Marshall Memo 310

A Weekly Round-up of Important Ideas and Research in K-12 Education
November 16, 2009

In This Issue:

Quotes of the Week

"With the disappearance of virtually all highly paid, low-skill jobs, the only way that most Americans can fulfill their aspirations for middle-class status is through acquiring a higher-education credential and the skills that go with it."

Daniel Yankelovich (see item #8)

"I wish I had known during my first year that some of the most important aspects of teaching effectively are organization and the ability to break down the work for students who are struggling or extend it for those who are able to complete assignments with ease."

Deirdra Grode, New Jersey principal, in "Facing First-Year Challenges" in *Education Update*, November 2009 (Vol. 51, #11, p. 5)

"One of the things that makes evaluation systems fail is insufficient buy-in from the people being evaluated."

Laura Varlas in "Making Teacher Evaluations Meaningful", *Education Update*, November 2009 (Vol. 51, #11, p. 7); this article and the previous one can be purchased at http://www.ascd.org/publications/newsletters/education_update/current_issue.aspx

"The understanding of what makes learning various topics within a discipline easy or difficult for an adolescent requires not only understanding the facts and concepts of that discipline, but also knowing how to help students learn and understand… This quality separates the biologist from the biology teacher and the writer from the English-language-arts teacher."

"Teaching for a New World" by the Alliance for Excellent Education, reported by Catherine Gewertz in *Education Week*, Nov. 11, 2009 (Vol. 29, #11, p. 8)

"The skillful use of silence can be just as powerful as the skillful use of words."

Paula Denton (see item #1)

1. Five Ways to Get the Best from Students

In this excerpt from her book, *The Power of Our Words: Teacher Language That Helps Children Learn* (NEFC, 2007), Responsive Classroom director Paula Denton suggests five general guidelines for teachers that help build a climate in which students feel safe, respected, and engaged:

• *Be direct and authentic*. Many teachers use the indirect approach to correct inattention and misbehavior – "I like the way May and Justine are paying attention" – but this gets compliance only to please the teacher and doesn't build self-discipline. In her own classroom, Denton began saying what she meant in a kind and straightforward tone, for example, "It's time to listen" or "Come to the meeting rug and take a seat." She also started using a chime to gain students' attention. Denton advises against using sarcasm, another form of indirection – "John, what part of 'Put your phone away' don't you understand?" Even though students laugh, this tone undermines trust. Better to say, "John, put your phone away" and invoke a logical consequence if he doesn't.

• *Convey faith in children's abilities and intentions*. What teachers say shapes children's view of themselves, Denton believes. A teacher might say to students, "You can look at the chart to remind yourself of our ideas for good story writing." Said in a calm, even voice, this communicates the belief that students know how to listen, cooperate, and do quality work. And when students do the right thing, specific compliments warmly delivered cap the process: "You're trying lots of different ideas for solving that problem. That takes persistence."

• *Focus on action*. Rather than making abstract demands like, "Be respectful", Denton believes it's better to tell students exactly what is expected, for example, "When someone is speaking during a discussion, it's time to listen. That means eyes on the speaker and hands in laps." General classroom injunctions about respect and responsibility are fine, she says, but students should have frequent reminders of what those values really mean. There are also times when it's a good idea to have the student name the specific action you're looking for: "What will help you think of good ideas for your story and concentrate on writing them down?"

• *Keep it brief*. Students have problems following teachers' ramblings like this: "When you go out to recess today, be sure to remember what we said about including everyone in games, because yesterday some kids had an issue with not being included in kickball and four square, and we've talked about this…" Better to ask, "Who can tell us one way to include everyone at recess?"

• *Allow 3-5 seconds of wait-time*. "The skillful use of silence can be just as powerful as

the skillful use of words," says Denton. "Silence allows children to think, rehearse what to say, and sometimes to gather the courage to speak at all… Being silent also allows us to listen to students. Listening means resisting the impulse to jump in and correct students' words or to finish students' thoughts."

"The Power of Teacher Language" by Paula Denton in *Responsive Classroom Newsletter and Resource Catalog*, November 2009 (Vol. 21, #4, p. 1-4) http://www.responsiveclassroom.org

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2. Getting Girls Tinkering

In this intriguing *Education Week* article, Ohio-based teacher and researcher Lisa Damour asks why female students have equaled or surpassed male students in school and college achievement but earn only 33 percent of college engineering degrees and 15 percent of computer science degrees. What's keeping young women from parity in these high-wage, high-prestige fields?

Damour mentions the familiar reasons – insufficient female role models, preferring to work in the helping professions, avoidance of the "isolated geek" image – but she believes there is another explanation: as boys grow up, they are given more opportunities than girls to tinker. "By approaching computers and other mechanical devices as toys," says Damour, "boys are able to learn how they function from the inside out. When tinkering with programming, they develop an intuitive understanding of how computers work. When tinkering with machines, they develop their mechanical reasoning, an arena of cognitive skill that boasts one of the largest of all gender gaps."

Why don't girls tinker as much? First, adults don't encourage it, according to David Sadker in his 1994 book, *Failing at Fairness: How Our Schools Cheat Girls*. Teachers show boys how to work staplers or VCRs, but with girls, they staple papers and start VCRs for them. Second, teachers give boys ample wait-time if they are struggling with math problems – but quickly "rescue" girls in the same situation. "By intervening rapidly with girls," says Damour, "adults let them know that they should be afraid of doubt, investigation, and experimentation – all the essential elements of tinkering." And third, girls are socialized to prize getting good grades and results, not dilly-dallying and experimenting along the way. "Having mastered an education system that prizes outcome over process," concludes Damour, "girls can be at a loss when asked to engage in a method that may or may not produce a polished finished product."

Damour believes this can be changed if parents and teachers give girls time, opportunities, encouragement, and *stuff* for tinkering – broken appliances, Lego leagues, etc. She also believes that tinkering should be structured as a collaborative, social experience for girls – tinkering with a peer at school or a parent at home. Finally, she suggests that girls' tinkering should result in a tangible product. At an Ohio school where she works, Damour had high-school girls get involved in all the details of designing chicken coops that would be constructed on a summer trip to a Tanzanian orphanage.

"Teaching Girls to Tinker" by Lisa Damour in *Education Week*, Nov. 11, 2009 (Vol. 29, #11, p. 25) http://www.edweek.org/ew/articles/2009/11/11/11damour.h29.html

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3. Involving Students in the Assessment Process

(Originally titled "From Test Takers to Test Makers")

In this thoughtful *Educational Leadership* article, University of Bergen/Norway professor Kari Smith suggests three ways to make tests part of the learning process:

• *Test creation* – Toward the end of a curriculum unit, Smith suggests the following steps:

- Students individually write down the main items they learned.
- Students present their items and they are written on the board. This helps everyone review, reveals different views on what mattered, and gives the teacher feedback on what wasn't learned.
- Students get a mini-lesson on test design.
- Each five-person group collaboratively designs a few test items.
- Each group presents its final product to the class and answers questions. If anything is unclear, the teacher re-explains.
- The teacher collects student-created items and creates a composite test.
- Students take the test.

Smith reports that kids take this process very seriously, don't turn in easy test items, and learn a great deal from the review and peer teaching. Since all this is quite time-consuming, she recommends this process only twice a year.

• *Group testing* – To counteract the tense, closed experience that most students have when they take tests, Smith suggests this variation:

- Students get advance warning of a test and a chance to study.
- On the day of the test, students sit in groups of three.
- Students are allowed to collaborate, with the understanding that each must pass in an individual copy.
- The teacher grades the tests, with each student getting the average grade of his or her group.
- Group grades are announced, with kudos to the winning group.

This approach puts a premium on helpful collaboration and all students doing their best. "In many workplaces, individual performance is related to group achievement," says Smith. "[W]e do not prepare students well for the ecology of the workplace if we focus only on individual performance."

• *Students grading tests* – After spending hours marking tests, only to have students glance at their grade and ignore comments, Smith devised this alternative:

- A test is administered and graded but nothing is written on students' test papers; grades, strengths, and weaknesses are jotted elsewhere.

- Students sit in groups chaired by a high-scoring student and verbally retake the test, generating an answer key.
- Each group presents its key to the whole class, sharing an exemplar for open-ended questions. The teacher clarifies, explains, or corrects if necessary.
- The class agrees on a single answer key, which is written on the board.
- Students then correct their own papers, referring to the answer key, exemplar answers, and the point value assigned to each question.
- Students write their overall grade on the top of their papers. Because students know that the teacher has already graded the papers, they're honest.
- The teacher collects the papers, compares students' scores with his or her own, and if there is a discrepancy of more than 10 points, confers with the student. Smith has found that the teacher's scores are usually higher than students' and differences of more than 10 points are rare.

"From Test Takers to Test Makers" by Kari Smith in *Educational Leadership*, November 2009 (Vol. 67, #3, p. 26-30)
http://www.ascd.org/publications/educational_leadership/nov09/vol67/num03/From_Test_Takers_to_Test_Makers.aspx; Smith can be reached at kari.smith@iuh.uib.no.

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4. Using On-the-Spot Assessments

(Originally titled "Every Day in Every Classroom")

In this *Educational Leadership* article, Connecticut high-school teacher Laura Greenstein describes some on-the-spot (a.k.a. formative) assessments designed to improve day-to-day learning and reduce students' fear of the "elephant in the room" – high-stakes tests. "These learners don't fear the elephant because they've used multiple measures to track their progress on learning standards all year," says Greenstein. "They have trained the beast one standard at a time." Here are some ways to tap students' understanding and get insights for fine-tuning instruction:

• *Entrance slips* – At the beginning of a curriculum unit, students individually and anonymously jot down answers to a question that gauges their content knowledge and understanding.

• *Gallery display* – Students jot responses to a prompt on sticky notes and put them on a board, displaying their values, opinions, communication style, and knowledge.

• *Signaling* – As a unit progresses, students hold up a red or green card to say "I need more time" or "I'm ready to move on."

• *Clarity on outcomes* – Students keep track of how they are doing with a "workalong" sheet outlining the curriculum sequence and evaluation criteria.

• *Bump in the road* – Periodically during instruction, the teacher asks students to jot on a card one thing they are still confused about or are finding an obstacle to learning.

• *Empty outlines* – As they listen to a lecture or read a passage, students record and answer reflective questions, giving the teacher evidence of how they are reacting and any misconceptions they may be forming.

• *Q&A mix-up* – Students write one or two content-related questions on slips of paper and the answer to each question on different color paper. Everyone gets an answer slip, each student reads a question, and the student who believes he or she has the right answer speaks up.

• *Nutshelling* – Students distill the essence of their learning in a brief statement.

• *3-2-1* – Students identify three new vocabulary words they have learned, use two of these words in sentences, and identify one thing that still confuses them.

• *Questions on the board* – During a practice test, students come up and write on the board the two questions that confuse them. Often the same question is written by a number of students.

"Every Day in Every Classroom" by Laura Greenstein in *Educational Leadership*, November 2009 (Vol. 67, #3, available online only at http://www.ascd.org); Greenstein can be reached at lauragteacher@hotmail.com.

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5. Robert Marzano on Interactive Whiteboards

(Originally titled "Teaching with Interactive Whiteboards")

In this *Educational Leadership* article, Robert Marzano reports on a recent study involving 85 teachers and 170 classrooms using interactive whiteboards. He found that, on average, using this technology was associated with a 16 percentile point gain in achievement. What worked best:

- Using "clickers" to check for understanding and follow up (a 25-point gain in achievement).
- Presenting information – video clips, Google Earth, graphs, and charts (a 26-point gain).
- Reinforcing correct answers with virtual applause or presenting information in an unusual context (31-point gain).

But whiteboards are not a magic bullet. In 23 percent of classrooms, teachers got better results *without* them. What explains this?

- Using clickers but not following up. "In many classrooms," he says, "teachers simply noted how many students obtained the correct answer instead of probing into why one answer was more appropriate than another."
- Poor presentation of content – Ineffective teachers zoomed through material so quickly that students didn't have time to process it.
- Too many visuals – This prevented students learning the most important content.
- Misusing features – Some teachers didn't use the gimmicks to clarify the content.

"Teaching with Interactive Whiteboards" by Robert Marzano in *Educational Leadership*, November 2009 (Vol. 67, #3, p. 80-82); this article can be purchased at http://www.ascd.org.

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6. Making Marking Meaningful

(Originally titled "Grading What Matters")

In this *Educational Leadership* article, Colorado social studies teacher and instructional coach Tony Winger bemoans the fact that the grading policy he used as a beginning teacher communicated an unintended message to students: that compliance with his policies – completing work, meeting deadlines, and following through with responsibilities – was more important than what students were learning and how it could be used in their lives. He was particularly stung when he happened to pick up a student's high-school graduation card. On the outside it said, "Graduate, you'll be amazed at how much of what you have learned in school will be handy in the real world." On the inside, "Almost none." Here are his suggestions:

• Separate academic achievement from nonacademic factors and don't allow the latter to dominate a student's overall grade. For example, Winger believes that short daily assignments designed to help students practice and prepare for the next class are not always indicative of their grasp of important concepts. He puts them in the non-academic bucket. Homework straddles the two – non-academic for turning it in, academic for the quality of the work.

• Clarify important learning targets and ensure that the academic portion of students' grades accurately assesses students' progress toward them.

• Guard against the tendency to assess easy-to-grade lower-level comprehension versus deeper understanding. "If higher-order thinking matters most," says Winger, "then that is what our grades must assess, record, report, and reward."

• Separate grades into distinct categories. One possibility: understanding, knowledge, skills, and non-academic factors. A more detailed breakdown used by a science teacher, with the relative weighting of each grade:

- Content knowledge: grasping the basic concepts in physical, earth, and life science, assessed through tests and quizzes and portions of homework and labs: 30%
- Enduring understanding: applying concepts to authentic situations, evaluated through lab activities and constructed-response portions of tests: 25%
- Science skills: Employing inquiry, using the scientific method, and reading charts and graphs, assessed through lab activities: 25%
- Writing skills: Using proper conventions, organization, and style to communicate scientific understanding in projects, labs, and essays: 10%
- Learning support factors: Following directions, punctuality, and being prepared for class: 10%

"Grading What Matters" by Tony Winger in *Educational Leadership*, November 2009 (Vol. 67, #3, p. 73-75); this article can be purchased at http://www.ascd.org. Winger can be reached at twinger@lps.k12.co.us.

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7. A Trap Some College Professors Fall Into – and K-12 Teachers Too?

In this retrospective *Chronicle of Higher Education* review of Mike Rose's classic 1989 book, *Lives on the Boundary*, University of Illinois/Chicago professor Gerald Graff says of university teachers, "Becoming smart about our subjects makes us pedagogically stupid. Forgetting that there was once a time when even we… could not do long division or make sense of a sonnet, we are incurious about why students find our teachings impenetrable, and we take no responsibility for clarifying ourselves." Graff agrees with Rose that standards are fair only if all students get the help they need. "For college instructors," he says, "being fair would mean, among other things, seeing student mistakes as a stage of development rather than a symptom of cognitive deficiency or hopeless illiteracy… mistakes can be intelligent."

"'Lives on the Boundary' at 20" by Gerald Graff in *The Chronicle of Higher Education*, Nov. 13, 2009, p. B14-B15), no e-link available

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8. Is Going to College Worth It?

In this *Chronicle of Higher Education* forum, several commentators discussed the question of whether too many U.S. students are going to college. Asked if individual students benefit economically from attending college (as economists have found in the past), panel members offered these views:

• Daniel Yankelovich, opinion pollster: "It applies more than ever, With the disappearance of virtually all highly paid, low-skill jobs, the only way that most Americans can fulfill their aspirations for middle-class status is through acquiring a higher-education credential and the skills that go with it."

• Sandy Baum, economics professor and researcher: "While the wage premium for a college education is not at its highest level ever, it is larger than it was five years ago, and typically four-year-college graduates earn more than 50 percent above typical high-school graduates… Going to college is not a guaranteed investment… But it is a wise investment for most people."

• Charles Murray, political scientist: "A large wage premium for having a bachelor's degree still exists," says Murray. However, he is skeptical that this is because of what's actually learned in college (with the exception of engineering and the hard sciences) and advocates substituting certifications for the bachelor's degree.

• Marcus Winters, Manhattan Institute fellow: "Those who argue that the bachelor's degree has lost its luster in the labor market are ignoring empirical evidence to the contrary… Employers clearly still value the general knowledge and work ethic that a student acquires in college… Blue-collar workers benefit nearly as much as white-collar workers from a year of college education. That is, going to college makes you a better plumber than you would have been otherwise. Why? One reason might be that college imparts nonacademic social skills that can benefit blue-collar workers, who often must interact with customers and clients who are

themselves college-educated." The wage premium is 13-14 percent of an individual's weekly wage, says Winters.

"Are Too Many Students Going to College?" in *The Chronicle of Higher Education*, Nov. 13, 2009, p. B7-B10), no e-link available

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9. What's Involved in Closing the Achievement Gap

"Achievement gaps have important consequences for both individuals and the nation," says Vanderbilt University dean Joseph Murphy in this lead *Kappan* article. "They damage the economic and social fabric of society, undermine civil rights and social justice for a large segment of the population, and destroy the principles of democracy." But the achievement gap has deep roots and we should be careful not to implement superficial and unproven solutions. In fact, says Murphy, "the knowledge base on closing the achievement gap for minority students is especially thin" and "there is no magic elixir that will solve the achievement gap problem." With this in mind, he suggests the following "principles of work" for the years ahead:

- Race is important, but SES is the core issue.
- There are no short-term solutions.
- An integrated, cohesive strategy is needed that knits together multiple initiatives. "Isolated actions and ad hoc work have more limited value," Murphy says.
- Prevention always trumps remediation. "[S]olving the 9th-grade problem in preschool is easier than solving it in 9th grade," he maintains.
- The longer an effective intervention is implemented, the greater its impact.
- We need to look for strategies that disproportionately benefit disadvantaged students.
- We should combine in-school strategies (e.g., more rigorous curriculum) with out-of-school strategies (e.g., academically oriented summer programs for elementary students).
- Within schools, we need academic initiatives (e.g., ways of improving the quality of instruction) with other programs (e.g., clubs for African-American students).
- We should be strategic about the point in students' school careers when interventions have the biggest impact – for example, smaller class size has more impact in the primary grades.
- Interventions have different impact in different settings.
- When the achievement gap shows signs of narrowing, we should not let up. Continued work is needed to hold onto gains.

"Closing Achievement Gaps: Lessons from the Last 15 Years" by Joseph Murphy in *Phi Delta Kappan*, November 2009 (Vol. 91, #3, p. 8-12), available for purchase at http://www.pdkintl.org/kappan/index.htm

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10. The Impact – and Limitations – of Smaller Classes

In this *American Journal of Education* article, professors Spyros Konstantopoulos and Vicki Chung interpret recent research (Project STAR and the Lasting Benefits Study) on the impact of smaller class size on student achievement. Their findings:

- Being in smaller classes in early grades leads to higher student achievement, on average, through eighth grade.
- The benefits of smaller classes are quite durable over time.
- Smaller classes appear to benefit all students equally.
- This means that smaller classes do not narrow the achievement gap between low- and high-achieving students – although one study produced weak evidence that being in smaller classes for several years disproportionately benefited low-income students.
- One year in smaller classes has limited impact on achievement.
- The more years students are in smaller classes from kindergarten through Grade 3, the better they do going forward.
- The effects of reducing class size were less pronounced in science classes.
- The mechanism through which small classes improve student achievement is still not clearly understood.
- Class-size reduction initiatives in California and Florida produced disappointing results because the massive scale of the programs resulted in teacher shortages and insufficient resources.

"What Are the Long-Term Effects of Small Classes on the Achievement Gap? Evidence from the Lasting Benefits Study" by Spyros Konstantopoulos and Vicki Chung in *American Journal of Education*, November 2009 (Vol. 116, #1, p. 125-154), no e-link available

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11. Short Item:

a. Creative Activist Toolkit – This website from the Creative Visions Foundation provides a variety of tools for middle-school, high-school, and college students to hone their skills and make a difference in their communities: http://www.globalyouthfund.org.

Creative Visions is an international organization devoted to tapping the power of individuals and media for positive change: http://www.creativevisions.org

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b. Instructional videos online – This website has a wide variety of brief videos on topics ranging from "How to Tell Directions Without a Compass", to "How to Read a Book You Hate but Have to Finish", and "How to Stand Up for Yourself." There's also one on "How to Convince a Teacher to Change Your Grade." http://www.Howcast.com.

Spotted in "Highlighted & Underlined" in *Phi Delta Kappan*, November 2009 (Vol. 91, #3, p. 7)

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Do you have feedback? Is anything missing?

If you have comments or suggestions, if you saw an article or web item in the last week that you think should have been summarized, or if you would like to suggest additional publications that should be covered by the Marshall Memo, please e-mail: kim.marshall8@verizon.net

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 37 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 44 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 about 50 issues a year).

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- How to change access e-mail or password

Publications covered

Those read this week are underlined.

American Educator
American Journal of Education
American School Board Journal
ASCD, CEC SmartBriefs, Daily EdNews
Catalyst Chicago
Changing Schools (McREL)
Ed. Magazine
EDge
Education Digest
Education Gadfly
Education Next
Education Week
Educational Leadership
Educational Researcher
Edutopia
Elementary School Journal
Essential Teacher (TESOL)
Harvard Business Review
Harvard Education Letter
Harvard Educational Review
JESPAR
Journal of Staff Development
Language Learner (NABE)
Middle Ground
Middle School Journal
New York Times
Newsweek
PEN Weekly NewsBlast
Phi Delta Kappan
Principal
Principal Leadership
Principal's Research Review
Reading Research Quarterly
Reading Today
Rethinking Schools
Review of Educational Research
Teacher Magazine (online)
Teachers College Record
The Atlantic Monthly
The Language Educator
The New Yorker
The Reading Teacher
Theory Into Practice
Tools for Schools/The Learning Principal