Marshall Memo 75

A Weekly Round-up of Important Ideas and Research in K-12 Education
February 21, 2005

In This Issue:

1. Richard Allington on the mixed messages from literacy research
2. Turning around a struggling Nevada elementary school
3. Monitoring student progress
4. Monitoring student attitudes
5. Recess matters for primary-grade students!
6. How can principals be more like Theo Epstein?
7. Four design principles for schools
8. Finding the right computer systems to track student data
9. Short item: Earth science web links

Quotes of the Week

"How could any reading program that provides a one-size-fits-all curriculum be considered scientific? Or effective for struggling readers?"

Richard Allington (see item #1)

"Good teaching, effective teaching, is not just about using whatever science says 'usually' works best. It is all about finding out what works best for the individual child and the group of children in front of you."

Richard Allington (*ibid*.)

"Effective teachers are much like the effective physician who offers a multi-pronged approach to reducing cholesterol, for instance, an approach that includes changes in diet, added exercise, and the use of drug therapy… Teachers, like doctors, must make decisions based on the unique evidence they observe in their students."

Richard Allington (*ibid*.)

"Formative assessments – ongoing assessments designed to make students' thinking visible to both teachers and students – are essential for guiding instruction and helping both teachers and students monitor progress."

David Ferrero, citing *How People Learn* (see item #7)

"When we've taught students in ways that enable them to score high on accountability tests, but in the process have made them scurry away from math or feel repelled by reading, have we educated those students properly?"

James Popham (see item #4)

"There's a sense of romance in having a second language. It makes you so much more in touch with the world."

Charles Stallcup, San Antonio parent of two children in a two-way immersion program (*Education Week*, Feb. 16, 2005, p. 8)

1. Richard Allington on the Mixed Messages from Literacy Research

"I think everyone can agree that children differ," writes Tennessee reading expert Richard Allington in this powerful *Kappan* piece attacking what he sees as ideologically-driven federal mandates for literacy teaching. "Therein lies what worries me about 'evidence-based' policy making in education. Good teaching, effective teaching, is not just about using whatever science says 'usually' works best. It is all about finding out what works best for the individual child and the group of children in front of you."

Allington's article is one of several in this month's *Kappan* dealing with the controversy that has raged since the publication of the National Reading Panel's 2000 report. Allington is especially critical of the 2003 NICHD pamphlet *Put Reading First,* which he believes oversimplifies and distorts the more nuanced message of the NRP report and has been used to justify mandating single-basal readers and scripted literacy programs. "How could any reading program that provides a one-size-fits-all curriculum be considered scientific?" he demands. "Or effective for struggling readers?"

One point of contention is the push for "decodable" books with awkward vocabulary choices. Allington: "There is no evidence that creating the artificial but highly decodable texts that have pigs doing jigs is necessary to foster effective decoding proficiency." Another plank in the conservative platform is support for whole-class teaching. Allington believes that *telling* – direct instruction to a whole classroom of students – is not the best way to improve reading. Instead of *telling* a child how to spell the word "nuts," he says, an effective teacher takes a less direct approach with a better chance of sparking learning: "Say it slow. What sounds do you hear?" But Allington doesn't oversimplify: "It isn't that telling is *always ineffective* but rather that *always telling* is ineffective. The single-minded focus on instructional explicitness diminishes the likelihood of developing the kinds of metacognitive awareness and self-regulation that are essential to proficient reading."

Allington urges us to take the current wave of "evidence-based" research with a grain of salt because it relies on averages and does not work for every student in every situation (between 11% and 44% of struggling readers are left behind in some of the recommended programs). He cites his own research on highly effective teachers who are successful because they look into the eyes of the children in front of them for their instructional cues, not to a script written by someone far removed from the

classroom. "They didn't necessarily reject commercial instructional packages or the directions that invariably accompany them," writes Allington of exemplary literacy teachers, "but they were rarely observed actually following such advice with any fidelity. Instead, they took their cues from the children they were teaching." Allington is all for using research to improve teaching, but he urges us to leaven it with sensitive and on-going diagnosis of students, who are almost never "average."

Allington is also troubled by the current obsession with "replicability," which assumes that good instruction can be packaged and then duplicated in many different classrooms. "[T]he evidence belies this fantasy," he says. "Effective teachers are much like the effective physician who offers a multi-pronged approach to reducing cholesterol, for instance, an approach that includes changes in diet, added exercise, and the use of drug therapy… Teachers, like doctors, must make decisions based on the unique evidence they observe in their students… As a teacher educator, I wish I could tell my students a few absolute truths, other than telling them to expect children to differ. But the fact is that researchers deal in probabilities, not absolutes. Teachers deal with variation, not sameness."

Trying to counter the ideologically-driven over-emphasis on phonics, Allington cites a meta-analysis of 22 studies that pointed to four factors that had a greater impact on student learning. These factors "develop children who will invest huge amounts of personal energy in reading and learning to read:

- Setting knowledge goals rather than performance goals;
- Providing students with choices about what to read, where, and with whom;
- Supplying interesting texts; and
- Allowing pupils to collaborate while reading."

In this same vein, Allington worries that a number of scientifically-based pillars of effective reading instruction are being ignored, including:

- The role of students' motivation to read;
- Effective instructional grouping;
- Matching texts to students' development and needs;
- Expert tutoring with materials matched to students' reading levels
- Extended-time opportunities;
- Using interim assessments to inform instruction;
- Extensive opportunities for student writing with feedback.

Allington closes with an appeal for local autonomy versus externally-mandated programs. "I know of no evidence that following the tightly scripted lessons from any

reading program has ever succeeded in building local capacity or even building teacher expertise," he writes. "However, there is much evidence that mandating a 'scientific' instructional package will fail to improve teaching or learning if local capacity is limited or wholly lacking… I believe the evidence indicates that professional accountability emerges only with professional autonomy. No one has ever taken personal responsibility for a failed plan imposed from above and afar… It is only by fostering (a) teacher expertise about how readers develop and how teachers can help, and (b) personal professional accountability for the reading development of each child under our watch that we might hope to ever leave no child behind."

"Ideology Is Still Trumping Evidence" by Richard Allington in *Phi Delta Kappan*, February 2005 (Vol. 86, #6, p. 462-468), no e-link available

2. Turning Around a Struggling Nevada Elementary School

Pete Hall, a rookie 30-year-old principal charged with rescuing a 500-student elementary school in Reno, Nevada, describes the steps he took to address chronically low student achievement (the school had not made AYP for three years and was in imminent danger of being taken over by the state):

• *Outreach* – First, he individually interviewed all employees in the school and challenged them to rededicate themselves to teaching the basics.

• *Hiring* – Hall was able to hire 13 new teachers, including a second literacy coordinator and three reading specialists.

• *Action-forcing deadline* – Hall used the 90-day timeline imposed by the state to generate a sense of urgency around writing a comprehensive improvement plan.

• *School visits* – Hall and a group of teachers traveled to an exemplary district in Kennewick, Washington (the district happened to be in session during a Reno school vacation) and spent nine days poking around three elementary schools looking for the factors that explained their success. The group bonded on the trip and came back with lots of specific ideas.

• *Planning process* – The "Kennewick Crew" fanned out and shared their findings in weekly subgroup meetings involving the rest of the staff. With the Nevada deadline looming, the entire staff collaborated on crafting a literacy-centered improvement plan with the following components:

- *New literacy program*: The staff decided to dump Success for All and adopt a balanced literacy approach.

- *More time for literacy*: They increased the amount of time scheduled for literacy from 90 minutes to 180 minutes a day.
- *All hands on deck*: They pressed every available staff member into service to lead reading groups during the literacy block: teachers, paraprofessionals, literacy coordinators, specialists, assistants, the librarian, and the dean of students.
- *Smaller classes*: By using all personnel, they were able to create smaller groups (especially for struggling students), and enhanced student focus by putting up temporary barriers in classrooms during literacy time.
- *Frequent assessments*: They decided to put all newly-enrolled students through a complete battery of literacy assessments to assign them to a reading group. They planned three additional assessments during the year for all students on phonemic awareness, comprehension, fluency, developmental spelling, and writing achievement.
- *Collaboration time*: Teacher teams were to meet every Wednesday for 75 uninterrupted minutes to discuss assessment results, student placement, progress, materials, teaching methods, philosophy and action research (see below). This block of time was made possible by the principal and dean splitting up the student body and alternating each week between an assembly and a physical education activity for 45 minutes plus the remaining 30 minutes of the contracted workday.
- *Action research*: Teachers were asked to sign up for an action research project focusing on a topic of interest or concern. Each team was to formulate a driving question, conduct research, and see if it could reach an actionable conclusion to share with the staff.

The school's improvement plan was accepted by the state and put into action. What were the results? The first year (during which many of the components of the plan were not fully implemented) they made AYP. The second year (2003-04) students made dramatic gains and far exceeded their targets:

In English and language arts:

- Overall pass rate rose from 24.2 percent to 38.6 percent
- Latino students' pass rate rose from 22.9 percent to 39.5 percent
- White students' pass rate rose from 26 percent to 36 percent
- Free/reduced meal students' pass rate rose from 23 percent to 36.8 percent
- LEP students' pass rate rose from 2.6 percent to 41 percent

In mathematics:

- Overall pass rate rose from 28.3 percent to 56.4 percent
- Latino students' pass rate rose from 26.5 percent to 58.5 percent
- White students' pass rate rose from 31.2 percent to 53.3 percent
- Free/reduced meal students' pass rate rose from 27.3 percent to 56.5 percent
- LEP students' pass rate rose from 5.1 percent to 56 percent

"A School Reclaims Itself" by Pete Hall in *Educational Leadership*, February 2005 (Vol. 62, #5, p. 70-73), no e-link available

3. Monitoring Student Progress

Student progress monitoring (originally designed for special-needs students and called curriculum-based measurement) is a very specific protocol for using interim assessments to continually evaluate whether teaching is effective and make better-informed teaching decisions. Student progress monitoring has a solid 30-year research track record. Here are its key components:

• Acquire or design an assessment to measure student proficiency on end-of-year learning expectations (e.g., running record, math computational skills test).

• Do a baseline assessment on each student to get beginning-of-the-year performance levels.

• Identify an achievement goal that each student needs to reach by the end of the year (e.g., reading at Level I on the Fountas-Pinnell scale by June) and share it with the student.

• Make a graph for each student and draw a line from his or her baseline score to the end-of-year target; this shows the rate of progress each student must make during the year to reach the target by June.

• At regular intervals during the year, give short assessments ("probes") to measure each student's progress toward the goal. These assessments are different versions of the end-of-year assessment and might be given weekly, bi-weekly, monthly, or quarterly.

• Note that each probe samples the entire range of skills that students must learn by the end of the year, not just the particular skills of the current teaching unit. Teacher-made unit tests are fine for telling whether a student has mastered the current material but do not tell if the student is on track to meet end-of-year goals.

• Plot the results from each probe on each child's graph to see if progress is above or below the line of progress needed to meet the year-end goal. Students can be involved in this process so they can get invested in "making the line go up."

• If a student is not on track, the teacher can adjust instruction, trying a different teaching approach, giving more time for practice, adding one-on-one tutoring, enlisting a peer tutor, etc.

Not all schools have the resources to generate multiple versions of end-of-year assessments; one resource is http://www.studentprogress.org

"Research Matters: How Student Progress Monitoring Improves Instruction" by Nancy Safer and Steve Fleischman in *Educational Leadership*, February 2005 (Vol. 62, #5, p. 81-83), no e-link available

4. Monitoring Student Attitudes

"When we've taught students in ways that enable them to score high on accountability tests, but in the process have made them scurry away from math or feel repelled by reading, have we educated those students properly?" asks UCLA assessment guru James Popham. Clearly the answer is no, so what should school leaders do? Popham argues that they should do bi-annual anonymous surveys of student attitudes on key topics and use the data to adjust the school's approach.

The Bethlehem Central School District in New York has done pioneering work in this area with their fall-to-spring student "affective inventories." Two years ago, Bethlehem teachers and administrators concluded that accountability pressures had led to an over-emphasis on cognitive outcomes and an under-emphasis on other aspects of student development. The district made a commitment to take a more balanced approach and appointed a task force to identify suitable affective targets, design a set of inventories, try them out on small groups of students, polish the tools, and begin administering them to all students at the beginning and end of each school year. The results of each anonymous survey are accessible to individual teachers as well as principals and the district at large. For example, if a fifth-grade teacher found in the fall inventory that her students were terrified of giving oral reports in class, she could use a set of public-speaking activities in class, gradually and gently bolstering students' confidence in making oral presentations, and then see in the June inventory if her students' fears had subsided.

"About Accountability: Students' Attitudes Count" by James Popham in *Educational Leadership*, February 2005 (Vol. 62, #5, p. 84-85), no e-link available. For more information on Bethlehem's student attitude inventories, e-mail Les Loomis, the superintendent, at loomlco@bcsd.neric.org

5. Recess Matters for Primary-Grade Students!

In the new *Educational Researcher*, two professors from the University of Minnesota make a strong case for the positive effects of recess on children's cognitive and social-emotional development. The article is especially timely because many school districts have responded to accountability pressures by cutting back on students' play time. The irony is that research indicates that *playful* breaks (as contrasted to structured activities) actually boost learning. "Breaks during periods of sustained cognitive work should reduce cognitive interference and maximize learning and achievement gains," write the authors, stressing that a drastic break from classroom routines is better than a partial break (i.e., free play is better than organized play).

Research also points to the health benefits of recess (the obesity epidemic) and the social advantages: "Children's social skills increase in correspondence with the frequency with which they enact different and varied social roles… In the process of these interactions, individuals learn to take other children's perspectives, comprehend and produce social signals, and inhibit their aggression… [C]hildren's social competence with peers is a powerful and complementary predictor of school performance and adjustment." These benefits are important for children who go home to empty apartments or houses after school and have few other opportunities to interact with peers. The pluses of recess are most pronounced for primary-age children; they are also significant for boys, who are most prone to distraction and ADHD, which makes them most vulnerable to negative aspects of prolonged periods of concentrated work without a break.

A little-known fact about high-achieving East Asian schools is that they have frequent recess breaks: primary schools have a 10-minute recess break about every 40 minutes, middle schools have a 10-minute break every 45 minutes, high schools a 10-minute break every 50 minutes. Anecdotal evidence suggests that when Asian students come back from these breaks, they are more attentive and ready to work than they were before the breaks. Experiments in U.S. schools bear this out, and recess doesn't have to be the outdoor, run-around type. One experiment with indoor recesses found the same positive classroom benefit afterward.

The Canadian province of British Columbia recently recognized the importance of peer interaction by designating social responsibility as the "fourth R" in their schools.

"The Role of Recess in Children's Cognitive Performance and School Adjustment" by Anthony Pellegrini and Catherine Bohn in *Educational Researcher*, January/February 2005 (Vol. 34, #1, p. 13-19), no e-link available

6. How Can Principals Be More Like Theo Epstein?

In a November, 2004 presentation to Massachusetts principals, management consultant Malachi Pancoast suggested ways to work less, play more, and still get the job done in a normal work week. He urged principals to shift from thinking of themselves as a technician/specialist/expert (someone whose expertise runs narrow and deep, who does one thing and does it well) to thinking of themselves as a *manager* – someone who focuses on "coordinating the actions of others, supporting and coaching, directing and orchestrating events."

Pancoast says principals, like Theo Epstein, general manager of the Red Sox, need to be "on the field" observing and overseeing the development of their players, knowing when *training* is needed (for people who don't know what to do) or when *coaching* is in order (for people who are already successful but are working on an area of weakness). "[Principals] need particular observing, listening, and speaking skills. They need to be comfortable holding uncomfortable conversations about what doesn't work and needs to be done. They need to know how to provide the right encouragement. They need to be courageous and support others to take risks."

Pancoast thinks that principals are least effective when they are in the school's outer office or in their own office. In the outer office, they are getting in the way of the secretary and other technicians who know what to do and want to be left alone to do it. In their own office, they are often wasting time on matters that others should or could be attending to and not getting out and about the school and managing in ways that support improved learning, staff development, parent and community involvement, and a host of other initiatives. Pancoast emphasizes the importance of coordinating effectively with one's secretary to organize workflow and free the principal up from unnecessary paperwork, phone calls, etc.

"Time: The Most Precious Resource" in *Principal View*, a publication of the Massachusetts Elementary School Principals' Association, Winter 2005 (Vol. 19, #2, p. 1, 5), no e-link available

7. Four Design Principles for Schools

In this otherwise policy-oriented article, David Ferrero cites a powerful passage from *How People Learn: Bridging Research and Practice*, a 1999 publication of the

National Research Council (NRC). The book proposed four bedrock, research-based principles for the design of learning environments:

• Schools and classrooms should be learner centered.

• Classrooms should be knowledge centered, focusing on: (a) what is taught (information and subject matter), (b) why it is taught (understanding), and (c) what student competency or mastery looks like.

• Formative assessments – ongoing assessments designed to make students' thinking visible to both teachers and students – are essential for guiding instruction and helping both teachers and students monitor progress.

• Schools should cultivate a strong sense of community by developing norms for the classroom and school and by making connections to the outside world that support core learning values.

"Does 'Research Based' Mean 'Value Neutral'?" by David Ferrero in *Phi Delta Kappan*, February 2005 (Vol. 86, #6, p. 424-432), no e-link available

8. Finding the Right Computer Systems to Track Student Data

In this *Educational Leadership* article, data consultant Victoria Bernhardt advises school districts and principals on three distinct components for ideal access to student achievement data:

- *Student information systems* – Databases housing class attendance, tardiness, discipline referrals, enrollments, and more sorted by gender, grade, race, etc.
- *Data warehouses* – These allow a district to analyze data across different databases (e.g., student information system, test results, questionnaire data from teachers and students). They use individual student and teacher ID numbers to link student data to teachers and courses, making it possible to look at student achievement over time.
- *Instructional management systems* – These analyze student performance on ongoing assessments, helping teachers align classroom curriculum to content standards, align curriculum between grades, and provide standards-based lesson plans and resources.

From her experience advising districts on getting the right technology set-up, Bernhardt shares the following tips:

• *Be clear about what you are looking for.* This is important as you listen to vendors' sales pitches. You don't have to buy all three components from a single vendor.

• *Be sure the tools can talk to one another.* Data management tools should have an SIF-compliant (Schools Interoperability Framework) label so they can interact as one system (i.e., data entered into one component should be entered automatically into the other two). See http://www.sifinfo.org for more information.

• *Involve a team with broad membership in the process.* Teachers, administrators, and information management personnel should be involved in the purchasing decision to ensure that they are all comfortable with the eventual decision.

• *Research possible vendors and have them come to you.* Look into each vendor's stability and financial status and have them demonstrate their data tools in your school.

• *Talk with current users.* Ask lots of questions about the product, technical support, and follow-up.

• *Don't automatically go for the lowest bidder.* Find the vendor that has the services you need, and challenge that company to meet the price offered by the lowest bidder.

"Data Tools for School Improvement" by Victoria Bernhardt in *Educational Leadership*, February 2005 (Vol. 62, #5, p. 66-69), no e-link available

7. Short Item:

Earth science web links – This month's *Kappan* has a number of links to resources for teaching earth science K-12:

• The GLOBE (Global Learning and Observations to Benefit the Environment) program is a worldwide network of educators, students, and scientists supported by NASA, the National Science Foundation, and the U.S. State Department. Students can perform environmental observations, take scientific measurements, report data via the Internet, and collaborate with other students and scientists around the world. Teachers can also find workshops, teaching guides, and networking opportunities: http://www.globe.gov

• The Visible Earth website has a comprehensive directory of all NASA earth science images, animations, and visualizations. Hundreds of images are available, for example, a dust storm in the Gobi Desert and one of the lava plateaus in Argentina: http://www.visibleearth.nasa.gov

• Digital Library for Earth System Education (DLESE) is a website with educational resources about the Earth and a variety of services for educators, including information on teaching with data and an evaluation and assessment: http://www.dlese.org/dds/index.jsp

• Volcano World has online and HyperStudio lesson plans, activities, interactive maps of active volcanoes worldwide, satellite images, and general information about how volcanoes work, different types of volcanoes, virtual field trips, and planetary volcanoes:
http://volcano.und.nodak.edu

• The National Atlas of the United States has resources on geographic awareness, and allows users to create interactive maps illustrating the relationship among the environment, places, and people:
http://nationalatlas.gov

• The U.S. Geological Survey Geological Hazards website has information on earthquakes, geomagnetism, landslides, and seismic hazards:
http://geohazards.cr.usgs.gov

• Weather Underground provides real-time, online information on current weather conditions, detailed forecasts, and weather advisories for over 60,000 cities worldwide, as well as historical data and satellite images of past hurricanes and tropical storms:
http://wunderground.com

"Earth Science on the Web" by Teresa Culligan and Walter Potocki in *Phi Delta Kappan*, February 2005 (Vol. 86, #6, p. 481)

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 best practices in K-12 education. Kim Marshall, drawing on 35 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 39 carefully-chosen publications (see list to the right), sifts through scores of 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, provide e-links to full articles when available, and e-mails the memo to subscribers every Monday (with occasional breaks; there were 50 issues in 2003-04).

Subscriptions:

Individual subscriptions are $50 for the school year ($25 for a half-year, beginning late January). 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:

If you go to http://www.marshallmemo.com you will find detailed information on:

- How to subscribe or renew
- Why the Marshall Memo?
- Focus topics
- Headlines for issues 1-68
- 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)
- All 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 Educational Research Journal
American Educator
American School Board Journal
ASCD SmartBrief
Atlantic Monthly
Bay State Banner
Boston Globe
CommonWealth Magazine
District Administration
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 Educational 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.