Marshall Memo 281

A Weekly Round-up of Important Ideas and Research in K-12 Education
April 13, 2009

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Quotes of the Week

"I've found that students have a radio station playing in their heads: WII-FM – What's In It For Me? During a lesson, students are processing every activity through that filter: …. Why do I need to learn this? Will I ever use this again?"

Barbara Blackburn and Roland Williamson in "Increasing Rigor" in *Principal Leadership*, April 2009 (Vol. 9, #8, p. 28-31), no e-link available

"If we want teachers who are smart, caring, alive to students' needs, and are in it for the long haul, we need to consider how to create schools that are themselves centers for the continual learning of everyone connected to them."

Deborah Meier in "Reinventing Schools That Keep Teachers in Teaching" in *Reinventing Schools*, Spring 2009 (Vol. 23, #3, p. 34), http://www.rethinkingschools.org/archive/23_03/rein233.shtml

"The odds are far greater that a tenured teacher would be struck by lightning during his or her lifetime than found to be an ineffective teacher."

Richard DuFour and Robert Marzano (see item #1)

"Students need opportunities to hone their skills, to write essays, to practice becoming academics. They also need opportunities to write about the tough issues in their lives that rarely surface in schools."

Linda Christensen (see item #4)

"[Trust is] one's willingness to be vulnerable to another based on the confidence that the other is benevolent, honest, open, reliable, and competent."

Megan Tschannen-Moran, quoted in "A Learning Community Is Built on Trust" by Valerie Von Frank, *The Learning Principal*, April 2009 (Vol. 4, #7, p. 1, 6-7), no e-link

1. Richard DuFour and Robert Marzano on Teacher Supervision/Evaluation

(Originally titled "High-Leverage Strategies for Principal Leadership")

"Principal evaluation of teachers is a low-leverage strategy for improving schools, particularly in terms of the time it requires of principals," argue Richard DuFour and Robert Marzano in this important *Educational Leadership* article. Orchestrating results-oriented teacher team meetings is far more likely to raise student achievement, they say. Supervision and evaluation attempt to improve performance one teacher at a time, and new teachers need that kind of close attention and support, but for most teachers it's not productive because:

- Veteran teachers rarely use evaluative feedback. "They are far more likely to attribute a poor evaluation to personality conflicts with the principal or to the principal's subjectivity than to weaknesses in their instruction," say DuFour and Marzano.
- Secondary-school principals don't have the subject-area expertise to give credible feedback on the rigor, relevance, or clarity of most instruction in their schools.
- Even when principals help an individual teacher improve, this doesn't translate to improvement for the whole school.
- Very few teachers are rated unsatisfactory. "The odds are far greater that a tenured teacher would be struck by lightning during his or her lifetime than found to be an ineffective teacher," they say.

"[T]ime devoted to building the capacity of teachers to work in teams is far better spent than time devoted to observing individual teachers to ensure they are demonstrating the right moves in the classroom," say DuFour and Marzano. "To those who argue that teacher supervision is necessary to hold teachers accountable, we contend that there is little evidence to support that claim. On the other hand, there is abundant evidence that organizing people into teams in which they work together to achieve common goals for which members are mutually accountable is a powerful structure for promoting individual and collective accountability."

A typical principal spends at least 120 hours a year on supervision and evaluation (about four hours a week). What if principals spent those 120 hours creating high-performing collaborative teams by:

- Scheduling at least an hour each week for team meetings;
- Focusing the agenda on whether students were acquiring the knowledge and skills most essential to continued success;
- Giving teams the training, support, resources, tools, and templates they need;
- Dealing with obstacles to collaboration.

Giving teachers state standards or district curriculum guides is not enough, say DuFour and Marzano. Teachers can still be teaching vastly different content. When asked, "What do we want our students to learn?" the whole team must have the same answer! Standards should be trimmed down to those that can realistically be taught in a year, with students moving from grade to grade with the skills and knowledge they need to be successful.

The most important tool for each team is common assessments and rubrics that teachers can use consistently and cooperatively to check for student mastery, get insights into what's working and not working, and follow up with students who are below mastery. Teacher teams should constantly ask, *What was learned?* and *How can we use evidence of learning to strengthen our professional practice?*

What is the principal's role in all this? DuFour and Marzano believe they should monitor teams' ongoing work by asking teachers for:

- The "guaranteed and viable curriculum" (what students should know and be able to do by the end of the year);
- Pacing guides to ensure everything fits into the calendar;
- Common assessments to check for understanding every 5-9 weeks;
- Their analysis of results to figure out what students didn't learn and why;
- Action plans for improving on the results, including professional development for teachers in areas where their skills need improvement.

Principals should meet quarterly with teams to review their work, focusing especially on evidence of student learning.

All this, DuFour and Marzano conclude, is a far more effective use of principals' time than traditional supervision and evaluation – and far more likely to produce gains in student achievement.

"High-Leverage Strategies for Principal Leadership" by Richard DuFour and Robert Marzano in *Educational Leadership*, February 2009 (Vol. 66, #5, p. 62-68); this article can be purchased at http://www.ascd.org/publications/educational_leadership/feb09/vol66/num05/toc.aspx
The authors can be reached at rdufour@gmail.com and robertjmarzano@aol.com.

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2. A New Book on Whether Intelligence Is Inherited or Acquired

In this *New York Times* review, Jim Holt examines Richard Nisbett's new book, *Intelligence and How to Get It: Why Schools and Culture Count*. The book provides what Holt calls a "meticulous and eye-opening" critique of hereditarianism (the theory that intelligence is mostly inherited, is fixed at birth, is unevenly distributed among various racial groups, and is not affected by schools or culture). Nisbett draws on recent evidence – from neuroscience, genetics, successful educational interventions, and the impact of parenting – to debunk the hereditarian theory and show that environmental factors are decisive in shaping a person's intelligence. Here are Nisbett's main points:

• I.Q. tests do measure something important. Children with higher I.Q.s grow up to make more money than siblings with lower I.Q.s.

• Based on studies of twins and siblings who grow up in different adoptive families, Nisbett says that I.Q. is about 50 percent inherited (considerably less than the 75 percent asserted by the hereditarians). Even this may be an exaggerated figure, since adoptive families tend to be more affluent and similar (if adoptive environments were identical, I.Q. would appear to be 100 percent inherited).

• I.Q. differences between racial groups in the U.S. are "purely environmental", says Nisbett. Even though I.Q. varies from one person to another, group differences are the product of differences in the world in which children grow up. He gives the example of corn seed planted in two fields, one with rich soil and one with poor soil. In each field, there are differences between the heights of individual corn plants based entirely on their genes. But the overall difference between the corn in one field and the other is 100 percent environmental.

• Another piece of evidence for the environmental theory is that the I.Q. gap between black and white 12-year-olds has shrunk from 15 points to 9.5 points over the last 30 years. Worldwide, I.Q. scores have been rising about 3 points a year for the last century. These shifts could not possibly have been brought about by changes at the genetic level; they are the product of changes in nutrition, parenting, and education.

• Yet another piece of evidence is that African Americans who have more Caucasian genes from white ancestors do not have higher I.Q.s than those who have fewer.

• Nisbett says that the supposed I.Q. advantage of East Asians turns out to be a myth; it's an artifact of sloppy research, and Asian Americans, on average, actually score slightly lower than white Americans. The superior academic achievement of many Asian-American students is the product of cultural, not genetic factors.

• More evidence: when poor children are adopted by affluent parents, their I.Q. rises 12-16 points. This happens because better-educated parents talk to their children more and ask more "known-answer" questions, that is, a question to which the parent already has the answer (*What color is that elephant, Billy?*). Low-SES parents rarely ask this kind of question, and when their children are questioned in this way in school (a common occurrence), they are puzzled (*If the teacher doesn't know this, then I sure don't*).

• The educational interventions that have shown the biggest and longest-lasting payoffs so far are well-planned, intensive early-childhood programs. For about $15,000 per child a year, such programs can essentially eliminate racial I.Q. gap.

• While Nisbett believes that the differences between racial groups could be eliminated, he's less sanguine about social-class differences. He also believes that as I.Q. gaps narrow, intelligence will become less important than certain "moral" traits, including conscientiousness and perseverance.

"Get Smart", a review of *Intelligence and How to Get It: Why Schools and Culture Count* by Richard Nisbett (W.W. Norton & Co., 2009) by Jim Holt in *The New York Times Book Review*, Mar. 29, 2009 (p. 9)
http://www.nytimes.com/2009/03/29/books/review/Holt-t.html?_r=1&scp=1&sq=Get%20Smart,%20Jim%20Holt&st=cse

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3. Teaching Elementary Math Using Multiple "Genres"

In this *Kappan* article, University of Georgia/Athens professor Amy Parks says that good teachers don't use just one instructional approach to teach math (traditional memorization of algorithms versus reform-oriented problem-solving, for example). They use a variety of "genres" as appropriate. "Just as genres of books have different styles, different purposes, and different attractions for readers," says Parks, "so do genres of teaching. A classroom that offers students only discussions or only worksheets is shortchanging students who might be drawn to other genres and is presenting a narrow view of mathematics… [A] diversity of genres presents a broader and more realistic picture of how mathematics is used in the world."

Parks spent a year observing an experienced third-grade teacher in an urban school, and found that she used the following genres in her math teaching:

- *Mathematical discussion* – In whole-class colloquies, the teacher challenges students to explain how they solved problems, with the focus on understanding the process. The teacher pushes students to listen to and respond to each others' ideas and to use mathematical reasoning.
- *Game show* – The teacher asks quick-recall questions of the whole class where students are expected to know the answer from memory or by using a standard procedure (for example, rounding 362 to the nearest hundred).
- *Group work* – Students work in small groups tackling a small number of challenging problems, with a premium on using manipulatives and working harmoniously with classmates who aren't necessarily their friends. "In Group Work," says Parks, "students used mathematics more like office workers than either students or mathematicians."
- *Individual student math book work* – Students work independently with occasional teacher help.
- *Cross-examination* – The teacher zeroes in on one student to check for understanding and elucidate a concept for the class.
- *Presenting work publicly* – Individual students or groups explain their work to the class.
- *Individual student-teacher conversation* – Students get one-on-one help from the teacher.
- *Games* – Students play math games, either in small groups or as a whole class.
- *Journal writing* – Students explain their thinking and get feedback.
- *Tests/quizzes* – Students show what they've learned.

"Each of these genres," concludes, Parks, "allowed different students to feel confident and successful in the mathematics classroom… Given the many ways math is used, and the many different people who use it, no unitary vision of classroom practice – whether traditional or reform-oriented – can hold it all."

"Teaching by Genre: Embracing a Diversity of Practices in Mathematics" by Amy Parks in *Phi Delta Kappan*, April 2009 (Vol. 90, #8, p. 601-606); this article can be purchased for $3.00 at http://www.pdkintl.org/kappan/kappan.htm

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4. Using a Powerful Poem with High-School Students

In this *Rethinking Schools* article, Linda Christensen describes teaching the poem "Knock, Knock" by Daniel Beaty to her Portland, Oregon high-school students. (To hear Beaty perform the poem, go to http://www.youtube.com/watch?v=nktBsI0PYPs.) "I left each class in tears," says Christensen, "because when poetry, like Beaty's, touches students' lives in real ways, I am reminded of both the pain and the hope that schools harbor."

In this partly autobiographical poem, Beaty tells of a father's imprisonment, then directly addresses the father, and ends with a letter to "heal" and "father" himself. Christensen played Beaty's performance for students twice, asking them to jot notes as they listened and read the words. She then had students take a few minutes of silence to write their thoughts about the poem – what it meant to them and what poetic devices Beaty used. She then opened the class for discussion, and was deeply moved by students' insights. Finally, she had students write a letter poem to themselves, giving advice they needed to hear. Many students poured their hearts out.

"Students need opportunities to hone their skills, to write essays, to practice becoming academics," concludes Christensen. "They also need opportunities to write about the tough issues in their lives that rarely surface in schools. Beaty's words opened their veins, so they could write with the blood of their lives."

"Knock, Knock: Turning Pain into Power" by Linda Christensen in *Rethinking Schools*, Spring 2009 (Vol. 23, #3, p. 18-21), no e-link available

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5. Seven Steps in Action Research

(Originally titled "Embarking on Action Research")

In this *Educational Leadership* article, University of Virginia professor Catherine Brighton suggests the following steps for teacher action research (which she defines as "a reflective, systematic inquiry that focuses on a relevant problem in teaching or learning for the purpose of enacting meaningful change to address that problem"):

• *Identify an area of teaching and learning that you are concerned about*. Then write one or more research questions that will guide the study. For example, Janice, a sixth-grade teacher, noticed that many of her African-American, Hispanic, and low-income girls were disengaged during math instruction and posed these research questions: Why do students from underrepresented groups frequently disengage from studying math? What specific strategies increase students' willingness to study math?

• *Develop a plan of action*. Janice worked with her action research team to design a five-week curriculum unit on probability. She identified four Big Ideas for the unit:

- Data can be represented in multiple forms.
- The functions of fractions, decimals, and percents are related.
- Specific sampling strategies increase how well any findings can be generalized to a population from a smaller sample.

- Researchers can make effective predictions by following systematic procedures of probability and sampling.

She then analyzed where students were likely to have difficulty, planned new ways to differentiate instruction, mapped out assessments of attitudes and understanding, and planned lessons with an emphasis on real-world examples that might capture students' interest.

• *Gather data from key points in the project*. Janice collected artifacts at each stage of the unit, including pre-assessments, interest inventories, exit cards, samples of student work, input from focus groups, and her own reflections.

• *Organize the data*. A systematic approach is important at this stage, ensuring the confidentiality of student information.

• *Analyze the data and draw conclusions*. When Janice and her colleagues looked at student work and other artifacts from the unit, they noticed that students became much more engaged in the math and did better when lessons tapped into their interests and they were able to work in small groups. This confirmed the hypothesis that students needed to be engaged before they were willing to persist and achieve.

• *Disseminate findings*. Janice and her colleagues presented their findings to the school's administrators, bringing the data alive by describing the change they saw in a boy who had been uninterested in math at the beginning of the year and was hooked when he was able to bring his passion for race cars into the study of probability.

• *Develop a new action plan*. Janice and her colleagues used the insights from their action research to revise other math units by injecting more areas of strong interest to students.

"Embarking on Action Research" by Catherine Brighton in *Educational Leadership*, February 2009 (Vol. 66, #5, p. 40-44); this article can be purchased at http://www.ascd.org/publications/educational_leadership/feb09/vol66/num05/toc.aspx. Brighton can be reached at brighton@virginia.edu.

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6. Douglas Reeves on Maximizing the Impact of Teacher Leaders

(Originally titled "Model Teachers")

How do educators improve their professional practice? asks author/consultant Douglas Reeves in this *Educational Leadership* column. Most often by watching and listening to outstanding colleagues, he says, and offers these suggestions:

• *Local exemplars hit home*. Reeves mentions several districts that film model mini-lessons and teacher meetings and share them on DVDs and Web-based streaming video.

• *Create a safe environment for rehearsal and improvement*. Teacher leaders often worry that their model lessons aren't very good. But lawyers, surgeons, pilots, pianists, and actors all practice in front of their peers. "Educators should not expect of themselves an initial perfection that eludes every other profession," says Reeves.

• *Create a bank of best practices*. This should include model lessons, practices, and case studies – but also some not-so-successful attempts and what teachers learned from them.

• *Establish boundaries without micromanagement*. Administrators who organize professional sharing should strike a balance between consistency and professional standards on the one hand and opportunities for creativity and individuality on the other.

"Model Teachers" by Douglas Reeves in *Educational Leadership*, February 2009 (Vol. 66, #5, p. 85-86); this article can be purchased at http://www.ascd.org/publications/educational_leadership/feb09/vol66/num05/toc.aspx. Reeves can be reached at DReeves@LeadAndLearn.com.

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7. Faculty Book Groups

(Originally titled "How Book Groups Bring Change")

In this *Educational Leadership* article, St. Louis principal Thomas Hoerr sings the praises of faculty book groups, which he has led for twenty years, some during the summer, some during the school year. "When the group works well, everyone learns," says Hoerr. Based on his experience, he has the following recommendations:

- Book groups should be voluntary.
- Teachers should have a role in selecting books (perhaps choosing from several options).
- Teachers should facilitate the discussion. "The administrator should provide the food and facilities," says Hoerr, "but the faculty should own the process."

Hoerr suggests the following criteria for choosing a book: it should offer helpful insights to teachers, be well written, and not be too long. These are some of the titles that his school's book groups have discussed:

- *The Absolutely True Diary of a Part-Time Indian* by Sherman Alexie (Little Brown, 2007);
- *Boys and Girls Learn Differently* by Michael Gurian (Jossey-Bass, 2001);
- *Frames of Mind: The Theory of Multiple Intelligences* by Howard Gardner (Basic Books, 1983);
- *Improving Schools from Within* by Roland Barth (Jossey-Bass, 1990);
- *A Mind at a Time* by Mel Levine (Simon & Schuster, 2003);
- *Mindset* by Carol Dweck (Random House, 2006);
- *Social Intelligence* by Daniel Goleman (Bantam Books, 2006);
- *Teaching Children to Care* by Ruth Charney (Northeast Foundation for Children, 1991);
- *Warriors Don't Cry* by Melba Beals (Simon & Schuster, 1994);
- *Why Are All the Black Kids Sitting Together in the Cafeteria?* by Beverly Daniel Tatum (Basic Books, 1997).

"How Book Groups Bring Change" by Thomas Hoerr in *Educational Leadership*, February 2009 (Vol. 66, #5, p. 80-82); this article can be purchased at http://www.ascd.org/publications/educational_leadership/feb09/vol66/num05/toc.aspx. Hoerr can be reached at trhoerr@newcityschool.org.

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8. Behavioral Economics Comes to the School Cafeteria

In this *Newsweek* article, Sarah Kliff reports on a recent Yale University study that found a remarkably simple way to get students to eat more fruits with their school lunch: ask them if they want fruit as they go through the serving line. When cafeteria workers pop the question, the consumption of healthy foods rises from 40 to 70 percent. Another strategy for "nudging" students to eat healthier foods is to use zippy names: "X-ray vision carrots" were eaten 50 percent more, and "rich vegetable medley soup" did better than plain-old vegetable soup.

Both of these strategies apply behavioral economics to the challenge of getting children to eat stuff that often seems less appealing than junk food. "The general principle is finding changes that push people in the right direction without limiting their choice," says David Just of Cornell University. In addition to asking the fruit question and renaming foods, it also helps when the "grab and go" section of the cafeteria contains the healthiest foods. Researchers have also found that when students pay with cash, they make healthier choices. Removing junk food choices entirely is an ineffective strategy, says Just, because it doesn't prepare students for the real world, where unhealthy foods are everywhere.

"Stealth Health for Kids" by Sarah Kliff in *Newsweek*, Apr. 6, 2009 (p. 46), no e-link

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9. Computer Games to Bring Learning Alive

In this *Education Week* article, Katie Ash reports on computer simulation games designed to help students understand difficult concepts. These games have been enthusiastically adopted by some schools but provoked skepticism in some quarters. Here are some of the resources mentioned in the article:

- Education Arcade: http://www.educationarcade.org.
- Lure of the Labyrinth: http://labyrinth.thinkport.org.
- Games for Change: http://www.gamesforchange.org/play.
- Games for Educators: http://www.gamesforeducators.com/index.php.
- Institute of Play: http://www.instituteofplay.com.
- K-12 Embodied & Mediated Learning Group: http://ame2.asu.edu/projects/emlearning.
- Learning Games to Go: http://www.thinkport.org/technology/gotgame/default.tp.
- Serious Games Initiative: http://www.seriousgames.org.

"High-Tech Simulations Linked to Learning" by Katie Ash in *Education Week*, Apr. 8, 2009 (Vol. 28, #28, p. 20-23), article available only to subscribers

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10. Short Item

Flashcards 2.0 – FunnelBrain is an online product that allows teachers and students to create flash-card questions and answers with images and sounds to review material. Students

can also form study groups on FunnelBrain to work on flashcards and other subject matter. FunnelBrain tracks whether a student clicks "I get it" or "I still don't know" for each question so questions that are causing trouble can be presented more frequently. For information, go to http://www.funnelbrain.com (this site works only with Internet Explorer and FireFox).

"Bulletin Board" in *Principal Leadership*, April 2009 (Vol. 9, #8, p. 8-9)

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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).

Subscriptions:

Individual subscriptions are $50 for the school year. Rates decline steeply for multiple readers within the same organization. See the website for these rates and information on paying by check or credit card.

Website:

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- About Kim Marshall (including links to articles)
- A free sample issue

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- The current issue (in PDF or Word format)
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- A database of all articles to date, searchable by topic, title, author, source, level, etc.
- 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