

Marshall Memo 403

A Weekly Round-up of Important Ideas and Research in K-12 Education
September 26, 2011

In This Issue:

1. [Applying Toyota's lean-management principles to knowledge work](#)
2. [In order to succeed, students first need to learn how to fail](#)
3. [Howard Gardner on pursuing truth, beauty, and goodness in schools](#)
4. [Two chemistry teachers "flip" their classrooms](#)
5. [Going back to basics with writing](#)
6. [Connecting school mathematics to everyday life](#)
7. [Recommendations of books with an international flavor](#)
8. [College admissions steps website](#)

Quotes of the Week

"Solve problems as soon as possible after they emerge. The fresher the information about a problem, the less subject it is to distortion, and the easier it becomes to find the cause. Attacking a problem early on also helps you make the most of the incident as a learning opportunity."

Bradley Staats and David Upton (see item #1)

"Books let me see the world when my mom won't even let me cross the street."

Andrew, a Michigan 6-year-old, quoted in "Teaching: A Magnificent Calling" by Mary Bigler in *Reading Today*, August/September 2011 (Vol. 29, #1, p. 7)

"Learning is maximized not by getting all the answers right, but by making errors and correcting them quickly. In this respect, children benefit from being close to the limits of their ability."

Sam Wang and Sandra Aamodt in "Delay Kindergarten at Your Child's Peril" in *The New York Times Sunday Review*, Sept. 25, 2011 (p. 6), <http://nyti.ms/qgNuOz>

"This push on tests is missing out on some serious parts of what it means to be a successful human."

Dominic Randolph, headmaster of Riverdale Country Day School (see item #2)

"Just tell me what to put here! Is this right? Is this what you want?"

A third grader struggling through a writing workbook (see item #5)

"It's really changed the classroom from 'finish these assignments' to 'learn these things.'"

Colorado chemistry teacher Jonathan Bergmann (see item #4)

1. Applying Toyota's Lean-Management Principles to Knowledge Work

In this crossover article in *Harvard Business Review*, business professors Bradley Staats (University of North Carolina) and David Upton (University of Oxford) ask whether the core principles of the super-lean Toyota Production System – relentless attention to detail, commitment to data-driven experimentation, and getting workers involved in continuously increasing efficiency and eliminating waste – apply to the knowledge sector. At first blush, the answer would seem to be no. Lean principles work well in repetitive, easily-defined automobile manufacturing, but how would they apply, for example, to a social worker deciding on whether a child's environment is safe? Knowledge work involves expertise and judgment that depend on tacit knowledge, which is locked inside the worker's head.

But in their research, Staats and Upton have found otherwise. "For one thing," they say, "a substantial amount of knowledge assumed to be tacit doesn't have to be; it can be articulated and captured in writing if the organization makes the effort to pull it out of people's heads. For another, all knowledge work includes some activities that have nothing to do with applying judgment and can be streamlined by training employees to continually find and reduce waste. Even when knowledge work is genuinely tacit, creating systems and rules to guide workers' interactions can lead to more-effective collaboration."

Here are the six principles of the Toyota Production System, all of which Staats and Upton believe can be applied to knowledge work:

- *Continually root out all waste.* Toyota found that in car manufacturing, there are "seven wastes" – overproduction; unnecessary transportation; unnecessary inventory; unnecessary worker motion; defects; over-processing; and waiting. "Typical knowledge work sites are loaded with these wastes," say Staats and Upton. "We've found that knowledge workers tend to grossly underestimate the amount of inefficiency that could be eradicated from their jobs. The key is to get everyone in the organization to systematically make waste visible and do something about it." Some strategies: (a) Teach everyone to ask "the five whys" – repeatedly asking *Why?* until you get to the root cause of the problem; (b) get everyone looking for small forms of waste, not just big ones; and (c) periodically review the structure and content of every job.

- *Strive to make implicit knowledge explicit.* A surprising amount of knowledge work is repeated and can be specified, say Staats and Upton, and once it's been articulated, it can be studied and continuously improved. "The key is to challenge the assumption that all knowledge is inherently tacit," they say. "A major benefit of specifying repeatable processes is that

knowledge workers are then freed up to focus on the parts of the job where they can create the most value.” Explicitness is particularly helpful when projects are running behind schedule.

- *Specify how workers should communicate.* Teamwork is at the heart of knowledge work, which means that success or failure depend on how well people communicate. Staats and Upton say the key principles here are: (a) Define who should be communicating, how often, and about what. “If frequent communication generates a rich flow of information,” they say, “problems can be spotted and fixed early on. And when the desired content of communication is spelled out, people get the information they need and don’t have to waste time trying to figure out what others are saying.” (b) Create a shared understanding. Knowledge workers sometimes don’t share the same assumptions and values, and the same words may have different meanings to different people. And (c), resolve disagreements with facts, not opinions. “A long line of research highlights the ways in which emotions and irrationality can distort the decision-making process,” say Staats and Upton. “This can be an especially big problem when the work involves tacit knowledge, because it’s often not at all clear how an expert arrived at a particular decision and to what degree that decision was based on intuition or emotion versus facts.”

- *Use the scientific method to solve problems quickly.* This means articulating an explicit and measurable hypothesis about how some aspect of work can be improved, conducting an objective test of the hypothesis, and, if the data support the hypothesis, making the approach standard. Staats and Upton suggest the following ways to apply this approach to knowledge work: (a) If a problem arises, the ideal person to fix it is the person who created it. The problem occurred either because the worker made a mistake or because the process was flawed; either way, involving the worker closest to the problem is most efficient. (b) Problems should be resolved *where* they occur. “Location provides important contextual information,” say the authors. “Without that information, those trying to solve a problem can’t reproduce exactly what happened and are much less likely to succeed. And (c) solve problems as soon as possible after they emerge. “The fresher the information about a problem, the less subject it is to distortion, and the easier it becomes to find the cause,” say Staats and Upton. “Attacking a problem early on also helps you make the most of the incident as a learning opportunity... By using the scientific method and having whoever caused an error to fix it where and when it occurred, a knowledge organization can build a problem-solving engine that drives continual improvement.”

- *Recognize that a lean system is a work in progress.* “You probably won’t get it right on the first try,” say Staats and Upton, “but over time you can put together a system of continual improvement...” Here are the keys: (a) Start small, perhaps with a pilot project; (b) codify the lessons learned, making sure someone is in charge of writing down key information; (c) keep looking for new ways to work; and (d) remember that the lean approach doesn’t apply everywhere. Workers need to have space to try out wild ideas – this is not waste work!

- *Have leaders blaze the trail.* Middle and senior managers are essential to launching and nurturing a process that will *eventually* result in bottom-up improvement, say Staats and

Upton. Managers need to train and motivate their teams, and senior managers need to be long-term champions and not move on to new fads.

“Lean Knowledge Work” by Bradley Staats and David Upton in *Harvard Business Review*, October 2011 (Vol. 89, #10, p. 100-110), no e-link available

[Back to page one](#)

2. In Order to Succeed, Students First Need to Learn How to Fail

In this important *New York Times Magazine* article, Paul Tough compares the character-education approach taken by two very different schools – Riverdale Country Day School, a prestigious private school, and KIPP Infinity, an inner-city charter school. Dominic Randolph is the British-educated headmaster of Riverdale, and he’s made a number of progressive changes in his short tenure, including doing away with Advanced Placement classes, asking teachers to limit homework, and saying that standardized-test scores are a “patently unfair system” for selecting students for the school. “This push on tests,” he says, “is missing out on some serious parts of what it means to be a successful human.”

What’s not included, he says, is *character*. “Whether it’s the pioneer in the Conestoga wagon or someone coming here in the 1920s from southern Italy, there was this idea in America that if you worked hard and you showed real grit, that you could be successful. Strangely, we’ve now forgotten that.” He worries that students who do well in school and on SAT exams don’t encounter enough challenges, and are therefore set up for failure when life throws them some really tough challenges.

David Levin, the co-founder of the KIPP (Knowledge Is Power Program) network of schools and the superintendent of the KIPP schools in New York City, has also been wrestling with the question of how to instill character in students. In 2005, he and Randolph happened to meet in the office of Martin Seligman, a University of Pennsylvania psychologist who had just co-authored an 800-page book, *Character Strengths and Virtues: A Handbook and Classification*. It was exactly what both school leaders had been looking for, and Randolph and Levin immersed themselves in the long list of character traits, which included bravery, citizenship, fairness, wisdom, integrity, love, humor, zest, appreciation of beauty, social intelligence, kindness, self-regulation, and gratitude.

Six years later, Riverdale and KIPP schools are still trying to figure out the answer to the questions the book explores. In Tough’s words, “What is good character? Is it really something that can be taught in a formal way, in the classroom, or is it the responsibility of the family, something that is inculcated gradually over years of experience? Which qualities matter most for a child trying to negotiate his or her way to a successful and autonomous adulthood? And are the answers to those questions the same in Harlem and in Riverdale?”

Levin is especially focused on these questions because the first wave of KIPP graduates, who left middle school for high-performing private and parochial schools and seemed to have excellent prospects, were dropping out of college at an alarming rate. Levin was struck by the fact that KIPP graduates who succeeded in college weren’t necessarily those

with the highest grades; they had character strengths like optimism and social intelligence that helped them recover from a bad grade, deal with a fight with their parents, ask a professor for extra help after class, and resist the temptation to watch a movie rather than studying. What Levin saw in the list of character traits was a recipe that KIPP students desperately needed.

Levin and Randolph decided to team up in their quest for a viable character-education program and joined forces with Angela Duckworth, then a graduate student in Seligman's department. She came to Penn with a clear focus on the issue of character. "Here's why," she wrote. "Learning is hard. True, learning is fun, exhilarating and gratifying – but it is also often daunting, exhausting and sometimes discouraging... To help chronically low-performing but intelligent students, educators and parents must first recognize that character is at least as important as intellect."

Duckworth's early research showed that self-control was a more reliable predictor of grades than I.Q., but she subsequently zeroed in on another quality: *grit* – the passion for a single mission, unswerving dedication to getting there, and perseverance in overcoming obstacles. She developed a 12-question grit survey with probes like, "I finish whatever I begin" and "I often set a goal but later choose to pursue a different one." Duckworth's survey takes three minutes to complete, but it's proven to be a very accurate predictor of success in college and at West Point.

Levin and Randolph worked with the Penn researchers and narrowed the long list of character traits to the seven they thought were most important to high achievement and life satisfaction: zest, grit, self-control, social intelligence, gratitude, optimism, and curiosity. Duckworth helped both schools turn the seven strengths into a two-page evaluation for teachers to fill out on students, with indicators for each. The final product was a 24-item list, including items like "This student is eager to explore new things" and "This student believes that effort will improve his or her future."

After this, the two school leaders went in slightly different directions. Levin created a twice-a-year KIPP character report card. At Riverdale, Randolph took a more muted approach. "I have a philosophical issue with quantifying character," he said. "With my school's specific population, at least, as soon as you set up something like a report card, you're going to have a bunch of people doing test prep for it. I don't want to come up with a metric around character that could then be gamed." Instead, he launched a lower-key approach, hoping that the values would go viral. Randolph talks about character at parent nights, asks pointed questions at staff meetings, connects like-minded faculty members, and launches programs. Students were given the 24-item survey, but the results weren't shared with students and parents. All this has stimulated a school-wide discussion on the nature of character that has taken everyone deeper than the character-education program the school had been using. But staff at Riverdale mostly believe the 24 traits are less important to future success for students who take for granted that they will graduate from college (everyone in their family has done that, so why won't they?).

At KIPP Infinity, the 24 character traits became rallying cries, with signs in the hallways (*Got Self-Control?*), T-shirts (*Infinity Character*), and slogans (*I actively participate!*). Teachers work character traits into math and literature lessons and engage in

lively discussions with students on whether character traits can backfire (yes, they can, as when a student is too gritty and doesn't listen to another's concerns). A teacher's accusations to a gum-chewing student elicited two denials, but then the teacher said, "Gosh, not only were you chewing gum, which is kind of minor, but you lied to me twice. That's a real disappointment. What does that say about your character?" The student was devastated, and rather than having a "baby attack" (KIPP jargon for an in-class melt-down), the student spat out her gum and had a tearful discussion with her teacher after class.

KIPP dean Tom Brunzell, who oversees the character initiative, sees these character conversations as a kind of cognitive behavioral therapy – using the conscious mind to understand and overcome unconscious fears and self-destructive habits by using techniques like "self-talk" – putting the immediate crisis in perspective by reminding oneself of the larger context. "All the kids this age are having mini-implosions every day," he says. "I mean, it's middle school, the worst years of their lives. But the kids who make it are the ones who can tell themselves, 'I can rise above this situation. I'm O.K. Tomorrow is a new day.'"

Back at Riverdale, Randolph says KIPP students' struggles with adversity are exactly what is missing for many of his students. Last February, he screened "Race to Nowhere" for the faculty – a film about the stresses of privileged American students, culminating with the suicide of a high-achieving girl. The movie features Madeline Levine, a psychologist who authored *The Price of Privilege: How Parental Pressure and Material Advantage Are Creating a Generation of Disconnected and Unhappy Kids*. Levine writes about emotionally distant parents who demand a lot of their children, creating shame and hopelessness in affluent children, while shielding them from the kind of experience that can lead to character growth. When these kids are faced with real challenges, they're unprepared.

Riverdale children are born with box seats on life. "And yet we all know – on some level, at least – that what kids need more than anything is a little hardship: some challenge, some deprivation that they can overcome, even if just to prove to themselves that they can," concludes Tough. "As a parent, you struggle with these thorny questions every day, and if you make the right call even half the time, you're lucky. But it's one thing to acknowledge this dilemma in the privacy of your own home; it's quite another to have it addressed in public, at a school where you send your kids at great expense."

What Randolph is undertaking at Riverdale is tricky, because the character program says implicitly that many parents who are paying the fees aren't developing these all-important character traits in their children. "The idea of building grit and building self-control," he says, "is that you get that through failure. And in most highly academic environments in the United States, no one fails anything."

"The Character Test" by Paul Tough in *The New York Times Magazine*, Sept. 18, 2011
<http://nyti.ms/mQQdXI>

[Back to page one](#)

3. Howard Gardner on Pursuing Truth, Beauty, and Goodness in Schools

In this thoughtful article in *Education Week*, multiple-intelligences guru Howard Gardner reflects on his earlier formulation (in *The Disciplined Mind*, 2000) of three fundamental purposes of education beyond basic literacy:

- Truth – Students learning what is true and what is false by studying science, history, and mathematics;
- Beauty – Students learning what is beautiful and what is boring or repugnant from the arts and observation of nature;
- Goodness – Students learning what is good and what is evil by reflecting on the actions of historical figures, fictional characters, and contemporaries.

Gardner wonders if these seemingly old-fashioned purposes are still relevant today, when anyone can edit what's on Wikipedia, we all have access to millions of works of art on the Internet, and long-held views of privacy, ownership, and trust are up for grabs in cyberspace. Here's his latest thinking about the definitions and how he believes they apply in schools:

- *Truth* – Gardner believes that, “with patience and persistence, we have a better chance than ever before to determine whether a proposition is true, false, or indeterminate.” Getting to the truth remains one of the central purposes of education, and that comes through deep immersion in science, math, history, and other disciplines. Online courses are helpful, and there's less need for memorization, given our ready access to information, but “there's no substitute for direct engagement over time with master teachers,” says Gardner. “Such immersion at school or work reveals the techniques for ascertaining truth – what the world is like, what happened in the past, how to achieve desired results going forward.”

- *Beauty* – “A single standard of beauty is gone forever,” he continues. “We should now apply the term ‘beauty’ more flexibly to experiences that are interesting, memorable, and worthy of revisiting. While truth is ultimately convergent, beauty becomes divergent. We each have the potential to develop, and to change continually, personal conceptions of beauty. And since one person's beauty need not clash with the sensibilities of others, this situation is welcome – no need for a consensual canon.” Gardner believes strongly in the role of the arts in schools to help students discern and create beauty. Students should be guided in developing portfolios that take them beyond mere habit or an attraction to celebrity. “The creating and curating of the portfolio constitutes an education in beauty,” he says.

- *Good* – Gardner believes that ancient codes like the Ten Commandments and the Golden Rule are still relevant today, but we need to add what it means to be a good worker and a good citizen in our complex and interconnected world. He suggests the idea of a “commons – a set of common spaces where reflective individuals can describe the dilemmas that arise at work or in their civic roles, how they have dealt with them, how they might behave differently in the future.” Commons can be organized in schools – teachers, staff, and students discussing ethical issues, debating respectfully, and trying to arrive a moral consensus.

The pursuit of truth, beauty, and goodness should be lifelong, concludes Gardner: “As we age, we are well advised to collaborate with younger persons. All can draw on our

knowledge and experience, while younger persons can alert us to the potentials and the pitfalls of the new technologies.”

“Reframing Truth, Beauty, and Goodness” by Howard Gardner in *Education Week*, Sept. 21, 2011 (Vol. 31, #4, p. 32, 29), available to subscribers at http://www.edweek.org/ew/articles/2011/09/21/04gardner_ep.h31.html

[Back to page one](#)

4. Two Chemistry Teachers “Flip” Their Classrooms

In this interview in *GO Teach*, award-winning Colorado teachers Aaron Sams and Jonathan Bergmann describe how they have “flipped” their high-school classes. They haven’t lectured in four years, they say. In the old days, students would take notes on their lectures and copy down everything written on the board, then go home and struggle to interpret and translate what happened in class in their homework assignments. There was always a big disconnect, resulting in frustration and failure. “What we realized is that’s when students need us present,” says Sams, “when they’re trying to bridge that gap.”

Now, Sams and Bergmann create instructional videos that students are required to watch at home, and the next day in class they discuss the videos and work on labs, interactive activities, and directed problem sets with lots of assistance from their teacher. “We really didn’t change anything about what we did,” says Bergmann, “except we moved the lecture to home, the homework to class, and we saw amazing results with kids.”

After a year of the new routine, the teachers realized their supply of videos meant they no longer needed all students watching the same video on the same night. From then on, they had students set weekly goals and let them proceed at their own pace, working on different things at different times. When students finish units, they can take on a project. “We call it our three-ring circus of learning,” says Sams. “We’ve got all sorts of stuff going on. We have kids doing a myriad different things in class at once, and we run around and manage it all.” Mastery is the criterion, as determined by 75% or higher on unit tests. “The expectation is that they actually learn the material before they move on,” says Sams.

How have students reacted? Being able to work at their own pace is highly motivating, but some students don’t enjoy the challenge. “The kids who don’t buy in are the kids who want to be spoon-fed,” says Bergmann, “and we’re not letting them do that.”

But most students are much more willing to do the homework because it actually has value – they need to see the lectures to be successful in class. “It’s really changed the classroom from ‘finish these assignments’ to ‘learn these things,’” says Bergmann. The flipped classrooms are also helpful for students with long-term absences. A girl who fractured her pelvis in a skiing accident was able to keep up with the work during a one-month absence and catch up on labs when she returned.

What do parents think? “They say, ‘So, Mr. Bergmann, you’re going to make sure my student learns it.’ ‘That’s right.’ ‘And if they don’t learn it, you’re going to provide help for them to learn it.’ ‘Yes.’ ‘And if they still don’t learn, you’re going to continue to provide help

for them to learn it. You're not going to accept that they don't.' 'Yes, that's right.' And then they say, 'Thank you.'"

And what about results? Bergmann says he covers the curriculum more quickly, has almost all students scoring 75% or higher on mastery tests, and had only three students out of 100 fail last year. "I've never had that low a percentage of kids fail," he says.

Sams and Bergmann have a website – <http://www.learning4mastery.com> – that serves as a clearinghouse for teachers who have good videos for flipped classrooms. This site has videos of Bergmann and Sams in action: <http://educationalvodcasting.com>.

"Flip It" – An Interview with Aaron Sams and Jonathan Bergmann in *GO Teach*, August/September (Vol. 1, #1, p. 12-14)

<http://www.futureeducators.org/goteach/2011/08/09/innov8-flip-it/>

[Back to page one](#)

5. Going Back to Basics With Writing

In this provocative *Education Week* article, writing teacher Paula Stacey says she is horrified at the way "process" writing is often implemented in schools. "I am left mostly feeling sorry for students who in the name of writing instruction are being asked to jump through an ever-expanding and increasingly byzantine set of hoops," she says, "but who less and less often are being asked to write. They may be able to create thesis statements and topic sentences, find details, write conclusions, and follow Modern Language Association style, but somewhere in there very little actual thought is taking place."

Stacey cites her own experience using a third-grade writing workbook and having students plead, "Just tell me what to put here! Is this right? Is this what you want?" The most artificial part of the curriculum was teaching students to write an "instructional essay" – a genre that doesn't exist in the real world. When Stacey tried to create a model for students, she was as confused as they were.

What's produced this, she believes, is teachers' and publishers' over-interpretation of state standards (and Common Core standards) that require mastery of specific elements of writing like thesis statements, argumentative appeals, and other structures. This can result in high-school English teachers requiring a schoolwide essay format with exactly three central paragraphs with eight sentences. It can lead a history teacher to give zeros to students who don't have the thesis statement as the final sentence of their opening paragraph. It can produce students who have mastered the five-paragraph essay but are incapable, says a professor in an elite research university, of developing a complex idea in writing. They're stuck, she says, with the notion that an argument consists of three reasons, one for each core paragraph.

"The truth is, the more we try to tease apart what writing is and serve it up processed and predigested," says Stacey, "the more we either confuse students or, as in the case of the elite university students, deny them engagement in the messy process that is thinking. At the very least, it is a benign waste of time and empty calories in the educational diet. At the worst, it crowds out the rich and complex array of intellectual nutrients we need."

We need to abandon the narrow models, the graphic organizers, the formats, the thesis statements and topic sentences, and maybe even the five-paragraph essay, says Stacey. And what does she suggest in their place? “Ask students questions, read their answers, and ask more questions,” she says. “Questions and answers. Nothing fancy. Much like home cooking, however, this kind of questioning takes time, it requires practice and honing, and the kitchen is a mess afterwards. But it is worth the trouble and the mess, for in this back and forth, this conference between teacher and student, real thinking and the work of real writing occur.”

The goal, she concludes, is to get students explaining their thinking about subjects they are studying, creating an authentic engagement with ideas and content.

“First, Do No Harm” by Paula Stacey in *Education Week*, Sept. 21, 2011 (Vol. 31, #4, p. 26-27); Stacy can be reached at pstacey8910@sbcglobal.net; the article is available to subscribers at <http://www.edweek.org/ew/articles/2011/09/21/04stacey.h31.html>.

[Back to page one](#)

6. Connecting School Mathematics to Everyday Life

In this intriguing *Middle School Journal* article, DePaul University/Chicago professor Mindy Kalchman addresses the gulf that commonly exists between school mathematics and math in everyday life. One dramatic example from the research is young Brazilian street merchants who were able to solve complex, multistep problems involving money, but couldn't do the same computation in a school setting. The same school/life gap exists among many American children, adolescents, and adults.

“One reason behind this discrepancy,” says Kalchman, “is that most mathematics programs and assessments require students to consider rules and laws formulated by others, use symbols or systems determined by others, and resolve problems contrived by others.” Textbooks and workbooks earnestly try to make mathematics relevant by including real-life scenarios, but these aren't the same as authentic problems that students encounter while shopping, cooking, and playing sports – situations that require spontaneous and functional application of mathematics.

Kalchman describes a teacher's experiment with Math in Everyday Life (MIEL), a program designed to address the gap. Every Monday, her fifth graders had to hand in a detailed description of an authentic experience they had outside school that required the use of mathematics. Students were asked to describe the mathematical situation and how they approached and solved it, and give the answer. When the teacher launched the idea at the beginning of the year, she gave examples of descriptions that would be acceptable: calculating a tip in a restaurant, adjusting proportions while following a recipe, and calculating tax and discounts in a store. She also said that it would not be enough to add 24 and 13 (for example); students had to explain why $24 + 13$ equaled 37 – for example, “13 is the same as 10 plus 3. So, I can add 24 plus 10, which is 34 and then I can add on the other 3. Thirty-four plus 3 is 37”.

The teacher also explained that students were not allowed to work on these papers in class, encouraged them to involve family members in the project, announced a Done/Not Done

grading policy, and allocated time every Monday for students to share their problems and solutions.

Here were some of the problems students shared: One girl figured out how long it would take to do math homework; later in the year, she figured out when the movie “The Sound of Music” was made and how old her parents were when it was made. A boy calculated the minutes he practiced his French horn; later in the year, he worked out his feet-per-minute speed running a mile.

Kalchman observed and interviewed students at three points during the school year, looked at their work, and analyzed their test scores. Here’s what she found:

- Students said the weekly homework assignments opened their eyes to the math they used outside school and made school math easier and more meaningful.

- Students said they felt much better prepared for the high-stakes state tests they took. They felt better able to handle the unpredictability of the test questions and were less nervous about the whole enterprise. They also said they felt more confident and competent with the tests’ open-response questions.

- Students actually appreciated having a weekly homework assignment that other fifth graders in the school didn’t have, because they believed it gave them an advantage over their peers.

- 71% of students improved in the clarity of their explanations during the year, and 65% improved the complexity of their problems and application of mathematics.

- 76% of students made significant gains on the Measure of Academic Progress (MAP) tests they took three times during the year.

The goal of the MIEL assignments was to get students to recognize, appreciate, apply, solve, and communicate about real-world math, and see themselves as competent and functional mathematicians, independent of (and perhaps in spite of) their success in school math. In that regard, it did triple duty – it connected math to students’ everyday lives, built their mathematical self-confidence, and prepared them well for high-stakes tests without engaging in explicit test prep. MIEL also gave their teacher weekly insights into how they were using and processing mathematics – insights that improved her in-school teaching of the subject.

“Using the Math in Everyday Life to Improve Student Learning” by Mindy Kalchman in *Middle School Journal*, September 2011 (Vol. 43, #1, p. 24-31), no free e-link; Kalchman can be reached at mkalchma@depaul.edu

[Back to page one](#)

7. Recommendations of Books with an International Flavor

The Children’s Literature and Reading Special Interest Group of the International Reading Association recommended these books in *Reading Today*:

- *The Greedy Sparrow* by L. Kasbarian (Marshall Cavendish, 2011), for young readers – A sparrow uses trickery to get bigger and better things, and learns how selfish and dishonest behavior can result in losing whatever one gains.

• *Akata Witch* by N. Okorafor (Penguin, 2011), for intermediate and young adult readers – Sunny is an albino and her light skin and hair lead to taunts and few friends. Back in her native Nigeria, she gets involved in trying to save her community from a serial killer.

• *Karma* by C. Ostlere (Penguin, 2011), for young adult readers – Maya, an Indo-Canadian whose mother has committed suicide, arrives in India as the country erupts in violence following the 1984 assassination of Indira Gandhi.

• *Cleopatra's Moon* by V.A. Shecter (Arthur L. Levine Books, 2011), for young adult readers – Cleopatra's only child to survive to adulthood suffers severe hardships and losses in Alexandria and as a prisoner in Rome but trusts her dreams.

• *Words in the Dust* by T. Reedy (Scholastic, 2011), for intermediate readers – A girl is born in Afghanistan after Taliban rule, and her cleft lip leads boys to call her “Donkeyface.” An older woman helps her learn to read and write, giving her hope and courage.

• *Between Shades of Gray* by R. Sepetys (Philomel, 2011), for young adult readers – In 1941, the Soviet secret police give thousands of Lithuanians twenty minutes to pack and deport them to the far north. Fifteen-year-old Lina and her family suffer unimaginable hardships and survive.

• *Now Is the Time for Running* by M. Williams (Little, Brown & Company, 2011), for young adult readers – Deo and his older brother are sole survivors of a village bloodbath in Zimbabwe and make their way across the border to South Africa and take refuge inside a bridge.

“International Book Reviews” by the Children’s Literature and Reading Special Interest Group of the International Reading Association, in *Reading Today*, August/September 2011 (Vol. 29, #1, p. 37)

[Back to page one](#)

8. Website:

College application steps – This site has timelines for the college application process, financial aid resources, quizzes on applying to college, and more:

<http://knowhow2go.org>

“LinkED” in *GO Teach*, August/September 2011 (Vol. 1, #1, p. 6)

[Back to page one](#)

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please e-mail: kim.marshall48@gmail.com

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 41 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 more than a hundred 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 evening (with occasional breaks; there are about 50 issues a year).

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
- A detailed rationale for the Marshall Memo
- Publications (with a count of articles from each)
- Article selection criteria
- Topics (with a count of articles from each)
- 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 log-in

Publications covered

Those read this week are underlined.

American Educator
American Journal of Education
American School Board Journal
ASCD, CEC SmartBriefs, Daily EdNews
Better Evidence-Based Education
Ed. Magazine
EDge
Education Digest
Education Gadfly
Education Next
Education Week
Educational Leadership
Educational Researcher
Elementary School Journal
Essential Teacher (TESOL)
Harvard Business Review
Harvard Education Letter
Harvard Educational Review
JESPAR
Journal of Staff Development
Kappa Delta Pi Record
Language Learner (NABE)
Middle Ground
Middle School Journal
New York Times
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
Teachers College Record
Teaching Children Mathematics
The Atlantic Monthly
The Chronicle of Higher Education
The Language Educator
The New Yorker
The Reading Teacher
The School Administrator
Theory Into Practice