, expectations, previous experience with the school, and their hopes and dreams.
- Parents are invited to a specific school function.
- Parents are asked to share one (only one) expectation they have for their child.

"It's a very different dynamic than the parent-teacher conferences," says Karen Mapp, a parent expert at the Harvard Graduate School of Education. "We can get teachers the information they need to reach students individually." Knowing that a child is crazy about soccer can help a teacher choose the right books or incorporate a related math activity.

Kronholz reports that home-visiting teachers around the U.S. have similar worries: "The call is hardest," says Jessica Ghalambor, a 7th-grade teacher in Sacramento. "You're inviting yourself over." In addition, "There's an immigration fear, a CPS [Child Protection Services] fear." Teachers get specific guidance from trainers on how to address their jitters: What's the best way to approach parents for a visit? ("This really will help me to be a better teacher for your child"). What if the parent refuses to have a visit? (Call back, but don't press – other parents will persuade them to come around.) What if there is evidence of abuse or neglect? (Work through your principal to report it to protective services – but also, "Check your assumptions," said one trainer; "homes don't look like the home you grew up in.") What if the parents don't speak English? (Arrange to bring a translator.) What if the child lives in a homeless shelter? (Meet in a neutral location like a park or coffee shop.) What if the family wants to feed you? (It's your choice whether to enjoy the meal or politely pass.)

The research on home visits is scanty and hardly conclusive, Kronholz reports. But when she challenged Steven Sheldon of John Hopkins University on whether funding for home visits might be better spent on an additional reading teacher, he said, "What goes on at home, all of that is part of the problem and all of it is part of the solution." D.C. teacher Ghalambor, after making a successful visit to the home of a super-shy eighth grader who was way behind in reading, said, "I know there's no scientific basis, but the very next day you could see the change. I could tell she knew I cared." On their own turf, parents are willing to share traumas that are haunting their children, and students are more willing to open up to a teacher who has seen their bedroom and patted their dog. Later, when it's time for a difficult conversation about a child's discipline problems or special-education testing, things go more smoothly. But the main purpose is building relationships and nurturing trust so students learn better.

"Teacher Home Visits" by June Kronholz in *Education Next*, Summer 2016 (Vol. 16, #3, p. 16-21), http://educationnext.org/teacher-homevisits-school-family-partnerships/

Back to page one

4. Whole-Class, Low-Stakes Assessments That Involve All Students

"To be successfully included in general education settings, students with learning disabilities must have a sense of belonging," say Sarah Nagro (George Mason University), Sara Hooks (Towson University), Dawn Fraser (Kennedy Krieger Institute), and Kyena Cornelius (Minnesota State University/Mankato) in this article in *Teaching Exceptional Children*. Because of these students' challenges with organizational skills, higher-order thinking, working memory retention, and making connections, inclusion teachers need to make an extra effort to help them stay engaged and get better at self-assessing their level of comprehension. What's guaranteed *not* to work during whole-class instruction is the teacher asking a question and then calling on one (usually high-performing) student for the answer. Better to use

strategies that elicit responses from all students and use the responses to make wise in-the-moment instructional decisions and monitor the learning of students with special needs. The authors recommend several approaches:

• *Hand-signals to check for comprehension* – Students can hold up four fingers to signify "I got it and can explain it to the class," three fingers for "I got it," two fingers for "I think I got it," and one finger for "I did not get it." This kind of whole-class check-in on a four-point scale is vastly superior to the frequent teacher question, "Does that make sense?" or "Do you understand?" If every student knows that he or she be will be asked to signal a specific level of comprehension, students are more likely to stay tuned in, feel accountable, and improve their ability to self-monitor. Teachers can also track 4-3-2-1 response data to help modify lessons and/or work with a special-education co-teacher and zero in on particular students who are having difficulty.

• *Hand signals to structure a discussion* – An alternative signaling strategy is for students to hold up one finger if they want to share a new idea or two fingers to add to the current idea. By calling on students strategically, the teacher can keep the discussion from veering off to another topic, call on students who will take the conversation deeper in one area, or allow it to branch off into other areas. It's also a way to scaffold a discussion by helping students think about not only what they want to share but how their ideas fit into the topic.

• *Response cards* – Asking for choral responses to a question gets every student involved, but it's difficult for the teacher to know who really understands. In addition, students with learning issues can "hide in the crowd" and become passive learners. A better system is having students hold up response cards after a question or prompt. The cards can be True/False, colored for multiple-choice answers, or content-specific – for example, phoneme components, vocabulary words, parts of speech, story elements, or (for a math lesson) coins. "The purpose," say the authors, "is to create a positive learning community so all students, including students who would otherwise not participate, have frequent opportunities to respond and actively learn. Some students may require additional wait time or prompting to generate a correct response." The teacher might also ask students to think-pair-share to allow time to interact with peers.

• *Dry-erase boards, open-ended poll questions, surveys, and exit tickets* – These work best when the teacher wants to capture and make judgments about specific details of student learning. Questions can probe content knowledge, prompt students to take a stance on a topic, or have them explain their thinking, show their work, or reflect. Wait-time is always an issue when students are writing. "When asking for written responses beyond one sentence," suggest the authors, "consider including sentence starters or a mnemonic device such as POW (pick my ideas, organize my notes, write and say more), because students with learning disabilities require planning time and a way to organize their thoughts before writing." Again, the teacher can collect data on students' responses over time to track how well they are doing, intervene with individual students or small groups, and continuously improve instruction.

"Whole-Group Response Strategies to Promote Student Engagement in Inclusive Classrooms" by Sarah Nagro, Sara Hooks, Dawn Fraser, and Kyena Cornelius in *Teaching Exceptional*

Children, May/June 2016 (Vol. 48, #5, p. 243-249), available for purchase at http://tcx.sagepub.com/content/current; Nagro can be reached at snagro@gmu.edu.
Back to page one

5. Broadening the Appeal of High-School Physics

In this article in *The Physics Teacher*, Seattle high-school science teacher Moses Rifkin bemoans the fact that many female and minority-group students are not taking or persisting in physics courses. "This is a missed opportunity in our discipline," says Rifkin, "because demographic diversity strengthens science." He identifies three causes: first, stereotype threat – the tendency of students in stigmatized groups to internalize negative beliefs (for example, *girls aren't good at science*) and underperform. Second, implicit biases among teachers – "connections that our subconscious brains make between members of groups and stereotypical characteristics," says Rifkin, "even if our conscious minds do not endorse these relationships." (The Implicit Association Test has revealed widespread beliefs about the academic potential of African Americans and the ability of females to excel in math and science.) And third, the fact that when physics teachers introduce key figures in the field, they usually talk about Newton, Maxwell, Lenz, and Einstein – all white European men.

Rifkin says he was "stunned" when he first heard about stereotype threat, and has taken several steps in his classroom to address the broader problem:

• *Stereotype threat* – Simply learning about the phenomenon can help students understand the subtle dynamic that prevents some from doing their best work in physics classes. In addition, a brief values clarification exercise can reduce racial and gender achievement gaps by offering students some defenses against stereotype threat.

• *Implicit bias* – Teachers and students learning about the prevalence of negative beliefs in the majority population can foster self-awareness and be a first step toward reducing biases in the classroom.

• *Monochromatic role models* – While it's true that the majority of major contributors to the field are from a particular demographic, the history of physics is more diverse than most of us know. For example, Newton's first law comes from Ibn Sina, a Persian scholar, and t online resources highlight other contributors:

- African-American: http://www.math.buffalo.edu/mad/physics/physics-peeps.html
- Hispanic: http://www.hispanicphysicists.org/recognition/index.html
- Women: http://cwp.library.ucla.edu
- Women and minorities: https://www.aip.org/history-programs/physics-history/teaching-guides-women-minorities

"These resources raise the bar for us as physics teachers," says Rifkin. "We can no longer plead ignorance. This is not 'diversity for the sake of diversity' but, rather, increasing the accuracy with which we present physics… This is something we owe to all of our students, whether under- or overrepresented." It definitely helps to mitigate stereotype threat and implicit bias.

• *Metacognition* – Rifkin describes a short curriculum unit in his 12th-grade physics course in which students research the demographics of physics in the U.S. It becomes starkly apparent how skewed the field is toward white males, and students explore the reasons and create displays highlighting the work of non-traditional physicists. "We are using the tools of science (hypothesis formation, experiment design, statistical analysis, the communication of knowledge) to learn about science itself," says Rifkin, "while eroding the stereotype that certain groups don't do physics, without putting students from those groups on the spot." This unit, he has found, benefits all students.

Rifkin concludes by addressing the push-back he sometimes receives on these strategies:

- *Won't the time taken from learning physics leave students unprepared?* The many benefits of this additional content more than outweigh the costs, he believes. "All of my students are learning about the culture of physics today, crucial knowledge for those who hope to continue in the field and useful for those who do not."
- *Does this belong in a physics class?* The Next Generation Science Standards require that teachers address "science as a human endeavor," he says, getting into scientists' backgrounds and how science is influenced by society.
- *Will students rebel against this?* Rifkin has polled his students (who are predominantly white): 70 percent say the material is definitely worthwhile and another 22 percent say it's somewhat worthwhile.
- *Won't this make teachers uncomfortable?* "We are uncomfortable because we lack experience talking about race and gender in physics," says Rifkin. "My ease and competency has grown with each year." Start small, he advises, and build from there.

"Addressing Underrepresentation: Physics Teaching for All" by Moses Rifkin in *The Physics Teacher*, February 2016 (Vol. 54, p. 72-74), http://scitation.aip.org/content/aapt/journal/tpt/54/2/10.1119/1.4940167; Rifkin can be reached at mrifkin@universityprep.org.

Back to page one

6. Another Way to Beef Up Content Knowledge in Elementary Schools

In this article in *Education Next*, Michael Petrilli (Thomas B. Fordham Institute) says that he and most parents of school-age children are guaranteed to get upset if teachers show movies during the school day. "I don't care if it's the afternoon before winter break or the last minutes before summer recess," he says. "*If anyone is going to use a video to babysit my kids, it's going to be me!*"

But Petrilli has come around to believing that certain videos can make a valuable contribution in fleshing out science and social studies content – which is crucial because K-3 students are getting a daily average of only 16 minutes of social studies and 19 minutes of science. "Schools need to see building knowledge not as something that's 'nice to do' once kids learn to read," he says, "but an essential, nonnegotiable component of building literacy,

starting as early as possible – especially for low-income children, who tend to come to school with very limited vocabularies and knowledge about the world."

Petrilli is in favor of beefing up the time allocated to science, social studies, and the arts, but he also suggests devoting one of the rotating stations in the typical 90-minute literacy block to a science and/or social studies streaming video station. For example, when it's time for a second grade class to study insects, the teacher could create a streaming video station at which students watch "The Giant Bug Invasion" episode of the PBS Kids show Kratts' Creatures and learn about scorpions, centipedes, tarantulas, and other exotic bugs. Or they could watch the French documentary *Microcosmos*, available for streaming on Netflix, which shows insect life in meadows and ponds with close-ups, slow motion, and time-lapse photography. After watching a video, students could construct a Venn diagram comparing two types of insects, and then go out for recess and look for insects in the great outdoors. Petrilli says there are numerous video resources in science – *Wild Kratts, Sid the Science Kid, Magic School Bus, Dinosaur Train*, and nature shows on Discovery Channel and National Geographic – but fewer in social studies.

"Incorporating the use of content-rich video into elementary school classrooms is hardly a novel or radical idea," concludes Petrilli. "It's surely not a silver bullet or a 100 percent solution to all that ails our schools. But it might be one of those 1 percent solutions that measurably moves the needle."

"'Children, Be Quiet and Watch Your Lesson' The Case for Video Time During Class" by Michael Petrilli in *Education Next*, Summer 2016 (Vol. 16, #3, p. 86-87), http://educationnext.org/children-be-quiet-and-watch-your-lesson/

Back to page one

7. The Impact of Close-Age Mentors on High-School Students of Color

In this article in *Journal of Education for Students Placed At Risk*, Chenoa Woods (Florida State University) and Mariana Preciado (CollegeSpring) report on their study of a mentoring program for low-income high-school students of color whose parents had not attended a four-year college. The mentors were current college students and spent 20 hours with their mentees, who were enrolled in an SAT prep program. The findings:

- Students with mentors did not significantly increase their SAT scores as a result of the mentoring. This suggests a difference between mentors who act as mentors and those who act as tutors.
- Students with low incoming achievement showed marked improvement in their college-going attitudes – motivation to attend, self-efficacy for being accepted, and perceived social norms around the need to go to college – if they believed their mentors had a personal investment in their success.
- Believing that their mentor was a role model was not a significant variable in students' college-going attitudes. What made a difference was their belief in the mentor's personal investment in their college attendance.

The findings suggest that "even if mentors are not able to improve students' academic college readiness, they can still effectively engage students around the college process," say Woods and Preciado. "Social and emotional preparation for college is also important, particularly for underrepresented minority students who may face hostile campus environments."

"Student-Mentor Relationships and Students' College Attitudes" by Chenoa Woods and Mariana Preciado in *Journal of Education for Students Placed At Risk*, April-June 2016 (Vol. 21, #2, p. 90-103), http://bit.ly/22JCp5C; Woods can be reached at cwoods@fsu.edu.

Back to page one

8. Short Items:

a. The graduation speech that went viral – This link will allow you to watch remarks by masters graduate Donovan Livingston at the May 25, 2016 convocation at the Harvard Graduate School of Education: http://www.gse.harvard.edu/news/16/05/lift. The speech has been viewed almost 12 million times.

Back to page one

b. Wealth and achievement – The interactive graphic in this *New York Times* article by Motoko Rich, Amanda Cox, and Matthew Bloch shows the relationship between the wealth of school districts and student achievement: http://nyti.ms/1TAf96b.

"The Upshot: In Schools Nationwide, Money Predicts Success" by Motoko Rich, Amanda Cox, and Matthew Bloch in *The New York Times*, May 3, 2016

Back to page one

c. A hands-on physics project – This video shows two girls building a balloon that they sent to near-space: https://www.youtube.com/watch?v=QCP5jZXoOhI

"Loki Lego Launcher" by Winston Yeung, September 6, 2015

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 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:

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

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

- The current issue (in Word or PDF)
- All back issues (also in Word and PDF)
- A database of all articles to date, searchable by topic, title, author, source, level, etc.
- A collection of "classic" articles from all 11 years

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
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 Educational Review
Independent School
Journal of Education for Students Placed At Risk (JESPAR)
Journal of Staff Development
Kappa Delta Pi Record
Knowledge Quest
Literacy Today
Middle School Journal
Peabody Journal of Education
Perspectives
Phi Delta Kappan
Principal
Principal Leadership
Principal's Research Review
Reading Research Quarterly
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 Magazine
Wharton Leadership Digest