Marshall Memo 44

A Weekly Round-up of Important Ideas and Research in K-12 Education
June 28, 2004

In This Issue:

Quotes of the Week

"They look like they weigh about 50 pounds, and they cover everything you can think of."

Mary Koppal on U.S. science textbooks (see item 4)

"Having quantifiable data eliminates guesswork or hunches and helps pinpoint which resources we need to address our core business – ensuring that every child learns, grows, and thrives."

Gerrita Postlewait and Will Garland (see item 1)

"Districts should end the multiple-mission confusion of high schools by adopting a single mission: all students graduating ready for college and work."

Tom Vander Ark (see item 2)

"[P]rincipals can only be held accountable for their schools' performance if their roles and goals are clearly enumerated, and if they are empowered to manage an adequate budget; retain and discharge staff members (with cause and due process); and make improvements to the structure, curriculum, schedule, and community connections."

Tom Vander Ark (*ibid.*)

1. Using Quarterly Data in South Carolina

Three years ago, the Horry County School District in South Carolina (46 schools, 31,000 students, more than half of students eligible for free and reduced-price meals) was looking for a way to use data to improve achievement. In this article, the superintendent and the school board chair describe how they decided on MAP (Measures of Academic Progress), an Internet-enabled adaptive testing system created by the nonprofit Northwest Evaluation Association. The district got great results: SAT scores for 2003 surpassed the national average for the first time, eleven Horry County schools were recognized for making significant gains in closing the achievement gap, and the district was one of only nine statewide (none of the others low-income) to receive excellent ratings on the South Carolina accountability plan.

The MAP system has students take frequent on-line tests that adapt to their responses: if a student gets an item right, the system provides a more challenging question; if a student gets an item wrong, the system gives an easier question. MAP charts and reports individual student growth throughout the year. The district has used the system to produce quarterly reports on student achievement, charting individual growth, grade distribution, teacher observations, and state and SAT test results (when they were given).

Each quarterly report gives different information to different audiences. Classroom teachers get data on individual students' growth that they can use to improve instruction. Principals get a report on groups of students, making it possible to compare results from different methods of instruction. And central-office administrators and board members get the big picture. After each quarterly report, principals meet with teachers and district administrators to discuss the data, celebrate successes, and identify challenges not yet overcome. Using during-the-year data, school staff plan improvements in instruction geared to the needs of individual students and groups of students who are struggling or under-challenged.

The quarterly report to the school board has four components:

- Principals report on their most pressing areas of concern based on the most recent data. These often focus on the AYP subgroups most at risk.
- Principals report on what they are doing to address each area of concern.
- Principals ask for support from the district to address their problem areas.
- Principals anticipate what they expect to occur in the next quarter.

The quarterly reports allow the board to stay in touch with work at the school level and be accountable to the public. The fine-grained data also make it possible for the board and district administrators to push back when faced with public demands to cut the budget. Here is how the school board feels about this system: "Working in this manner enables us to operate more like a business – identifying which investments are creating a positive return in terms of increased student achievement and which ones should be changed or eliminated. Like any successful business, our district now can analyze each of our annual initiatives on a quarterly basis to see how much growth has occurred. Having quantifiable data eliminates guesswork or hunches and helps pinpoint which resources we need to address our core business – ensuring that every child learns, grows, and thrives."

"Mapping Out Solutions" by Gerrita Postlewait and Will Garland in *American School Board Journal*, July 2004 (Vol. 191, #7, p. 30-32)

2. Turning Around Failing High Schools

Tom Vander Ark, the director of education for the Bill and Melinda Gates Foundation (when this man talks, people listen!), has a powerful piece on the back of *Education Week* on what needs to be done with unsuccessful high schools. Based on his work with districts around the country, he recommends a three-pronged approach:

• *Progressive intervention to offer appropriate resources to failing schools* – The focus needs to be on turning around (rather than simply punishing) low-performing schools, which requires:

- Clear mission and metrics: "Districts should end the multiple-mission confusion of high schools by adopting a single mission: all students graduating ready for college and work. Each high school will be held accountable for student achievement, high school graduation rates and postsecondary enrollments, safety, and satisfaction."
- Differentiated approaches depending on status: Cincinnati developed five levels for high schools, including guidance for struggling schools, prescriptive assistance for failing schools, and replacement for chronic failure.

- An articulated approach for failing schools: Failing schools need fundamental redesign, which is disruptive and expensive – at least $1 million over four to six years. Several cities (New York City, Chicago, Milwaukee, and Sacramento) are experimenting with breaking up failing schools using proven design principles and qualified staff.
- Role and goal clarity: "[P]rincipals can only be held accountable for their schools' performance if their roles and goals are clearly enumerated, and if they are empowered to manage an adequate budget; retain and discharge staff members (with cause and due process); and make improvements to the structure, curriculum, schedule, and community connections. Well-intentioned federal, state, and local programs with separate budgets and program managers make it difficult to create this level of clarity and empowerment for principals."

• *Performance contracts to clarify what is expected of every school* – The same simple accountability decision used with charter schools should be used in struggling district-operated high schools: renew or non-renew. The ideal system would outline steps of progressive intervention, including supports and sanctions if performance does not improve.

• *Aligned accountability for everyone, not just students* – Expectations for all stakeholders in the system need to be lined up to the same targets:

- Student accountability: This should include demonstrating proficiency at regular intervals, including at graduation, and use of standardized tests and other measures.
- School/staff accountability: Assessing performance and acknowledging good teaching through "a mix of financial rewards and additional responsibilities" and giving struggling teachers the support they need to be successful.
- System accountability: This should be "a transparent system of progressive intervention that begins with guidance, moves to prescriptive intervention, and concludes with alternative governance."

Vander Ark concludes: "As a nation, we will need to invest more than $10 billion just to develop new schools and improve existing schools, so that they are able to adequately prepare all students for the economic and civic challenges of the day."

"Getting High School Accountability Right" by Tom Vander Ark in *Education Week*, June 23, 2004 (Vol. XXIII, #41, p. 52, 41)
http://www.edweek.org/ew/ewstory.cfm?slug=41vanderark.h23

3. Keys to Reading Achievement in Vermont

In this study, five University of Vermont researchers made 8-15 visits each to six schools whose students met or exceeded state reading standards in Grades 2 and 4. They compared these schools with less-successful schools with similar SES characteristics, interviewing all staff members associated with K-4 literacy and analyzing the "contexts and processes" that seemed to influence students' success or lack of success. The researchers found that "there is little evidence that a specific strategy, approach, or program determines high student performance. And there is no evidence that low-socioeconomic schools cannot achieve success." Instead, they found several other school factors that they felt were associated with high levels of student proficiency:

- *The school had a strong commitment to literacy over 8-10 years*. Strong leadership from the principal was key, as was consistency in the administrative and curriculum team over time. In addition, each successful school responded to setbacks and disappointing results by thoughtfully adopting new methods and approaches.
- *The school community had a shared belief in children's ability to learn*. Shared vision meant that "school personnel took responsibility for children's learning. There was little tendency to attribute children's lack of success to others, that is, to blame the child, parents, or other teachers."
- *There was ongoing communication among the faculty*. "The sense of community was complemented by teachers' sense of autonomy in making instructional decisions."
- *K-4 teachers were knowledgeable and articulate about their work and had a high level of expertise*. Teachers were "expert in managing a complex set of literacy activities operating simultaneously and including teacher-directed group work, independent reading and writing, and work at learning centers."
- *Students had ample time and opportunity to read and discuss books*. An extensive collection of books was accessible and put to good use.

"Contexts and Practices in Six Schools Successful in Obtaining Reading Achievement" by Jim Mosenthal, Marjorie Lipson, Susan Torncello, Barbara Russ, and Jane Mekkelsen in *Elementary School Journal*, May 2004 (Vol. 104, #5, p. 343-367), no e-link available.

4. The Shortcomings of U.S. Science Teaching

Recent studies show that science is getting squeezed in the U.S. curriculum. Only 35 percent of elementary teachers say they teach science every day, and 29 percent say they teach it twice a week or less. Science textbooks cover too many topics in a superficial fashion. "They look like they weigh about 50 pounds," says Mary Koppal of the American Association for the Advancement of Science, "and they cover everything you can think of. But they're more like a dictionary of science than something designed to teach kids difficult concepts."

Another challenge in science education is shifting teaching from rote memorization to higher-order thinking. George Nelson, a Washington (state) professor of science education, says that there is now a clear realization that students come into the classroom with ideas already in their heads and teachers "need to draw out what students already are thinking and have them confront their own thinking with scientific phenomena and scientific explanations for the way the world works." Instruction like this requires teacher training and incentives to attract first-rate people to the classroom, perhaps including twelve-month contracts and higher pay to compete with the private sector.

It's not clear that there is a shortage of scientists that schools need to fill, but the reasons for better science education go beyond the job market; Nelson believes that the main reason to improve the quality of science teaching is to raise the scientific literacy of American citizens – which is more and more important as science and technology assume a larger and larger role in our lives. "The world is a different place now." says Nelson, "And it requires a different kind of knowledge from the general population, a different kind of wisdom."

"Squeeze Science Education and – Surprise! – the United States Begins to Lag" by Lawrence Hardy in *American School Board Journal*, July 2004 (Vol. 191, #7, p. 6-8)

5. Is It Right to Teach to the Test?

Each month, Doug Reeves answers a question from the field in his organization's newsletter. June's question came from a teacher who was concerned when a colleague had this to say about her students' performance on a state test: "They did well. But they should. We taught to the test." Was teaching to the test a bad thing, the teacher wanted to know.

Reeves acknowledged the widespread confusion about "teaching to the test" and said that of course it is unethical and unprofessional to prep students with

purloined test items. But it is also unethical and unprofessional to set students up for failure by not preparing them for subject matter on which they will be tested. These are Reeves's guidelines for ethically and appropriately teaching to the test:

- Understand the standards, test requirements, and test format.
- Ensure that students have multiple opportunities to learn and demonstrate success in meeting standards.
- Assess student learning in a variety of formats. "Even if the state and district tests are only multiple-choice," writes Reeves, "effective teachers will have a variety of classroom assessments, including multiple-choice, written responses, demonstrations and other formats."
- Ensure that students approach testing not with dread and fear, but with confidence and success.

"Questions from the Real World" by Douglas Reeves in *Center for Performance Assessment Monthly E-Mail Newsletter*, June 2004

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, teachers, and other educators very well-informed on important research, ideas, and developments in K-12 education. Kim Marshall, a former Boston teacher and administrator, is your "designated reader," searching through a wide range of publications the week they come out, zeroing in on the articles that are most relevant and useful to improving teaching and learning at the school level, and summarizing them in a brief e-mail. Target topics include the following:

• *School leadership* – Building a professional learning community; effective teamwork; effective schools practices; supervision and evaluation of teachers; time management.

• *Effective teaching* – Key variables associated with high student achievement; professional development of teachers; teacher leadership and career ladders; multiple intelligences and brain research.

• *Curriculum* – Alignment and planning with the end in sight; teaching for understanding; new ideas in reading, writing, and math.

• *Assessment* – Aligned formative and summative assessments; using data and student work for continuous improvement; graphic display of student achievement data; standardized testing and the debate on standards.

• *Closing the gap* – Effective strategies to close the racial/economic achievement gap; the innate-ability/intelligence/effective effort debate; safety-net programs.

• *Positive school culture* – Student discipline; social-emotional learning; moral development; parent involvement; and community partnerships.

• *And…* – New areas of research; upcoming television and radio programs on education.

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/Education Update (ASCD)
Ed. Magazine (Harvard School of Education)
Education Digest
Education Gadfly
Education Next
Education Week
Educational Leadership
Educational Researcher
Elementary School Journal
Harpers
Harvard Business Review
Harvard Education Letter
Harvard Education Review
Journal of Staff Development
Middle School Journal
NAASP Bulletin
New York Times
New Yorker
Newsweek
PEN Weekly NewsBlast
Phi Delta Kappan
Principal Magazine
Principal Leadership
Psychology Today
Reading Research Quarterly
Reading Today
Review of Educational Research
Teachers College Record
Teacher Magazine

E-links will be provided whenever possible.

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