

Marshall Memo 66

A Weekly Round-up of Important Ideas and Research in K-12 Education
December 13, 2004

In This Issue:

1. Do we have “professional development apartheid” in U.S. schools?
2. Six strategies for reforming American high schools
3. Raising the achievement of black male students
4. An indirect approach to squashing elementary-school bullying
5. Being safe in school – physically, emotionally, and intellectually
6. Going beyond drill and computation in elementary mathematics
7. Making math meaningful – and fun
8. A quiz on legal protections for gay and lesbian students
9. Short items: (a) *Caveat emptor* with all those tutoring programs; (b) Getting higher-than-expected achievement from special education students; (c) Is too much home computer use bad for student achievement?

Quotes of the Week

“Have a simple, clear purpose which gives rise to complex, intelligent behavior, rather than complex rules and regulations that give rise to simplistic thinking and stupid behavior.”

Dee Hock (see item #1)

“I feel I always get picked on at school. I don’t get included at all. People tell me I am going to hell. I get called carrot top, loser, mentally retarded. I get so mad. I tell, and no one believes me. I cry, and still no one believes me. Sometimes I really want to kill myself.”

A New York fourth-grader (see item #4)

“There can’t be a climate where the kids laugh at the wrong answer. When that happens, a kid will immediately shut down and refuse to participate. And that’s when learning stops.”

Ted Sizer (see item #5)

“Parrots can say things like ‘six times three is 18’ without knowing a thing about six or three or times or 18. Are they doing real math?”

Thomas O’Brien and Ann Moss (see item #6)

“The natural tendency of schools will be to meet the NCLB math requirements by cramming in as much test prep/content drill as possible. While this strategy may initially increase test scores, the gains will quickly plateau. This approach will also produce another generation of math haters and mathaphobes.”

Stanley Pogrow (see item #7)

“In this current Wild West environment of tutoring programs, it benefits everybody to evaluate what works and what doesn’t.”

Steve Quattrociocchi of Princeton Review (see item #9a)

1. Do We Have “Professional Development Apartheid” in U.S. Schools?

In the new *Kappan*, Dennis Sparks, head of the National Staff Development Council, says that professional development in American schools is settling into a disturbing “apartheid” between affluent and poor school districts. According to Sparks, many suburban districts have excellent professional development programs featuring:

- Teachers working in ongoing teams;
- Collective school and team improvement goals;
- Supportive, collegial interactions;
- Lessons planned together;
- Reflection on the effectiveness of those lessons;
- Cycles of action and reflection;
- Examination of student work and data to make decisions;
- Discussion of instructional practices;
- Extended study of educational issues.

Teachers in these districts, says Sparks, “experience growth in professional judgment and skills, see improvements in student learning, and feel the increased confidence and motivation that these improvements produce.”

Many impoverished inner-city districts, on the other hand, have professional development programs characterized by:

- Top-down mandates;
- Highly prescriptive approaches;
- Scripted teaching;
- Careful monitoring for compliance.

Teachers in these districts are generally told what to do and when to do it, especially in reading and math. Sparks says that this approach to professional development leaves “the culture of schools untouched and teachers and students ill prepared to function much beyond the most rudimentary levels of performance. I am also concerned that demeaning and mind-numbing staff development will create a persistent aversion to professional learning and leave teachers feeling resigned to their fate and dependent on experts as the primary source for their development.”

Contrasting these two approaches, Sparks quotes Dee Hock, the founder of VISA: “Have a simple, clear purpose which gives rise to complex, intelligent behavior, rather than complex rules and regulations that give rise to simplistic thinking and

stupid behavior.” Sparks believes that the type of professional development being used in less advantaged schools is in the second category.

Sparks agrees with Andy Hargreaves of Boston College: “[I]f all students – black, white, rich, and poor – are to acquire deep understanding; learn to solve problems creatively; develop the ability to work in teams and independently; and seek, through their concern about others, to contribute meaningfully to the public good, teachers must pursue deep and continuous professional learning. To achieve these outcomes, we will need to develop teachers who regularly exercise professional judgment, who can work in networks and teams, who establish sustaining relationships with students and other teachers, who draw on research, and who make decisions based on shared data.”

Sparks concedes that novice teachers who are truly neophytes need mentoring, in-classroom coaching, and intensive professional development, some of it highly structured. But Sparks agrees with Mike Schmoker that such teachers, working in teams, should also be involved in a continuous process of inquiry with “targeted, short-term cycles of improvement” in which they explore more effective ways to teach particular skills or concepts “through short-term trial and error.” Sparks says that educational policy-makers and leaders “consistently underestimate teachers’ capacities to innovate and to improve their teaching and their students’ learning.” With good leadership from the principal, high-poverty schools can design “more effective incremental approaches to continuously improving teaching and instructional methods by tapping both teachers’ strengths and outside resources.”

The danger, Sparks fears, is that the pressures of No Child Left Behind will lead school administrators in high-poverty districts to panic and purchase low-quality off-the-shelf professional development programs that do not develop “a school culture that stimulates teachers’ intellectual capacity and professional judgment [or enable] sustained and respectful collegial interaction.” This, he thinks, will have “long-term, deleterious consequences for poor and minority students.”

“The Looming Danger of a Two-Tier Professional Development System” by Dennis Sparks in *Phi Delta Kappan*, December 2004 (Vol. 86, #4, p. 304-306), no e-link available

2. Six Strategies for Reforming American High Schools

In the current *Gadfly*, Chester Finn has a brilliant (and quite non-ideological) analysis of six approaches to reforming high schools. Finn says we’re in a period of experimentation and there is no consensus on which of these (or which combination)

works best; educators and policymakers are like the proverbial blind men feeling parts of the elephant and trying to describe the whole beast from their limited perspective. Here are the strategies, each with its problem definition and “theory of action:”

- Increase school accountability – Extend standards-based reform to high schools and hold them accountable for student achievement, completion rates, etc.

Problem definition: Schools aren’t accomplishing all they could because no one has held them accountable for results.

Theory of action: Student achievement will improve if we get the standards and assessments right, hold schools responsible for student performance, and intervene forcefully if schools fail.

- Make diplomas contingent on a graduation test – Establish high-stakes tests that students must pass to earn a diploma. This strategy is different from the first in that students take the primary heat. Positive incentives can be part of this plan, e.g., state-funded college scholarships for students who earn a B average or better.

Problem definition: Students are not taking the right courses, working hard enough, or learning enough because it doesn’t “count;” they can just go through the motions and rack up course credits.

Theory of action: Students will work harder with the right combination of carrots and sticks.

- Jazz up the high school experience – This includes individualizing instruction, letting students move at their own pace, eliminating boredom, and setting up programs to lure back dropouts and educate out-of-school youth.

Problem definition: Too many kids are turning off, tuning out, and dropping out because high school is boring. If they’re not engaged, we’ll keep losing them.

Theory of action: If young people like school more, they’ll work harder and be more successful, and well-conceived specialty programs can re-engage those who have given up on formal, conventional schooling.

- Let students choose alternative models – Options include “early college” high schools, small schools, schools-within-schools, charter schools, KIPP high schools, and virtual high schools.

Problem definition: The one-size-fits-all 1950’s comprehensive high school is dysfunctional; it is an inefficient, outmoded way of teaching adolescents what they need to learn.

Theory of action: If we create new options for delivering secondary education and give real choices, students will find their niche and do better.

- Beef up the curriculum – Ramp up AP courses and International Baccalaureate, make state standards more rigorous, revise textbooks, and make college-prep the default curriculum. Tease real workplace expectations (a la American Diploma Project) back through the grades.

Problem definition: Students aren't learning because the courses are easy, boring, pointless, and not matched to real-world demands.

Theory of action: Challenge their minds, make it worthwhile, and they will learn.

- Make high school practical – Increase work-study, “tech prep” programs joined with community colleges, blending school with jobs, voluntarism and community service.

Problem definition: Academic work and intellectual activity are not the way to the adolescent heart.

Theory of action: If we approach teenagers through tangible rewards and sleeves-rolled-up engagement, they will engage and learn more.

“The Blind Men and the High School” by Chester Finn, Jr. in *The Education Gadfly*, Dec. 9, 2004 (Vol. 4, #44 ,p. 1-3)

3. Raising the Achievement of Black Male Students

Improving the academic achievement of black male students has recently been taken on as a major focus by the Schott Foundation in Cambridge, Massachusetts. The foundation believes that a key to building success among African-American boys and men is changing negative images propagated by the entertainment industry and news media – stereotypes of the black male as criminal and anti-intellectual. “It’s about re-humanizing African-American males,” says Gregory Hodge, a school board member in Oakland, California. “If people don’t value these young men, they don’t have the advocates that they need, working with them and for them.”

Teacher preparation is another issue, says La Vonne Neal, an education professor in Georgetown, Texas. “How do we prepare all our teachers to be culturally responsive?” she asks. “If you don’t understand students’ diverse social and cultural behaviors, then you won’t know that what you’re seeing as problematic is not a deficit, it’s just different.” Professor Neal and her colleagues found that adolescent males who adopted “the stroll” (a style of walking common among black males) were

more often perceived by their teachers as more aggressive and less intelligent than other students, and were more often referred for special education evaluation.

Rossi Ray-Taylor of the Minority Student Achievement Network hopes that the Schott Foundation will continue to focus on this issue. Too often, she says, educators blame students for performing poorly, rather than looking squarely at the failings of the schools. “How are kids experiencing school?” she asks. “What are the pressures on African-American males that could be pulling them off track? Are we expecting different things from them? Are they expecting that from themselves? Where are we broken, as a school system? That’s where we’ve got to keep the question.”

“Foundation Tackles Black Males’ School Woes” by Catherine Gewertz in *Education Week*, Dec. 8, 2004 (Vol. 24, # 15, p. 6)
<http://www.edweek.org/ew/articles/2004/12/08/15schott.h24.html>

4. An Indirect Approach to Squashing Elementary-School Bullying

A New York fourth grader had this to say about being bullied: “I feel I always get picked on at school. I don’t get included at all. People tell me I am going to hell. I get called carrot top, loser, mentally retarded. I get so mad. I tell, and no one believes me. I cry, and still no one believes me. Sometimes I really want to kill myself.”

Faced with evidence like this, the staff of an elementary school in Oceanside, New York decided to conduct an action research project on bullying. Each teacher in the project identified one student in his or her class who was the target of bullying. Teachers noticed that the victims of bullying were evenly divided among boys and girls and stood out from their peers in their appearance, clothing, ethnic origin, English proficiency, speech patterns, behavior, shyness, or tattling. The victims were lonely and often insecure; when they were bullied, some withdrew while others reacted in kind (“provocative victims”), teasing and annoying their tormentors and not knowing when to stop – which made things worse.

The Oceanside teachers came up with an action plan to reduce bullying. They theorized that all humans have three basic psychological needs – competence, autonomy, and a sense of belonging – and for a variety of reasons, students who are the targets of bullying are not getting these needs met. Bullied students seemed not to be successful, felt powerless, and/or felt they were not cared for. The teachers decided to test the theory that meeting these three needs would make bullied students less vulnerable and reduce victimization.

Over a ten-week period, teachers increased the bullied students' sense of competence (by making a point of putting them in the limelight and providing incentives); gave them more of a sense of autonomy (by giving them choices and structured freedom); and increased their sense of belonging to the community (including opportunities to tutor younger students). Teachers also made a point of personally reaching out to the targeted students (e.g., asking them about family activities and meals), structuring shared learning activities that got the bullied students to work with other students and make friends, and enforcing rules against excluding anyone from activities or games.

At the end of the action research project, teachers felt their actions had made a significant difference for the targeted students and felt a new sense of confidence that they could change their classroom climate and reduce peer harassment. Teachers learned the following lessons:

- Showing personal caring toward students makes a difference.
- It's essential to showcase students' competencies and respect their right to make decisions.
- It's okay to differentiate the classroom and tailor activities to different students' needs.
- Teachers can influence students' peer relationships.
- Academic success and social success go hand in hand.

"Interrupting the Cycle of Bullying and Victimization in the Elementary Classroom" by Karen Siris and Karen Osterman in *Phi Delta Kappan*, December 2004 (Vol. 86, #4, p. 288-291), no e-link available

5. Being Safe in School: Physically, Emotionally, and Intellectually

Education reporter John Merrow identifies three kinds of school safety that are needed for optimal teaching and learning: physical, emotional, and intellectual. On the first, Merrow cites evidence that schools are getting safer and criticizes rigid "zero tolerance" programs. (He also recommends the "back door test" for gauging a school's accessibility to mischief-makers: see if you can walk in the back door of a school, or wander the corridors, without being challenged.)

On emotional safety, Merrow makes a plea for school leaders to take a stand against bullying and move on from the discredited "boys will be boys" reaction to verbal and physical harassment and abuse. "Words sting," he writes. When children

are teased or frightened or bothered, they should feel confident about taking their problems to teachers, knowing that teachers will follow up.

On intellectual safety, Merrow quotes Ted Sizer: “There can’t be a climate where the kids laugh at the wrong answer. When that happens, a kid will immediately shut down and refuse to participate. And that’s when learning stops. For me, the ultimate test of a school is the willingness of any student to display his or her ignorance, because the riskiest thing you can do in a school, whatever your age, is to say, ‘I don’t know’ or ‘I don’t understand.’”

“The Three Kinds of School Safety Since 9/11” by John Merrow in *Educational Horizons*, Fall 2004 (p. 19-32), spotted in *Education Digest*, Dec. 2004 (Vol. 70, #4, p. 4-15), no e-link available

6. Going Beyond Drill and Computation in Elementary Mathematics

“Parrots can say things like ‘six times three is 18’ without knowing a thing about six or three or times or 18. Are they doing real math?” Starting from this provocative question, two Midwestern educators argue that we need to move math away from straight computation toward *making sense* and problem solving. They focus on two fundamental math ideas – classification and inference – and give sample problem-solving games in each:

- *Classification* (putting things into mental baskets) – For younger children, the “I’m thinking of a person who...” game is excellent practice; students have to sort out whether people (or animals, objects, colors, etc.) are or are not in a category. This can be made more challenging for older students by saying, “I am thinking of a state” and allowing only questions like, “Does it touch Alabama?” Other possible categories are countries, historical figures, items from popular culture, etc.

What’s the math here? Activities such as these give children a chance to practice canceling things until they get down to the final item. “This ability lies at the heart of logical thinking,” say the authors, “both in mathematics and everyday life.”

- *Inference* (generating new knowledge out of old knowledge) – For younger children, an appropriate game is hiding a coin in one hand and asking them to choose one; they know that if the coin is not in the hand they pick first, it *must* be in the other one. For older students, the extension is “patterns and logical necessity.” One game is having children sit in a circle and start counting, each calling a number in sequence, then pausing and asking, Who gets to say 15? How about 112? How about a million? This can be made more challenging by using skip counting (by 3 or 5 or 6).

What's the math here? Figuring out patterns that save having to work through solutions step by step to the bitter end!

The authors feel strongly that this kind of sense-making is real math – that students should be constantly solving problems that “stretch their abilities and force them to construct and extend or revise their mental networks.” The authors list seven books (all available from Amazon.com) that are sources of great math problems for all ages:

- *Get It Together: Math Problems for Groups Grades 4-12* by Tim Erickson
- *United We Solve: 116 Math Problems for Groups, Grades 5-10* by Tim Erickson
- *Math Games and Activities from Around the World* by Claudia Zaslavsky
- *Anno's Hat Tricks* by Akihiro Nazaki
- *Critical Thinking Activities in Patterns, Imagery, Logic* by Dale Seymour and Ed Beardslee
- *Daily Tantalizers Math* by Tom O'Brien
- *Family Math* by Jean Kerr Stenmark, Virginia Thompson, Ruth Cossey, and Marilyn Hill

“Real Math?” by Thomas O'Brien and Ann Moss in *Phi Delta Kappan*, December 2004 (Vol. 86, #4, p. 292-296, 303), no e-link available

7. Making Math Meaningful – and Fun

“The natural tendency of schools,” writes California researcher Stanley Pogrow, “will be to meet the NCLB math requirements by cramming in as much test prep/content drill as possible. While this strategy may initially increase test scores, the gains will quickly plateau. This approach will also produce another generation of math haters and mathaphobes.”

Pogrow and his colleagues have found that most students are blocked from doing well in math because (a) they don't understand many of the concepts; (b) they see no purpose for the concepts; and (c) they see math as a series of arbitrary, unintelligible rules imposed by adults. Many teachers find it very difficult to explain math concepts in ways that make sense to students and spark their interest. One thing that *doesn't* work is telling students that they will understand the need for math when they grow up – or that learning math will make them more successful adults.

What is to be done? Pogrow has spent the last ten years developing a supplementary program for upper-elementary and middle-school students called *Supermath*, and claims remarkable gains in math understanding and test scores with

all types of students. Pogrow's program plunges students into fantasy situations (he thinks real-world math problems turn students off) and challenges them to solve outlandish problems in which math concepts "save the day" and help them reach a valued goal.

For example, take the classic problem: Which number is bigger, 3.2 or 3.1999? Most students get this one wrong, even after careful explanations. *Supermath* makes the problem into an urban adventure where decimal numbers in sequence are part of the scenario and the fact that 3.19999 really *is* smaller than 3.2 is part of the solution.

Another perennial sand trap for students (especially those with weak reading skills) is word problems. *Supermath* challenges teams of students to explain to a befuddled space creature the language of a poorly-worded word problem, clarifying the meaning and improving the wording step by step. After a few weeks of this unit, students learn to spot what they come to see as "ridiculously lame" distractors in conventional word problems and solve the problems with aplomb.

For more information on *Supermath*, contact Pogrow at stanpogrow@att.net

"Supermath: An Alternative Approach to Improving Math Performance in Grades 4 Through 9" by Stanley Pogrow in *Phi Delta Kappan*, December 2004 (Vol. 86, #4, p. 297-303) http://www.pdkintl.org/kappan/k_v86/k0412pog.htm

8. A Quiz on Legal Protections for Gay and Lesbian Students

How's your knowledge on school law on issues surrounding gay and lesbian students? Test yourself on these situations; the answers will be in next week's Marshall Memo:

- a. Some students in my high school want to form a Gay-Straight Alliance (GSA). What are my legal responsibilities?
- b. I have students and parents who object to the formation of any student clubs that address gay issues. How am I supposed to handle this situation?
- c. How do I handle staff or outsiders wanting to be part of the GSA?
- d. I have been approached by some parents and members of the community who object that the Boy Scouts meet at the school. They feel the Boy Scouts discriminate against gay people, and the school should not condone this. What do I do?
- e. Some parents object to military recruiters being allowed on the school campus, claiming the military discriminates against gays and lesbians and should not be allowed at school. What do I do?

f. I have students with both pro-gay and anti-gay messages on their T-shirts and am getting complaints from all sides. What am I supposed to do?

g. Some transgender students complain about prom, yearbook, and graduation dress codes; they say separate dress requirements for girls and boys unfairly restrict their “gender identify” or “gender expression.” How do I handle it?

h. Some parents complain of what they see as “pro-homosexual” content in some classroom materials. They demand more control of class content or the removal of their child from the class. What is the best response?

i. Some students want to participate in or have the school sponsor events like “Diversity Days” or a “Day of Silence.” What are the school’s obligations and limitations?

j. Some students have religious or moral objections to homosexuality and want a chance to provide a public counterpoint to what they see as problematic “gay-positive” viewpoints in such events. Should I allow it?

k. A same-sex couple wants to attend a school dance. What is the proper course of action?

l. Our school’s anti-bullying policy lets us discipline students for harassing students over their sexual orientation. Some students say this violates their freedom of speech. How do you strike the balance?

m. I’ve just been told harassment based on sexual orientation is occurring at my school. What am I supposed to do?

“Legal Protections Gay Students Must Receive” by Julie Underwood from *Dealing with Legal Matters Surrounding Students’ Sexual Orientation and Gender Identity*, November 2004, National School Boards Association et al.

9. Short Items:

a. Caveat emptor with all those tutoring programs – Spurred on by the mandates of No Child Left Behind, there is a huge market for remedial tutoring for struggling students. No single company has cornered the market, and there is fierce competition among Plato Learning, Kaplan, Catapult Learning, Huntington Learning Centers, Kumon Math and Reading Centers, Princeton Review, Failure Free Reading, and at least 18 other companies, most of them for-profits. Very little independent evaluation has been done, and it’s wise for schools and school districts to take their claims with a grain of salt. “In this current Wild West environment of tutoring programs,” says Steve Quattrociocchi of Princeton Review, “it benefits everybody to evaluate what works and what doesn’t.”

“Federal Law Spurs Private Companies to Market Tutoring” by Karla Scoon Reid in *Education Week*, Dec. 8, 2004 (Vol. 24, # 15, p. 1, 18, 19)

<http://www.edweek.org/ew/articles/2004/12/08/15tutor.h24.html>

b. Getting higher-than-expected achievement from special education students –

A study by the Donahue Institute at the University of Massachusetts/Boston zeroed in on several reasons that some schools are more successful than others at raising the achievement of special needs students:

- They align their curriculum with state frameworks.
- They emphasize inclusion of special-needs students in regular classes.
- They use student-assessment data to inform decision-making.
- They have a disciplined social environment.
- They have strong leadership teams.

“Some Mass. Cities Show Success with Sec. Ed. Students” by John Gehring in *Education Week*, Dec. 8, 2004 (Vol. 24, # 15, p. 9)

<http://www.edweek.org/ew/articles/2004/12/08/15speced.h24.html>

c. Is too much computer use bad for student achievement? An international study questions whether the money that parents spend on computers for their children is helping kids’ school achievement. An analysis of survey data from the Program for International Student Assessment (PISA) covering 30 countries showed that home computers have a significant *negative* relationship to achievement – and computers in school had no impact one way or the other. “The more computers there are in a student’s home, the worse the students’ performance” in both math and reading literacy, the study found. The full study, “Computers and Student Learning: Bivariate and Multivariate Evidence on the Availability and Use of Computers at Home and at School,” is available at <http://www.edweek.org/links> .

“International Study Questions Computers’ Aid in Learning” by Andrew Trotter in *Education Week*, Dec. 8, 2004 (Vol. 24, # 15, p. 13)

<http://www.edweek.org/ew/articles/2004/12/08/15compute.h24.html>

© Copyright 2004 Kim Marshall

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 aims to keep busy principals and other educators very well-informed on important research and ideas in K-12 education. Kim Marshall, drawing on 35 years of experience as a teacher, principal, central office administrator, coach of principals, and writer, acts as “designated reader.” Kim searches through 39 publications the week they come out, chooses the articles that are most relevant and useful to improving teaching and learning, and summarizes them in a brief e-mail. Some ideas will be familiar, reinforcing what readers already know; others will be new and genuinely thought-provoking.

Subscriptions:

The Marshall Memo is sent every Monday (with occasional breaks). Individual subscriptions are \$50 for the school year; rates decline steeply for multiple readers within the same organization. See the website for information on paying by check or credit card.

Website:

If you go to <http://www.marshallmemo.com> you can get information on:

- How to subscribe or renew
- Why the Marshall Memo?
- Focus topics
- Headlines for issues 1-51
- What readers say
- About Kim Marshall
- A free sample issue

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

- The current issue (in PDF or Word format)
- Back issues (also in PDF or Word)
- A database of all articles to date, searchable by topic, article headline, source, article title, author, and level
- How to change access e-mail or password

Publications covered:

(those read this week are underlined)

American Education Research Journal
American Educator
American School Board Journal
ASCD SmartBrief
Atlantic Monthly
Bay State Banner
Boston Globe
CommonWealth Magazine
Curriculum Update (ASCD)
Ed. Magazine (Harvard School of Education)
Education Digest
Education Gadfly
Education Next
Education Update (ASCD)
Education Week
Educational Leadership
Educational Researcher
Elementary School Journal
Harper’s
Harvard Business Review
Harvard Education Letter
Harvard Education Review
Journal of Staff Development
Middle School Journal
NASSP Bulletin
New York Times
New Yorker
Newsweek
PEN Weekly NewsBlast
Phi Delta Kappan
Principal Magazine
Principal Leadership
Psychology Today
Reading Research Quarterly
Reading Today
Rethinking Schools
Review of Educational Research
Teachers College Record
Teacher Magazine

E-links will be provided whenever possible.