

Marshall Memo 127

A Weekly Round-up of Important Ideas and Research in K-12 Education

March 13, 2006

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Quotes of the Week

“The nature of relationships among the adults within a school has a greater influence on the character and quality of that school and on student accomplishment than anything else.”

Roland Barth (see item #1)

“Getting good players is easy. Getting ’em to play together is the hard part.”

Casey Stengel, baseball manager (see item #1)

“Nothing is as important for student learning as the individual teacher and what that person knows, believes, and can do.”

Jon Saphier, Matt King, and John D’Auria (see item #2)

“Teacher evaluation in this country is generally abysmal. There is no time for principals to do proper evaluation, and many principals aren’t trained to do evaluation well.”

Julia Koppich, specialist in teacher quality and labor relations

(*Harvard Education Letter*, March/April 2006, Vol. 22, #2, p. 4)

“The big idea, I think, is that at every stage of the system, at every level of the system, there’s a way of checking that learning is happening.”

Dylan Wiliam, British formative evaluation guru, now at Educational Testing Service

(*Education Week*, March 8, 2006, Vol. 25, #26, p. 7)

“I can’t believe that you think we came from monkeys!”

A high-school student reacting to a unit on evolution (see item #6)

“The most difficult task for teachers is dealing with students who have been told that they are in jeopardy of losing their immortal souls if they believe their teachers [about evolution].”

Kenneth Miller, Brown University professor (see item #6)

1. Roland Barth on Promoting Collegiality in Schools

“The nature of relationships among the adults within a school,” says Roland Barth in this important article in the March issue of *Educational Leadership*, “has a greater influence on the character and quality of that school and on student accomplishment than anything else. If the relationships between administrators and teachers are trusting, generous, helpful, and cooperative, then the relationships between teachers and students, between students and students, and between teachers and parents are likely to be trusting, generous, helpful, and cooperative. If, on the other hand, relationships between administrators and teachers are fearful, competitive, suspicious, and corrosive, then *these* qualities will disseminate throughout the school community.”

“A precondition for doing *anything* to strengthen our practice and improve a school,” Barth continues, “is the existence of a collegial culture in which professionals talk about practice, share their craft knowledge, and observe and root for the success of one another. Without these in place, no meaningful improvement – no staff or curriculum development, no teacher leadership, no student appraisal, no team teaching, no parent involvement, and no sustained change – is possible.”

Barth goes on to analyze four types of adult interactions in schools, from the most superficial to the most productive:

- *Parallel play* – Like toddlers in a sandbox, many teachers keep to their own classrooms (“our separate caves,” as one put it), and many principals fail to connect with fellow principals in nearby schools.

- *Adversarial relationships* – Competition is one form – teachers vying for scarce resources and recognition, with the name of the game being, “The better you look, the worse I look.” There’s also intramural sniping, often on ideological grounds (phonics versus whole language, hands-on experiences versus drill and practice). Adversarial relationships can also take the form of withholding craft knowledge that would be helpful to colleagues down the hall. “Just think,” says Barth. “This June, thousands of teachers and principals will retire. With them will go all they have learned over the years, forever lost to the profession. The following September, newcomers will arrive to spend their careers painfully learning what those who just left had already figured out.”

- *Congenial relationships* – These are positive, personal, and friendly interactions, often centering around food, and they are important to getting us out of bed in the morning. But they're not educationally substantive or deeply nourishing.

- *Collegial relationships* – These are the hardest to foster. As baseball manager Casey Stengel once said, "Getting good players is easy. Getting 'em to play together is the hard part." Drawing on the work of Judith Warren Little and the experience of successful schools, Barth suggests four ways that collegiality manifests itself:

- *Talking about practice*: A professional learning community thrives on constant talk about students' progress, assessment results, parent involvement, curriculum, and team teaching. One principal boldly suggested that for a week, conversations in the staff lounge should be limited exclusively to education-related topics. This helped change the existing don't-talk-about-education ethos.
- *Sharing craft knowledge*: One way to jump-start this is for every staff meeting to begin with one or two teachers sharing something they have learned recently, something that works, something that excites them. "Once the exchange of craft knowledge becomes institutionally sanctioned," says Barth, "educators no longer feel pretentious or in violation of a taboo by sharing their insights." Such a school might well be on the way to establishing a taboo against *not* sharing ideas!
- *Observing one another*: Teachers are notoriously insecure about being observed by their peers, and it's tough for a principal to get this ball rolling. One idea is to hold each staff meeting in a different classroom and have the host teacher give a quick "tour" of what's going on in the room – but this doesn't expose colleagues to actual teaching. Barth suggests more forceful measures, including the principal offering to cover teachers' classrooms while they observe others; an administrative fiat ("Before March 31, I expect each of you to observe for one half-day in the classroom of each teacher to whom you might be sending students next year"); social pressure (a chart on the wall of the faculty room keeping track of inter-visitations); and setting an example (having another principal come and observe a staff meeting). He also suggests an explicit compact between teachers visiting each other, including mutuality, confidentiality, focus items, and follow-up conversations.
- *Rooting for one another*: Principals have to work hard to foster a climate in which teachers will actively intervene to help a struggling teacher rather than sit back and watch the train wreck. Even more difficult is having a school where everyone is vitally interested in the front-burner issues of each of their colleagues (working on integrating language arts and social studies, for example, or experimenting with multi-age grouping). Most of us would give a lot to work in a school like this.

Promoting collegiality is the principal's job, Barth avers. "I can think of no more crucial role for a school leader." He concludes with four suggestions to make it happen:

- *State expectations explicitly*. For example, "I expect all of us to work together this year, share our craft knowledge, and help one another in whatever ways we can."

- *Model collegiality.* For example, join visibly in cheering on colleagues, or invite in other principals to observe meetings and give feedback.
- *Reward those who behave as colleagues.* This can include release time, recognition, space, materials, and funds.
- *Protect those who are collegial.* At a staff meeting, principal should *not* say, “Janet has a great idea that she wants to share with us today.” This sets Janet up with her colleagues. Rather, the principal should say, “I observed something in Janet’s classroom last week that blew my socks off, and I’ve asked her to share it with us.” A subtle but important difference.

“Improving Relationships Within the Schoolhouse” by Roland Barth in *Educational Leadership*, March 2006 (Vol. 63, #6, p. 8-13)

http://www.ascd.org/portal/site/ascd/template.MAXIMIZE/menuitem.459dee008f99653fb85516f762108a0c/?javax.portlet.tpst=d5b9c0fa1a493266805516f762108a0c_ws_MX&javax.portlet.prp_d5b9c0fa1a493266805516f762108a0c_journaltypeheaderimage=%2FASCD%2Fimages%2Fmultifiles%2Fpublications%2Felmast.gif&javax.portlet.prp_d5b9c0fa1a493266805516f762108a0c_viewID=article_view&javax.portlet.prp_d5b9c0fa1a493266805516f762108a0c_journalmoid=df75f993dac99010VgnVCM1000003d01a8c0RCRD&javax.portlet.prp_d5b9c0fa1a493266805516f762108a0c_articlemoid=d8a5f993dac99010VgnVCM1000003d01a8c0RCRD&javax.portlet.prp_d5b9c0fa1a493266805516f762108a0c_journalTypePersonalization=ASCD_EL&javax.portlet.begCacheTok=token&javax.portlet.endCacheTok=token

2. The “DNA” of School Leadership

“If you go to a teacher team meeting and observe well,” write Massachusetts educators Jon Saphier, Matt King, and John D’Auria in this insightful article in the spring *Journal of Staff Development*, “you can tell if a school is on the move... The team is the window on the soul of the school.” What gets teams moving? The “DNA of school leadership,” say the authors. It brings out the potential of teacher teams by providing three essential ingredients:

- *Academic focus, which provides rigor, direction, and coherence* – Principals need to be sure that teachers have the following key elements:
 - Clear student learning expectations for each grade level (aligned to state standards);
 - “Power standards” that help teachers focus on the most high-leverage standards;
 - High-level thinking tasks for all students;
 - Exemplars of proficient student work;
 - Common year-end and quarterly assessments;
 - Pacing guides to give teachers a common frame of reference as the year progresses;
 - Quarterly data meetings and weekly team sharing meetings to analyze and plan follow-up on interim assessments;
 - Continuous follow-up with students.
- *Shared beliefs, which generate commitment* – Principals are key to nurturing a set of beliefs that must permeate a school if high-level teaching and learning are to occur. These include the following:
 - Achievement comes from effort, not just ability: “Smart is something you can get” (Jeff Howard)
 - Errors are normal and create opportunities for learning and goal-setting.
 - Care, quality, and craftsmanship matter more than speed and being first.
 - Good students (and teachers) know how to ask for help and get feedback on their work.

- It matters that students feel known, included, and valued for who they are.
- Students' success is teachers' joint responsibility; when students succeed, teachers share credit and a sense of cumulative accomplishment.
- Improvement is urgently needed.
- We must constantly explore professional knowledge and improve pedagogy. There is a vast and sophisticated common core of knowledge about teaching.

• *Productive professional relationships, which generate energy* – To maximize synergy and the growth of teaching expertise, school leaders need to foster an environment in which “people feel safe yet challenged; where they feel a sense of belonging and ownership; where people look forward to going to work.” This means fostering the following norms:

- Non-defensive self-examination of practice;
- “Deprivatization” of teaching – experimentation, collaboration, and critiques;
- The willingness to ask for help;
- The ability to disagree and debate without rancor;
- The ability to discuss the “undiscussable;”
- The willingness to hold each other accountable for agreed-upon norms;
- The willingness to look at and discuss student results;
- Curiosity and constant professional learning;
- Appreciation and recognition of each others' accomplishments; mutual respect;
- Celebration, caring, and humor;
- Traditions, rituals, and ceremonies that build a sense of community;

The authors acknowledge that this third area is a “frontier in staff development.” They recommend a three-phase approach: (a) developing interpersonal skills such as self-awareness and the ability to send “I-messages,” which can be done in study groups reading and discussing common books; (b) applying those skills to team meetings (e.g., using temperate language and balancing advocacy with inquiry); and (c) teaching the skills to colleagues and challenging them to bring them to the teams they lead.

Schools with academic focus, shared values, and productive relationships, say Saphier, King, and D’Auria, will have strong organizational cultures, more teaching expertise, better student achievement, and more thoughtful, caring graduates.

“3 Strands Form Strong School Leadership” by Jon Saphier, Matt King, and John D’Auria in *Journal of Staff Development*, Spring 2006 (Vol. 27, #2, p. 16-21), no e-link available

3. Seven Common Mistakes That School Leaders Make

In this article in the March *Kappan*, Harvard leadership guru Ron Heifetz analyzes mistakes that he sees superintendents and principals making all the time:

• *Misdiagnosing problems* – Leaders often fail to differentiate between technical problems (which have known solutions and can be handled with authoritative expertise) and adaptive problems (which don’t have readily available solutions and require people to clarify

their priorities and learn new ways of thinking and behaving). “Adaptive leadership requires changing hearts and minds,” says Heifetz.

- *Underestimating the need to think politically* – Leaders need to identify and engage the key stakeholders and constituencies needed to improve children’s education.

- *Not teaching collaboration* – Heifetz believes that school leaders need to foster collaborative learning among teachers, engage parents, and develop the social competencies of children.

- *Avoiding or mismanaging conflict* – “Educational leadership requires heart, stomach, and skill to productively manage the multiparty conflicts that arise every day,” says Heifetz. Leaders must accept that conflict is an inevitable byproduct of adaptive problem-solving, especially among those who are personally threatened by proposed changes.

- *Thinking they are supposed to have all the answers* – “Because new, more successful adaptations are often the product of trial and error,” says Heifetz, “managers can at times be more effective when they lead with questions rather than answers... [E]ducational leadership is a collaborative, experimental activity.”

- *Getting defensive* – This reaction is understandable, given the constant onslaught of problems faced by school leaders. But it is neither appropriate nor effective, believes Heifetz. “Conflict is part of the change process,” he says, and leaders can’t afford to take things personally.

- *Trying to go it alone* – This is unwise, says Heifetz, because “reaching out to colleagues is a way not only to cope with the stress and loneliness of the job but also to get perspective on processes and challenges that would overwhelm any professional.”

“Educational Leadership: Beyond a Focus on Instruction” by Ronald Heifetz in *Phi Delta Kappan*, March 2006 (Vol. 87, #7, p. 512-513), no e-link available

4. SMART Goals and Continuous Improvement

In this article in the spring issue of *Journal of Staff Development*, Timothy Kanold, superintendent of famed Adlai Stevenson High School outside Chicago, describes the cycle his school is using to foster continuous improvement:

- Articulate core values and purpose: shared mission, shared vision, and shared values;
- Set student achievement goals;
- Have grade-level or course-based teams develop action plans to achieve their goals;
- Commit to a culture of action/inquiry-focused risk-taking;
- Collect interim data reflecting achievement of the goals;
- Analyze the data;
- Celebrate! Then set new goals for another cycle.

In the remainder of the article, Kanold gives particular attention to teacher teams setting SMART goals (specific, measurable, attainable, results-oriented, and time-bound) in August before the start of each school year (for example, We will increase the percentage of students performing at the “meets or exceeds” level on the quadratics subtest of the Algebra 1 exam

from 42% to 60% by the end of the school year). Teacher teams then write action plans for reaching their SMART goals and meet every week to monitor progress, share ideas, and plan modifications to the game plan if necessary. “They must hold one another accountable for taking the agreed-upon actions,” says Kanold. “Ideally, the team does not let a team member drift into a bad habit, practice, or isolate himself from others.” If a team doesn’t reach its SMART goal, members refocus their plan. If the team hits the target, they set a higher goal for the next cycle. “Either way,” concludes Kanold, “the cycle of continuous improvement and the momentum for improvement continue to refocus our effort and energy.”

“The Flywheel Effect: Educators Gain Momentum from a Model for Continuous Improvement” by Timothy Kanold in *Journal of Staff Development*, Spring 2006 (Vol. 27, #2, p. 51-57), no e-link available

5. An Accelerated Math Curriculum in De-Trackled Classes

This longitudinal study in the spring issue of *American Educational Research Journal* looks at the downstream math achievement of nearly 1,000 New York students who were taught an accelerated algebra curriculum in heterogeneous eighth-grade classes. When these students reached high school, they were much more likely to complete advanced math classes – and this included students of color, low-SES students, and students who entered middle school with low math achievement levels. The study also found that fewer students fell behind grade level and dropped out of mathematics compared with comparison groups.

It is significant, say authors Carol Corbett Burris (a Chicago principal) and Jay Heubert and Henry Levin (professors at Columbia Teachers College), that students who entered eighth grade with strong math achievement did even better than the comparison group when they reached high school. For example, 100% of African American and Latino students in one of the acceleration cohorts successfully completed a trigonometry course and passed a New York State Regents exam in high school, then went on to study pre-calculus. This compared with 69% of a comparison group of high-achieving students of color.

This suggests, say Burris, Heubert, and Levin, that one of the big worries that educators and parents have about heterogeneous classes – that they will hold back high-octane students – is not justified. The critical variable, say the authors, is an enriched, accelerated curriculum for all students, and this can be delivered in heterogeneous classes.

“Accelerating Mathematics Achievement Using Heterogeneous Grouping” by Carol Corbett Burris, Jay Heubert, and Henry Levin in *American Educational Research Journal*, Spring 2006 (Vol. 43, #1, p. 105-136), no e-link available

6. Getting Students to Understand Evolution, Even If They Don’t Believe It

In this article in the March/April *Harvard Education Letter*, journalist Nancy Walser reports on the challenges high-school teachers face when they cover evolution. Student push-back is common: “I can’t believe you think we came from monkeys!” “Evolution is stupid,” students citing Scripture and refusing to take tests. All this puts teachers on the spot; they want

to maintain positive relationships with students and at the same time help them understand evolution as a fundamental, underlying concept of biology.

Teacher veterans of the evolution wars advise colleagues to do their homework by: (a) visiting some of the excellent websites on the subject (see below); (b) anticipating the kinds of misconceptions that are likely to arise; (c) setting boundaries for discussions; and (d) avoiding arguments about morality, spirituality, and personal beliefs. Here are ways that teachers can deal with three of the most common student push-backs on evolution:

- *Evolution is just a theory* – It’s vital that teachers clarify up front the distinction between the everyday use of the word “theory” (a hunch) and the scientific definition (a rigorously tested explanation derived from evidence and scientific research, supported by a preponderance of evidence and tested by peer review). The theory of evolution is accepted by virtually all scientists: they debate *how* it occurs, but not *whether* it occurs.

- *In fairness, alternative theories should be given equal time* – Once teachers have established the scientific definition of “theory,” they can rightly assert that there are no competing explanations for biological diversity that are backed up by evidence and peer review. Acknowledging common arguments against evolution doesn’t mean they have to be taught, and veterans advise against allowing discussions of alternative explanations like intelligent design or staging debates between groups of students. These can end up pitting student against student and increasing conflict in the classroom. However, there may be room for discussion and argument in special teaching units focusing on the controversy. Teachers at Northwest School in Seattle cover the evolution controversy in the context of the history of science. “Teenagers love to argue,” says Lisa Durkin, a New Mexico science teacher. “Keep the discussion on the topic of science and avoid attacking the kid or their belief system at all costs.”

- *Evolution is inherently irreligious* – “The most difficult task for teachers,” says Kenneth Miller of Brown University, himself a Roman Catholic, “is dealing with students who have been told that they are in jeopardy of losing their immortal souls if they believe their teachers. This places teachers, many of whom are religious themselves, in an adversarial situation that makes learning difficult.” The key, says Miller, is separating science from belief. Teachers need to avoid the trap of “requiring students to ‘believe’ in evolution,” cautions Miller. “Good teachers never do this, since science education is not a matter of compelling belief, but rather of promoting understanding.” With the proper separation of science and belief, it should be possible for a student to get an A for demonstrating an understanding the basic concepts of evolution, while still refusing to believe in evolution as the driving force of biological diversity. Teachers and students can agree to disagree and avoid arguments about the spiritual dimension.

A sidebar to this article lists several Web resources for teaching evolution:

- Understanding Evolution for Teachers: <http://evolution.berkeley.edu>: this site advises teachers to:
 - Use appropriate terminology, for example, talking about the “function” rather than the “purpose” of a body part.

- Clarify confusing concepts, e.g., the distinction between “ancestor” and “relative” and between variation, which is random, and selection, which usually is not.
 - Avoid suggesting that evolution implies improvement or that the direction of evolution always proceeds from simple to complex.
- National Center for Science Education: <http://ncseweb.org>; NCSE defends the teaching of evolution in public schools and offers background information on the teaching controversy, tracks anti-evolution activity, and provides resources for teachers.
 - Public Broadcasting System on evolution: <http://pbs.org/wgbh/evolution>: This is the home page of the 2001 PBS series and includes videos for teachers and students and a teachers’ guide to the series.
 - Evolution Resources from the National Academies: <http://nationalacademies.org/evolution/>: Books, position statements, and resources on evolution education and research.
 - Ken Miller’s Evolution Page: <http://millerandlevine.com/km/evol>: Writings and interviews by a leading advocate for evolution, with an emphasis on the relationships between evolution and religion.
 - National Science Teachers’ Association: <http://nsta.org/evresources>: This site include questions and answers, position statements, Web links, and news.
 - The Talk Origins Archive: <http://talkorigins.org>: An archive of essays and articles providing mainstream scientific answers to frequently asked questions about topics related to evolution.

“Talking ’Bout Evolution: High School Science Teachers Share Strategies for Dealing with Controversy in the Classroom” by Nancy Walser in *Harvard Education Letter*, March/April 2006 (Vol. 22, #2, p. 1-3), no e-link available

7. A High-School Student Newspaper Digs Deep

In last week’s *New York Times* education column, Michael Winerip features *Silver Clips*, the student newspaper at Montgomery Blair High School in Silver Spring, Maryland, which has won six statewide awards in the last decade. Student reporters and editors have tackled a variety of controversial subjects, including profiles of students who have had sex in school, an article about a student graffiti artist, and a piece about student athletes whose grades are so low they are ineligible to play.

Student reporters garnered some poignant quotes. An unnamed girl who had sex on the auditorium catwalk said “that was the extent of the relationship.” The graffiti artist boldly claimed, “It’s our community too, and we should have just as much say as to what goes on the walls as Pepsi and Gatorade do.” As they wrote their stories, reporters wrestled with real-world angst. Allie O’Hora, who interviewed an ineligible student athlete (who allowed his name to be used), said, “I almost felt bad – if it were me, I wouldn’t want my name in a story like that. When I wrote it, I made it sound as positive as possible. I guess I didn’t want him embarrassed. I agonize over this stuff.”

Silver Clips has never been censored; 22-year veteran principal Phillip Gainous has defended the paper with the superintendent and says he has always trusted the paper's advisors. "The only thing I ask," he says: "If a story's controversial and will provoke calls from the central office or parents, that I'm given a 'heads up' so I can be prepared."

"Given the Freedom, Tireless Reporters Excel" by Michael Winerip in *New York Times*, March 8, 2006, http://www.nytimes.com/2006/03/08/education/08education.html?_r=1&oref=slogin

8. Why Students Drop Out

This front-page article in the current *Education Week* reports on a recent Civic Enterprises study of high-school dropouts. The study found that almost all students later regretted dropping out and said they quit school not because they were failing academically but because they were not challenged and motivated enough or were overwhelmed by troubles outside of school. John Bridgeland, the head of Civic Enterprises, saw a silver lining in the findings: "The very people most affected by this crisis, the young people, are telling us that this problem can be solved," he said.

The study also found that students who were struggling the most academically and had the most serious problems outside of school (e.g., needing to work, being a single parent, having to care for a family member) were the most vocal in criticizing their schools. "They just let you pass, anything you got," said one focus-group participant. Many said there needed to be more structure and discipline in school. "In high school, if you don't go to class there isn't anybody who is going to get you," said one young Philadelphian. "You just do your own thing." Fewer than half of those interviewed said they or their parents got a phone call from school when they were absent or stopped showing up altogether.

Dropouts interviewed for the study cited the following changes that would have decreased their chances of quitting school (with the percent who mentioned each):

- Opportunities for real-world learning to make classes more relevant (81%);
- Better teachers who keep classes interesting (81%);
- Smaller classes with more individual instruction (75%);
- Better communication between parents and school; get parents more involved (71%);
- Parents make sure their kids go to school every day (71%);
- Increase supervision at school; ensure students attend classes (70%).

But some experts quoted by *Education Week* were skeptical of the study's findings. Jay Greene of the Manhattan Institute said that responses may have been colored by dropouts wanting to preserve their pride. "Asking people why they do things and understanding why they do things are two separate things," he said. Bob Wise, former governor of Virginia and now head of the Alliance for Excellent Education, thinks a lack of academic proficiency is the real reason for dropping out. "Underneath the frustration of a lot of these kids is an adolescent-literacy issue," he said. "Of course, class isn't interesting if you can't understand it."

“H.S. Dropouts Say Lack of Motivation Top Reason to Quit” by Catherine Gewertz in *Education Week*, March 8, 2006 (Vol. 25, #26, p. 1, 14), no free e-link available

9. An Emerging Consensus on College-Ready Expectations

In his lead editorial in the current *Education Gadfly*, Checker Finn bemoans the lack of curriculum coordination between high schools and colleges. “The sprawling, chaotic empire of K-12 education has created one set of institutions, norms, practices, and requirements,” he writes. “The unruly kingdom of higher education has created its own entirely separate set.”

The challenge, he says, is to harmonize high-school graduation expectations with what universities expect of their entrants. “In a rational world,” he says, “those would be identical: a body of knowledge, skills, habits, and dispositions that equips young people to exit the K-12 system and enter the tertiary system with no need for remediation and no undue duplication or boredom.”

The closest anyone has come to this on a national level is the American Diploma Project (<http://www.achieve.org/achieve.nsf/AmericanDiplomaProject?openform>), which found remarkable consensus among employers and university people on the skills that high-school graduates need to be successful in either domain.

“Obstacles on the Route from High School to College” by Chester Finn, Jr. in *Education Gadfly*, March 9, 2006 (Vol. 6, #10, p. 1-4) <http://www.edexcellence.net/foundation/gadfly/index.cfm>

10. Short Items:

a. More on block scheduling – Marshall Memo reader Frank Thoms of the Franklin, Massachusetts schools had this response to a recent article summary on block scheduling: “One reason for better grades might be that students in block schedules do not have to shift ‘heads’ as often during the day. I have often remarked to my teachers that shifting from math to English to PE to science to history is hard on the brain. Teachers don't recognize this, as they stay in their subject areas all day.”

Personal communication, March 11, 2006

b. Weblink to a telescope – This link gives students and teachers remote access to a 24-inch telescope at southern California’s Mt. Wilson Observatory. Students have to reserve observation time during an evening of the week; then they can use a modem and remote astronomy software to look into space and download images of the universe onto their computer. Participating classrooms pay for the software, but access to the telescope is free. Check it out at:

<http://www.telescopesineducation.com> or call 520-558-0103.

“Head of Class” in *Edutopia*, March 2006 (Vol. 2, #2, p. 13), no e-link available

c. Math resource – Math Channel is a website with full-length articles and graphics on teaching math. The September/October issue featured “Making Sense of Number Sense” and “Pigs in a Pen: One-to-One Correspondence and Parts of a Whole.” To check it out, go to <http://www.mathchannel.com/>.

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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 36 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 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, provides e-links to full articles when available, and e-mails the memo to subscribers every Monday (with occasional breaks; there were 50 issues in 2004-05).

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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- 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, title, author, source, level, etc.
- 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
Boston Globe
CommonWealth Magazine
District Administration
Ed. Magazine
EDge
Education Digest
Education Gadfly
Education Next
Education Update
Education Week
Educational Leadership
Educational Researcher
Edutopia
Elementary School Journal
Harvard Business Review
Harvard Education Letter
Harvard Educational Review
JESPAR
Jimmy Kilpatrick
Journal of Staff Development
Language Learner
Middle Ground
Middle School Journal
NASSP Bulletin
New York Times
New Yorker
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
Teachers College Record
Theory Into Practice