

Marshall Memo 109

A Weekly Round-up of Important Ideas and Research in K-12 Education
October 31, 2005

In This Issue:

1. Intervention and access for children with special needs
2. Modifying classrooms for struggling students – and everyone else, too
3. Keys to high achievement for Latino students
4. Are you happy with the way science is taught in your school?
5. Programs that increase time for high-risk middle-school students
6. Finding and creating time for teacher teams to meet
7. Effective formative assessments
8. Appropriate uses of value-added assessments
9. Short items: (a) Key factors in high-achieving California schools; (b) The difference that caring teachers make; (c) Parent outreach ideas; (d) Are computers our salvation? (e) Foreign language exchange website; (f) Design your own planet website

Quotes of the Week

“Confidence is the expectation of a positive outcome.”

Rosabeth Moss Kanter, quoted in *Newsweek*, Oct. 24, 2005, p. 67

“There is sometimes a difference between the men and women in the willingness to claim air time in class. The men seem to feel that they can start talking and eventually they’ll have a point to make. The women are slightly more likely to feel that they ought to have something valuable to say before they say it. That’s a good quality, but it means that if I don’t watch it and make sure to call on many people who don’t have their hands up, men are likely to be claiming more of the air time, which can make them look more important. The women are just as likely to have wonderful things to say, but there’s a kind of self-censorship going on.”

Rosabeth Moss Kanter on her Harvard Business School classes (*ibid.*)

“Socioeconomic factors are clearly not the sole predictor of academic performance. What schools do, and what resources they have for doing it, can have a powerful impact on student achievement.”

Trish Williams, California researcher (see item #9a)

“Teachers are formative assessors. It’s what they do every day. But if the results don’t guide instructional practices, then the exercise is virtually meaningless.”

Stuart Kahl (see item #7)

“Instead of saying, ‘What’s wrong with my students?’ I said, ‘What’s wrong with me?’”

Sandia White, Washington D.C. Assistant Superintendent, recalling a difficult year when she was a teacher (*Principal Magazine*, Nov./Dec. 2005, p. 8)

“[T]he time available in a uniform six-hour day and a 180-day year is the unacknowledged design flaw in American education.”

National Education Commission on Time and Learning, 1994 (see item #5)

1. Intervention and Access for Children with Special Needs

In this article, former city and federal special education director Tom Hehir posits two goals for programs for students with disabilities:

- Minimizing the impact of the child's disability – For example, teaching a blind child how to read Braille or helping a child with autism through structured behavioral therapies.

- Maximizing access to regular classroom instruction – For example, not inappropriately segregating a handicapped child from peers or engendering feelings of difference and inferiority by focusing inordinately on the disability.

Hehir has the following suggestions for principals and other educators as they work toward these two goals:

- *The focus should be on integrating students with special needs into the general education environment and promoting high standards.*

- *Removal from the regular classroom should occur only if important learning goals cannot be achieved in the general education environment.* “Because the population of children with disabilities is large and diverse,” writes Hehir, “a successful practice for one group may not be appropriate for another, and there may be justifiable reasons for removal.”

- *Removal should not occur simply because general educators refuse to accommodate the needs of children with disabilities.* “As a special education teacher,” recalls Hehir, “I learned and practiced the art of negotiation in order to integrate ‘my kids’ into general education classrooms. There were some teachers who were a godsend for the students I served, while there were others I avoided. Looking back, I have mixed feelings about my behavior. On the one hand, I was successful in attaining important educational experiences for students with disabilities. On the other hand, I was condoning discrimination that was – and is – illegal and immoral... Though it may be difficult for school principals to force integration on a recalcitrant teacher, failure to do so will keep the system in place and result in lost opportunities for students.”

- *Differential diagnosis is important.* “Knowing *why* a child is having difficulty is central to good decision-making,” says Hehir. For example, a third grader might be having trouble reading because of mental retardation, dyslexia, a hearing impairment, or attention difficulties.

- *Consider family capabilities.* If parents are taking on an important role (for example, teaching a child with mental retardation to cook for himself), there's no point in the school wasting precious instructional time duplicating those efforts.

- *Involve students with disabilities in educational decisions where appropriate.*

Students can give educators valuable insights about the impact of their disabilities and the ways they learn best. “It is also important,” writes Hehir, “for students with disabilities, particularly as they move into adolescence and begin to take appropriate responsibility for their education, to understand both the nature and impact of their disability. They need to integrate their disability into their self-image in a way that is natural and positive.”

- *Encourage students with disabilities to develop and use skills and modes of expression that are most effective and efficient for them* – for example, a blind child learning Braille or severely a dyslexic child listening to a tape-recorded book. Teachers need to let go of their natural urge to have these children do everything the same way as other children.

- *Social integration is important.* Making friends, which is vital to long-term integration into the world outside school, may not come easily for many children with special needs. Teachers can play an important role by structuring opportunities for interaction, for example, cooperative learning in classroom activities or using the “Circle of Friends” program.

“The Changing Role of Intervention for Children with Disabilities” by Thomas Hehir in *Principal Magazine*, Nov./Dec. 2005 (Vol. 85, #2, p. 22-25), no e-link available

2. Modifying Classrooms for Struggling Students – and Everyone Else, Too

Jim Wright, a special education administrator in Baldwinsville, New York, is a fan of Universal Design for Learning (UDL), an approach to accommodating diverse learners. The basic UDL concept was invented by architects who noticed that designing public buildings to accommodate physically handicapped people ended up helping lots of other people as well – for example, curb cuts for people in wheelchairs are helpful to people with bicycles, baby carriages, and wheeled suitcases. “Universal Design for Learning,” says Wright, “is based on the conviction that a few key classroom accommodations can empower teachers to manage the needs of a diverse range of learners.” There are three reasons this makes sense:

- Those with learning or physical disabilities are not a distinctly different kind of child but fall on a continuum of learner differences.
- Teachers are most successful when they gear content and delivery to maximize the success of all students, rather than focusing on the needs of the most challenged.
- Teachers should use multiple sources of information, not just textbooks.

Here are some classroom interventions Wright believes will remove barriers to learning for high-risk students and benefit other students as well:

- *Find the root cause.* Wright suggests that teachers perform a simple experiment to find out if a student’s failure is due a lack of skills (can’t do it) or a lack of motivation (won’t do it): ask the student to independently do two similar assignments, one with no incentive and one with an incentive that the student finds rewarding. If the student does markedly better with an incentive, it shows that motivation is the issue; if performance on the two tasks is similar, skill is the issue. Either way, the teacher has valuable information on what strategy to use.

- *Identify the student's learning stage.* Wright says that teachers should tailor their interventions to whether a student is at the:
 - Acquisition phase – just learning the skill.
 - Fluency phase – learning to perform the skill with accuracy and fluency.
 - Generalization phase – learning to apply the skill in situations where it will be useful.

Specific strategies tied to this instructional hierarchy are available at:

<http://www.jimwrightonline.com/pdfdocs/instrhier.pdf>

- *Match students to appropriate levels of instruction.* Students don't learn well when the work is too hard or too easy.

- *Adopt evidence-based intervention strategies.* Wright says that schools should carefully screen academic interventions and choose only those that have a solid track record.

- *Require active student response.* This means getting students to demonstrate their learning in observable ways and not assuming that because you taught it, they learned it.

- *Be explicit in teaching strategies.* Struggling students won't absorb a strategy after hearing it once. Teachers should first demonstrate the strategy using a "think-aloud" approach, then have students try the strategy with support, then try it independently.

- *Review, review, review.* Struggling students need lots of practice to internalize new skills. Without this, they will not master new skills.

- *Give students options.* When students can make choices, their motivation to learn increases and behavior problems decrease.

- *Monitor student progress frequently.* Teachers need to collect data by giving interim assessments on a regular basis to see if students have really learned. Curriculum-based measurement (CBM) is one approach to frequent assessment; CBM resources are available at:

<http://www.interventioncentral.org/htmldocs/interventions/cbmwarehouse.shtml>

- *Develop school-wide programs for common academic problems.* Principals should look at interim data, notice problem areas (for example, a lot of struggling readers in second grade), and create interventions (for example, a cross-grade peer tutoring program). Detailed training materials for starting a cross-age peer tutoring program are available at:

<http://www.interventioncentral.org/htmldocs/interventions/rdngfluency/prtutor.shtml>.

- *Create an intervention team.* "The collective wisdom and expertise of groups of educators," says Wright, "far outstrips that of any one person."

"Intervention Ideas That Really Work" by Jim Wright in *Principal Magazine*, Nov./Dec. 2005 (Vol. 85, #2, p. 12-16), no e-link available. For more information on Universal Design for Learning, go to: <http://www.cast.org/teachingeverystudent>

3. Keys to High Achievement for Latino Students

In this article, Rhode Island education professor Carmen Rolón lists strategies for improving the academic achievement of Latino students:

- *Know your students and their families.* A welcoming atmosphere is all-important. So is being sensitive to differences within the Latino community. For example, don't assume that

all students with Hispanic surnames have Spanish as their dominant language. This is true of 72 percent of first-generation Latinos but only 22 percent of third and subsequent generations.

- *Replace failed strategies.* “Conceptualizing the culture and language that Latino students bring to school as assets rather than deficits is probably the single best strategy to improve their learning experiences in school,” says Rolón. She particularly recommends dual-language programs, which are strongly supported by the research.

- *Reach out to parents.* It’s important for the school to have a significant number of bilingual administrators and teachers, also to recruit Latino parents for the parents group and involve them in policy and curriculum decisions.

- *Enhance the curriculum.* This means fostering an environment in which Latino students see that their culture and history are included and respected.

- *Provide professional development for teachers.* Many elementary teachers need support and training to successfully teach ELL students. Here are some possible areas:

- Identifying students’ English language proficiency and gearing instruction accordingly.
- Using a variety of literacy methods to accommodate different learning styles.
- Using dialogue journals in which the teacher carries on a written conversation with students, modeling correct English and gauging students’ English language development.
- Using cooperative learning to help Spanish-dominant students develop content knowledge and interact frequently with English-dominant peers.
- Using different modes for presenting new material (visual, tactile, etc.) and being “attentive to students’ nonverbal expressions signaling their understanding of concepts and directions.”
- Using a variety of assessments that allow students to show proficiency in different ways.

“Succeeding with Latino Students” by Carmen Rolón in *Principal Magazine*, Nov./Dec. 2005 (Vol. 85, #3, pl. 30-34), no e-link available

4. Are You Happy with the Way Science Is Taught in Your School?

In this article, Olaf Jorgenson, former director of science in the Mesa, Arizona schools and now a principal in Hawaii, makes the case for hands-on, inquiry-based science in elementary and middle schools. He notes the stark contrast between the recommendations of the National Science Teachers Association – 60 percent of elementary instructional time should be spent on active science investigations, 80 percent in middle schools – and the current situation: about 80 percent of K-8 science class time is spent on seatwork and worksheet activities, with occasional teacher demonstrations.

In a sidebar, Jorgenson describes a sample fifth-grade inquiry science lesson. The teacher begins with the question, “How many drops of water will fit on the head of a penny?” Students work in small groups and are assigned roles: researcher, observer, and recorder. They use droppers of different sizes, pennies of different ages and conditions, and water at different

temperatures. After predicting how many drops their penny will hold, they conduct multiple trials, recording and graphing the data. The teacher moves from group to group, asking questions and redirecting rather than correcting or providing answers. At the end, students spend some quiet time writing in their lab notebooks. In the next class, the teacher displays the graphs and has students compare each group's results, taking into account the three most obvious variables (coin condition, dropper size, and water temperature) and less obvious variables (which side of the coin they used and the temperature of the coin). The discussion is lively as students "get" the scientific concept of variables, and they are ready to launch into their next hands-on experiment.

What does the research say is the best way to teach science? "While there has been little research to determine the quantitative benefits of inquiry science," writes Jorgenson, "there is a growing body of anecdotal evidence supporting its positive impact on academic performance as measured objectively on standardized tests."

- A study in Wisconsin showed that after three years of inquiry science, K-8 science scores improved from 55 percent to 80 percent proficient and advanced.

- A study of five schools by the Einstein Project showed 81 percent of students who engaged in inquiry activities mastered science terminology, versus only 20 percent who did not use inquiry methods.

- In a 2001 study of a high-poverty school in El Centro, California, sixth graders who used inquiry science showed remarkable gains in *math and reading achievement* – 35 percent and 28 percent higher, respectively, than classmates who did not have inquiry science. In writing proficiency, El Centro inquiry students scored 89 percent, compared to 23 percent for non-inquiry students.

Where should principals begin if their school is still in the lecture-textbook-worksheet mode? Jorgenson recommends starting with a small group of teachers, parents, administrators, and community leaders to gather information and build support. Hands-on science materials cost money, professional development is vital, and parents have to be prepared to expect less emphasis on textbooks. Jorgenson also has these words of wisdom about hands-on science teaching:

- Science smells. It also goes bump, boom, and makes other noises.
- Science is found everywhere, not just in textbooks.
- Science is noisy and may appear out of control.
- Good science teachers teach skepticism.
- Science teachers bring science into other content classes.
- Science teachers introduce students to scientists, both present and past.
- Science teachers keep parents involved.
- Science teachers do not resist trying new things.
- Science teachers shouldn't bite off more than they can chew.

"What K-8 Principals Should Know About Hands-On Science" by Olaf Jorgenson in *Principal Magazine*, Nov./Dec. 2005 (Vol. 85, #3, pl. 49-52), no e-link available

5. Programs That Increase Time for High-Risk Middle-School Students

“[T]he time available in a uniform six-hour day and a 180-day year is the unacknowledged design flaw in American education,” said the 1994 National Education Commission on Time and Learning. In this article in *Principal Magazine*, South Carolina education professor Kay Woelfel follows the spirit of this quote and briefly describes four programs that expand the time window for struggling students:

• *Promoting Academically Successful Students (PASS)* – Developed in Villa Park, California, this program uses these sequential steps to give struggling students more instructional time:

- Below-level sixth graders are invited to the Summer School Bridge program to get a head start on seventh grade.
- At-risk seventh graders have individualized programs in a Skills for Success class.
- Any student who is not maintaining a C average participates in academic advisement and
- After-school tutorial classes.
- If students are failing two or more classes, they get four additional hours a week of tutoring and skill-building classes.
- Students who fail the same class twice are put in an independent learning program.
- Students who fail two classes are required to enroll in a summer school/immersion program.
- The most reluctant students take Opportunity for Success, a block of small-group and individualized classes targeting problems in English, history, math, science, and study skills.

• *Academic Acceleration Academy* – Developed in Rancho Cordova, California, this program is a school-within-a-school aimed at helping struggling sixth graders make two years of academic growth in one year. The program features:

- Primary and practice periods for math and language arts.
- Daily computer-assisted learning;
- Weekly homework club;
- Monthly parent workshops;
- Frequent communication;
- Curriculum-related field trips.

• *Knowledge Is Power Program (KIPP)* – Time is comprehensively redesigned in the 38 KIPP schools in 15 states. The school day runs from 7:15 a.m. to 5:00 p.m. and four hours on Saturdays, three to four weeks in the summer, with two to three hours of homework every night. The four “pillars” of the program are: high expectations; choice and commitment; power to lead; and focus on results.

• *Middle-Grade Acceleration Project (M-GAP)* – This Charleston County, South Carolina program moves underachieving but average 16-year-old students to high school and groups them in classes of 15 or fewer. The program aims to accelerate learning and motivate

students to stay in school. Teachers are hired based on strong backgrounds in literacy and math and experience working with overage students. Teachers use the Read 180 reading program and individualized math.

“Successful Intervention: It Takes Time” by Kay Woelfel in *Principal Magazine*, Nov./Dec. 2005 (Vol. 85, #2, p. 18-21), no e-link available

6. Finding and Creating Time for Teacher Teams to Meet

This article lists six ways that principals can carve out time for teacher teams to meet during or outside the school day:

- *Bank time.*
 - Lengthen the regular school day and “save up” the extra minutes to create larger blocks of time on certain days.
 - Schedule regular early-dismissal or late-start days.
 - Shave minutes off lunch periods and save that time for teacher learning time.
- *Buy time.*
 - Hire more teachers, clerks, and support staff to add planning or learning time for teachers.
 - Hire substitute teachers to cover for regular classroom teachers so they can meet.
 - Add a permanent substitute teacher position to the school and use this person to cover for teachers to free them up for meetings.
 - Create a substitute bank of “staff development substitute teachers” that regular classroom teachers can tap into in order to take part in team meetings.
- *Create common meeting times.*
 - Schedule common planning times for same-subject/same-grade teachers to share information, collaborate on projects, learn more about items of shared interest, or look at interim assessment data.
 - Organize specialty subjects in blocks to create common time for teachers with similar interests.
 - Link planning periods to other non-instructional times (e.g., lunch), giving teachers the option to use their personal time for shared learning.
- *Free teachers from instructional time.*
 - Arrange for administrators to cover classes.
 - Authorize teaching assistants and/or college interns to teach classes to free up teachers (always under the direction of a teacher).
 - Team teachers so one teaches while the other plans or learns independently.
 - Plan day-long, off-site field experiences for students to create a large block of time when teachers can meet.

- *Add professional days to the school year.*
 - Create multi-day summer learning institutes for teachers.
 - Create a mid-year break for students and use those days for teacher meetings.
- *Use existing time more effectively.*
 - Use regular staff meetings for professional learning versus routine announcements.
 - Spread time from multi-school planning days across the calendar to provide more frequent, shorter school-based team meeting opportunities.

“How To Find Time” in *The Learning System*, November 2005 (Vol. 1, #3), no e-link available. The ideas in this article are drawn mostly from “The Time Dilemma in School Restructuring” by Gary Watts and Shari Castle, *Phi Delta Kappan*, Dec. 1993

7. Effective Formative Assessments

An advertisement for a testing company hardly seems like the place to get impartial insights on education, but for the second time, Stuart Kahl, the President and CEO of Measured Progress, a New Hampshire-based assessment company, has thoughtful comments:

- “A formative assessment,” says Kahl, “is a tool that teachers use to measure student grasp of the specific topics and skills they are teaching. It’s a ‘midstream’ tool to identify specific student misconceptions and mistakes while the material is being taught.”

- Formative assessment “is what teachers do on a daily basis. Teachers design and administer formative assessments, which can take the form of classroom quizzes, worksheets, homework, projects, and portfolios, not to mention the teacher’s observations of classroom work.”

- “Formative assessments,” writes Kahl, “are not designed to measure post-instruction mastery or to inform students’ course grades... [A]t the point formative assessments are administered, students will not necessarily have reached the level of content mastery they will achieve as a result of continuing instruction.”

- So-called formative assessments being sold by most testing companies are really summative assessments. Kahl cautions against the idea that an external testing company can provide meaningful interim assessments: “A test vendor would have to take up permanent residence in the classroom in order to provide true formative assessments.”

- The weakness of many commercial “formative” assessments, says Kahl, is that they rely on multiple-choice questions, which “do not provide the kind of diagnostic information [teachers] need to adjust instruction to address the misconceptions and errors of individual students. Experience has shown that constructed-response questions, which enable teachers to see actual student work, lead to a better understanding of student reasoning and help teachers to detect misconceptions and erroneous practices.”

- Kahl says that formative assessments will improve student achievement only if three conditions are met:

- Timeliness – Assessments are given (and scored) when the content is being taught.

- Diagnostic – Assessments yield accurate, pertinent information on students’ level of understanding and misunderstanding.
- Put to work – Assessment results are used to inform and adjust instruction for individual students: “Teachers are formative assessors,” writes Kahl. It’s what they do every day. But if the results don’t guide instructional practices, then the exercise is virtually meaningless.”

- Given that, concludes Kahl, it’s vital to spend professional development time helping teachers become experts in using formative data to improve teaching and learning.

“Where in the World Are Formative Tests? Right Under Your Nose!” by Stuart Kahl, Measured Progress. Advertisement in *Education Week*, Oct. 26, 2005 (Vol. 25, #8, p. 38), no e-link available

8. Appropriate Uses of Value-Added Assessments

Two recent reports on value-added assessment (tracking individual students’ test-score gains over time) praise its potential but caution against using such assessments to reward or punish teachers.

The reports, which were done by the National Association of State Boards of Education (NASBE) and the Educational Testing Service (ETS), say that value-added assessment is fairer and more accurate when it comes to judging teachers and schools than looking at whether students reach an absolute performance level. Value-added assessments, says the ETS study, “move the discussion about teacher quality to where it belongs: centered on increasing student learning as the primary goal of teaching.”

The value-added approach also does a better job of affirming the work done by teachers in high-poverty schools, where students might start far below proficiency and make great progress, but still not meet state achievement targets. According to the NASBE study, “failure to use growth as one indicator of success could end up making it even more difficult to retain effective teachers in disadvantaged schools.”

But both studies say that data from value-added assessments are never “pure” because (a) students aren’t assigned to classrooms on a random basis, and (b) students’ learning is influenced by factors outside the teacher’s control (for example, the physical condition and resources in the school).

The NASBE study concludes, “We believe that educators should recognize value-added assessment is a ‘tool,’ but it is not ‘total’ – and indeed that the data can only with certainty identify about the top 10 percent and bottom 10 percent of teachers.” Both reports say that value-added assessments are best for making low-stakes decisions, for example, identifying teachers who need extra training and support, and should always be supplemented by other information, especially from classroom observations.

“‘Value-Added’ Models for Gauging Gains Called Promising” by Lynn Olson in *Education Week*, Oct. 26, 2005 (Vol. 25, #9, p. 11), no e-link available, but links to the studies are available at <http://www.edweek.org/links> (as a guest, you get two visits).

9. Short Items:

a. Key factors in high-achieving California schools – A study just released by EdSource (a California non-profit) examined the variables in 257 high- and low-achieving California elementary schools. Four common factors emerged in high-poverty schools with impressive student achievement:

- Closely tying the curriculum to state academic standards;
- Ensuring adequate classroom resources, including current textbooks;
- Using student assessment data to analyze instructional strengths and weaknesses;
- Establishing high achievement standards and communicating those goals to all staff.

Study director Trish Williams concluded, “Socioeconomic factors are clearly not the sole predictor of academic performance. What schools do, and what resources they have for doing it, can have a powerful impact on student achievement.”

Spotted in *PEN Weekly NewsBlast*, Oct. 27, 2005.

b. The difference that caring teachers make – A new study by University of Chicago professor Dexter Voisin documents the difference that caring teachers make to student behavior. High-risk students who feel connected to a teacher and believe the teacher cares about them have lower rates of drug and sexual risk behaviors. On the other hand, said Voisin, “Adolescents who reported low teacher connectedness were two times more likely to use marijuana and amphetamines, and two times more likely to be sexually active, have sex while high on alcohol or drugs, have a partner who was high on alcohol or other drugs during sex, and have multiple sexual partners.”

Other studies have found that students’ behavior improves when schools show concern, but Voisin’s study is the first to show a significant link between teacher connectedness and anti-social behavior among delinquent teens. The study calls for additional teacher training, higher expectations for students at school and at home, and ensuring that each student feels close to at least one supportive adult at school. Cooperative learning structures in the classroom are helpful in breaking down the whole-class, impersonal dynamic between teachers and students. The study also found that it’s helpful when teachers serve as coaches and after-school leaders.

Spotted in *PEN Weekly NewsBlast*, Oct. 27, 2005. A more detailed description of the study is available at <http://www-news.uchicago.edu/releases/05/051018.voisin.shtml>.

c. Parent outreach ideas – John Wherry of The Parent Institute in Virginia has these suggestions for new teachers on dealing successfully with parents:

- Make personal contact with the parents of each student.
- Contact parents immediately when potentially serious problems occur with their child.
- Call at least two parents a week with good news.
- Send “quick notes” home to acknowledge something special.
- Tap parents’ knowledge of their children.

- Learn how to deal with angry parents: “React calmly. Separate the parent from his or her argument; rephrase what the parent says to ensure you understand and to gain time to think. If confronted with a dubious suggestion, say, ‘I’ll certainly keep that in mind.’ ... Emphasize what you have in common: ‘We both want your child to do well.’”
- Don’t make quick judgments about parents’ level of interest.
- Have children write notes to their parents on school papers, surveys, or invitations; this greatly increases parent response.
- Use an academic skills checklist to build at-home support for what you are teaching.
- Let parents contact you after school. “Your free time is precious,” writes Wherry. “But if you can accommodate parents’ difficult schedules by letting them contact you after school, you will find that it makes teaching more rewarding and less stressful. In practice, parents contact teachers at home only when it’s critical. But they appreciate the opportunity and become more supportive.”

“Working with Parents: New Teachers’ Greatest Challenge” by John Wherry, *Principal Magazine*, Nov./Dec. 2005 (Vol. 85, #2, p. 6), no e-link available

d. Are computers our salvation? At the beginning of this article on computers and student achievement, ERS researcher Nancy Protheroe writes: “Research does not allow us to unequivocally state that technology presents a cost-effective way to improve student achievement.” She goes on to explain why it’s so hard to come to firm conclusions about the efficacy of computers in schools.

But Protheroe thinks computers have the *potential* to be helpful if they are used as part of intelligent curriculum planning, and cites evidence that computers can enhance basic skills, collaboration among students, and opportunities to construct knowledge. Computers also have the potential, over time, to change the way teachers teach.

In the end, Protheroe writes, “Traditional questions of instructional planning still apply when deciding how (and whether) to use computers in the classroom:

- How does the lesson fit into the curriculum?
- What are the lesson’s specific educational goals?
- What will the students learn as a result of this activity?
- What materials and activities will be needed for the lesson?
- What experiences do students have with data analysis and thoughtful discussion?
- How will students know what is expected of them?
- How will students demonstrate what they have learned as a result of this activity?”

“Technology and Student Achievement” by Nancy Protheroe in *Principal Magazine*, Nov./Dec. 2005 (Vol. 85, #3, pl. 46-48), no e-link available

e. Foreign language exchange website – This website allows students to practice a foreign language with a study buddy. Check out <http://www.mylanguageexchange.com/>

Spotted in *Newsweek*, Oct. 10, 2005, p. 71

f. Design your own planet website – This NASA website allows students to design their own virtual planet, specifying the planet mass, star type, volcanoes, etc. Check out <http://www.astroventure.arc.nasa.gov>.

Spotted in *Newsweek* Oct. 17, 2005, p. 71

© Copyright 2005 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 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 42 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:

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 all issues
- What readers say
- About Kim Marshall (including links to articles)
- A free sample issue

Marshall Memo 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, 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
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
Edutopia
Elementary School Journal
Harper's
Harvard Business Review
Harvard Education Letter
Harvard Educational Review
Journal of Staff Development
Middle School Journal
NABE News
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
Teacher Magazine
Teachers College Record
Theory Into Practice

E-links will be provided whenever possible.