ADI News

ADI is offering several great training opportunities this summer. We will have four outstanding regional conferences and, of course, a terrific National Direct Instruction Conference. Following is a brief description of each training event and details about the location. Full brochures are available by calling our office (1.800.995.2464) or on the Web at adihome.org.

June 18–20 we will host the 10th Southeast Conference. Located in Orlando at the Studio City Sheraton, this conference is continuing to be popular as a place for families to come. While mom and/or dad are in session, families enjoy all the attractions the area has to offer. When sessions are over there is still plenty of time left to see the mouse or try and shake a few brain cells loose. The hotel is located one block off of International Drive, an area renowned for outlet shopping, entertainment, and restaurants. This year the conference sessions are focused on coaching, administrative development, and advanced Direct Instruction techniques. Cary Andrews

will be the keynote speaker at the event. Many ADI members can testify as to his knowledge about and enthusiasm for Direct Instruction.

Next we will be back to Colorado Springs for the Mountain States Conference, July 16–18. About 200 people will gather at this regional conference. People will enjoy downtown Colorado Springs and the great restaurants within a few steps of the historic Antlers Hilton.

For the past 33 years DI users have looked to the National Direct Instruction Conference and Institutes at Eugene as more than just a training conference. This year the conference is July 22–26. Attendees will have the opportunity to meet and talk to people from all over North America and the world that share a passion for DI. The national conference has 46 different sessions as well as four comprehensive institutes. Zig Engelmann will give opening and closing remarks. Randy Sprick will give the keynote on Monday the 23rd. Prominent program authors and trainers are accessible to

meet with participants in both formal and informal settings. Popular social events are the SRA welcome reception on Sunday night, the picnic in the park on Monday night, and the Excellence in Education and Hall of Fame Awards banquet on Wednesday night. Also available are tours to the fantastic Oregon Coast and a winery tour. Eugene's warm summer days are also a huge attraction.

The Atlantic Coast conference will be held in Harrisburg, PA, this year. Not exactly on the "coast," but close enough for us. There will be training on most of the DI programs as well as some advanced sessions.

The final event of the summer will be a relocated Midwest Conference. We will be in Holland, MI, Aug. 20–21. This event will feature training on mainline DI programs as well as a unique keynote and session on Creating Cultures of Excellence, presented by Rick Paraino.

As you can see, there are some great sessions and locations to get your Direct Instruction training. I hope to see you at one of our events this summer!



MICHAEL J. PETRILLI, Thomas B. Fordham Foundation

Reading Last

Reprinted with permission from the Education Gadfly. First published Sept. 28, 2006, in the Education Gadfly, Vol. 6, No. 37 (http://www.edexcellence.net/foundation/gadfly/).

The brouhaha over the federal Reading First program illustrates everything that's wrong with government today—not the alleged improprieties, but a twisted government culture that prioritizes "proper procedures" over actual results and that looks for scapegoats and fall-guys when the going gets tough.

Let's recap what happened. On Sept. 22, 2006, the Department of Education's Inspector General issued a scathing report that accused Reading First officials of steering dollars toward preferred programs such as Direct Instruction (DI)—a reading strategy with massive evidence of effectiveness—by putting fans of the program on the review panels that decided which state applications would be funded.

As Chris Doherty, Reading First's director, said in a now infamous email: "You know the line from Casablanca, 'I am shocked that there is gambling going on in this establishment!' Well, 'I am shocked that there are pro-DI people on this panel!'"

After all, his direct orders from Congress and the President were to ensure that Reading First dollars went only to certain reading curricula—those that had been proven to work.

In 2001, when Congress created Reading First as part of the No Child Left Behind act, it represented a sharp break from past policy. Rather than being agnostic to the specifics of teaching and learning, with monies from this program Uncle Sam would fund only reading programs that are based on "scientifically-based reading research." In other words, instead of letting a thousand flowers bloom, the feds would handpick a few roses and daffodils and weed out the rest of the garden.

This was a reasonable strategy. After all, the nation's education system has been captured for decades by educators and publishers enamored of "whole language reading"—the notion that children learn how to read naturally, as they learn how to speak. It's a charming theory, but it's patently untrue. Thirty years of rigorous studies all reach the same conclusion: children must be taught to read systematically. Primary reading is perhaps the one domain of the elementary-secondary curriculum where there is clear, definitive scientific evidence of what works and what does not. Congress agreed with the Bush team that only the former should get federal funding.

So it drafted the most heavy-handed program in the history of federal education policy. The statute spends 17 pages spelling out the program's requirements, including five paragraphs that define "scientifically-based reading research" and six that define "reading" itself.

President Bush embraced this aggressive approach. On Sept. 10, 2001, urging Congress to approve the program, he explained the challenge: "One of

the unfortunate aspects that we find in many states is that there are great teachers who have got wonderful hearts who don't know how to teach reading; that don't know the science of reading. ... What we find is a good curriculum based upon the science of reading is necessary to make sure no child gets left behind."

So Doherty did precisely what Congress and the president expected him to do: he implemented the program aggressively. He selected panelists whose views were supportive of scientifically-based reading research. (Though, importantly, he ensured that none of these panelists would benefit financially from their own decisions.) And he raised concerns when school districts wanted to use Reading First funds for unproven whole-language programs.

What was the result of this assertive approach? If you read the Inspector General report, you won't find out, because its authors don't consider this an important question. They're not interested in whether children learn to read. But two recent studies—one from the government and one from the Center on Education Policy (CEP), a think tank led by a former democratic Congressional aide—reach the same conclusion: Reading First is working.

Here's the headline from the CEP report: "Majority of participating states & districts credit Reading First for achievement gains in early grades. ... Billion-dollar federal program is driving significant changes in instruction, curriculum, assessment." State Reading First directors give much of the credit to Doherty and his team for their forceful leadership.

Did Doherty push the bureaucratic and procedural envelope? Absolutely. Did he do what his bosses in Congress and the White House expected him to do? Absolutely. Did his actions help millions of children in classrooms nationwide? Absolutely.

So why, then, have leaders in the Administration and Congress raced to hang him out to dry? Secretary of Education Margaret Spellings told the auditors, "I acknowledge that some of the actions taken by Department officials as described by the draft report reflect individual mistakes." Democrat George Miller, ranking member of the House Education and the Workforce Committee, said, "They should fire everyone who was involved in this. ... This was not an accident, this was not an oversight. This was an intentional effort to corrupt the process." He has since called for a criminal investigation. Perhaps Miller's comments can be chalked up to election-year politics. If the Democrats win back the House, he will win the coveted chairmanship of the education committee. But Spellings? As the President's first-term domestic policy advisor, she micromanaged the implementation of Reading First from her West Wing office. She put one of her most trusted friends inside the Department of Education to make sure Doherty and his colleagues didn't go soft and allow just any reading program to receive funds. She was the leading cheerleader for an aggressive approach. And now she bobs and weaves: "Although these events occurred before I became secretary of education, I am concerned about these actions and committed to addressing and resolving them." (Regrettably, much of the media bought this spin hook, line, and sinker.)

Shame on Spellings for not backing a loyal, selfless, and truly capable lieutenant. Shame on the auditors for missing the forest for the trees. But mostly shame on all of us if we allow "gotcha" politics and adult power struggles to distract us from the first duty of education: making sure all of our children learn to read so that they can go on to become productive members of our society.

NANCY SALVATO



NANCY SALVATO

'R' Stands for Reading Rat Race

Reprinted with permission of the author. This piece was first published by The New Media Journal, www.therant.us. Nancy Salvato works as a Head Start teacher in Illinois.

In the Summer of 2001 Dame Marie Clay, creator of the New Zealandbased Reading Recovery program, and her entourage came to the Rayburn House Office Building in Washington, DC, to speak with House Education Committee staffer Bob Sweet. Her purpose was to ascertain whether Reading Recovery would be eligible for Reading First funding once the bill was passed. Bob explained to Ms. Clay that explicit, systematic phonics instruction had to be included in any program eligible for RF funding because it was one of the necessary key components of reading instruction that had been

established through decades of carefully conducted quantitative research.

These findings had been validated in the Report of the National Reading Panel in 2000 and were now going to become an essential part of the Reading First Law. He pleaded with Ms. Clay to use her extensive network of teacher training programs all over the U.S. to help in the implementation of the RF program. He encouraged her to provide the leadership within the RR family to make the modifications nec-

essary, and thus make RR eligible for RF funding consideration.

With a stare as cold as ice, Marie Clay replied that RR would not be making any changes to their program; however, Mr. Sweet could be certain a new description of its components would be written in such a way as to bring it into compliance with the RF law. Momentarily dumbfounded, he maintained that Reading Recovery could not be eligible for RF funding without modification, and his initial estimation then still stands today.

A little background about Clay's Reading Recovery program reveals it to be a very expensive program to implement, averaging more than \$8,000 per student per year when the expense of teacher development is considered. This cost is more than one whole year of education in all subjects for one student in many districts around the country, yet only the lowest 10% to 20% of first graders is even eligible for such services. It seems hardly worth implementing given that students who complete the first-grade Reading Recovery sequence lose much of their gains, and that unpaid trained volunteers can prepare students to perform equally as well. Given the importance of explicit phonics instruction for the poorest readers, it shouldn't be shocking that they make almost zero gains when instructed with Reading Recovery. Students who do not respond have been found to be weak in decoding skills because phonics instruction in Reading Recovery is not sufficiently explicit and systematic.

Interestingly, New Zealand researchers found that adding an explicit phonics component to a standard Reading Recovery intervention reduced the time required to complete the program by about 30%.

President Bush initiated Reading First soon after he took office. It marked the first time that the findings of scientific research became the basis of federal law. This research dealt with teaching methods, brain function, positron emission tomography (PET) scans, and many other aspects of reading research that were summarized in the Report of the National Reading Panel in 2000. The findings of this extensive 30-yearlong effort to discover how children learn to read concluded that changes could be made in instructional practices to apply those findings in the classroom and to offer both prospective and veteran teachers the tools they need to succeed. Its objective was to change the teaching of reading from

There was resistance up and down the line to voluntarily adopting reading programs that included the essential components of reading instruction.

the latest fad to instruction based on scientific evidence.

The practical application of the research boiled down to the identification of five essential components of reading instruction. Those components are: phonemic awareness; phonics; vocabulary development; fluency, including oral reading fluency; and comprehension strategies. If taught explicitly and systematically children could learn to read proficiently.

These five components of reading instruction were written into law (Sec. 1208 (3)) and became the heart and soul of Reading First. This was the measure that states were to use in the proposals and applications they submitted to the Reading First office. It was up to the states to choose products that would fit the new standard. It is not astounding that this law

spurred an internal feud within the education industry.

Chris Doherty, the director of Reading First who was asked to resign in the aftermath of the release of the Inspector General's report on Reading First's grant application process, was faced with an enormous task. He and his two assistants had to develop state application forms, guidance documents (which were approved by staff on both the House and Senate Education Committees), review panels, and training sessions making sure that all states knew the deadlines for applying for their share of funds. Then, the real work began with the review of state applications to make sure they were in compliance with the new law. Unfortunately, many of the states sent back their applications and proposed they use the 'same ole, same ole' reading programs used up until then. The Reading First law was different because it required states to change practices that had been used for decades, and voluntarily use reading programs that were consistent with the latest findings of scientific reading research. For example, one state wanted to use the new money from Reading First to pave parking lots, another submitted requests to use the money for library books, and still others wanted to use the old basal textbooks, which did not follow the findings of scientifically based reading research. Some states did not want to submit specific products they would use for Reading First classrooms and simply gave their assurance that they would comply with the law. Other states actually did include programs that met the standards of Reading First, but had little leverage to insist that local educational agencies comply with the requirements of Reading First. There was resistance up and down the line to voluntarily adopting reading programs that included the essential components of reading instruction.

In spite of the challenges in implementing the new law, Director
Doherty and his small staff did an outstanding job. Reports are now coming in that make clear Reading First is making a substantive improvement in reducing illiteracy in the U.S. Many states who were skeptical about the "paradigm" shift away from untested programs to those that were aligned with explicit, systematic instruction in the essential components of reading instruction are now the law's strongest advocates. The testimony of Reading First state directors tells the story:

Alabama: "Reading First is the most helpful thing about No Child Left Behind and the most helpful federal program I've seen in my career."

—Katherine Mitchell, assistant state superintendent for reading

Washington: "Reading first encompasses all the things that research says effective schools do. That is unique. It's seen as a place to learn. I love everything about it. I love it every day."

—Lexie Domaradzke, Reading First administrator New York: "An awful lot of non-Reading First schools are starting to implement the tenets of RF on their own. Veteran teachers are raving about what RF has done for them. The whole field is learning together. Before Reading First, reading instruction was all over the map."

—Cindy Gallagher, Reading First director

But one of the most moving comments comes from the principal of a school in Wyoming: "In 25 years in education it has been one of the most well-researched, results-oriented programs I have even seen. The results in our school speak for themselves. We'd been the state leader in Reading Recovery/Balanced Literacy, and were not seeing the results there. Reading First is an exceptional model every school in the country should be following. The results for children learning to read are amazing!!"

When we keep in mind that the I.G. Report was initiated by two disgruntled publishers for Reading Recovery and Success for All, because they didn't get "their fair share of the federal

largess," one can only wonder how far selfishness can go. Reading Recovery's publisher even has the audacity to ask for reparations for loss of revenue. Success for All's publisher complains that not enough states chose to use their program since it is scientifically based and is demanding that the Department of Education require states to use it, even though that is forbidden by law. There are other publishers who have squawked that they too have not been treated fairly under Reading First, although their products are not supported by the findings of scientific research.

We can be thankful that Director Chris Doherty stood his ground under great pressure and established a strong national foundation through the initial five years of Reading First. We will miss his leadership and his dedication to the cause of ensuring that all children learn to read proficiently in the early elementary grades. One can only hope that the Secretary of Education will find someone who is worthy to replace him, and who can match his grace under fire.

SOL STERN



SOL STERN

This Bush Education Reform Really Works

Deep in the winter of the Bush White House's discontent, the education department's inspector general made things worse by issuing a series of reports that slammed the administration's prized Reading First program. The IG charged that Reading First executive director Chris Doherty exhibited a "lack of integrity and ethical values" by trying to strong-arm education officials in some states to adopt a phonics-based reading program called Direct Instruction, while blocking a non-phonics program, Reading Recovery. The report also quoted pri-

vate e-mails in which Doherty defended his preferred early-childhood reading programs against their progressive critics in language unsuitable for kids. An embarrassed administration forced Doherty to resign.

The inspector general's revelations brought intense media coverage and outraged editorials—having more to do with the domestic political war against President Bush than with the "reading wars" over classroom pedagogy that have raged within American education for decades. Most news accounts did-

n't even bother to report that a 2005 American Institute for Research study concluded that Direct Instruction and a similar program, Success for All, were the two most effective reading programs available. Nor did they point out that Reading Recovery, favored by progressive educators, hasn't met the test of scientific research. If Doherty's sin was to lean on a state education agency or two to promote a reading program backed by science over one that wasn't, well, that's just what the Reading First legislation intended.

Reprinted with permission of the author. This article was published Jan. 29, 2007, in EducationNews.org (www.ednews.org).

At \$1 billion per year, Reading First, part of the No Child Left Behind (NCLB) act, accounts for just 2 percent of federal education spending. Yet this program for lifting reading achievement, always the apple of George W. Bush's eye, is already delivering promising results. The commonsense idea informing it—that the best scientific research should guide the teaching of reading—was one of Bush's signature education initiatives since his days as Texas governor, and it makes even more sense today. But the negative publicity surrounding the inspector general's reports could put Reading First under a cloud when NCLB comes up for congressional reauthorization this year. That would be tragic for millions of American kids at risk for reading failure.

To see clearly what's at stake, we need to remind ourselves of the gravity of the national problem that Reading First seeks to solve—and of how it proposes to solve it. That essential context is missing from both the inspector general's reports and much of the media commentary.

After a century and a half of universal public education, and despite the highest per-pupil expenditure on public elementary and secondary education in the world, 40 percent of U.S. fourth-graders are reading below the minimally acceptable level, according to the gold-standard NAEP test. For minority students in inner-city schools, the reading failure rate is a shocking 65 percent. This educational failure bodes ill: children who don't read by fourth grade almost always fall behind in all other subjects, often wind up in costly special education programs, and, as adults, have higher rates of drug addiction, incarceration, and welfare dependency.

Making the situation more tragic, 19th-century American children learned to read very well, thank you, in one-room schoolhouses, with nothing more than a single determined teacher wielding Daniel Webster's Blue-Backed Speller and the McGuffey readers. Even before a public school system existed in America, Alexis de Tocqueville had marveled at the country's extraordinarily high literacy rates.

Happily, recent developments point the way to a solution to the nation's reading woes. For the past several decades, the National Institute of Child Health and Human Development (NICHD), a wing of the National Institutes of Health, has sponsored reading research at universi-

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ties across the U.S, with scientists from cognitive neuroscience, pediatrics, genetics, educational psychology, and child development publishing hundreds of peer-reviewed studies that describe not just how children learn to read but why so many fall behind—and how schools can best keep it from happening.

The converging scientific evidence confirms what our great-grandmothers knew intuitively. The most effective reading instruction for most childrenespecially for those from disadvantaged homes—begins by training them to recognize the relationship between letters and the sounds they make (phonemic awareness), moves on to teaching them how to sound out whole words (phonics), and then focuses on fluency, vocabulary, and comprehension. Reading science has also developed effective new technologies to assess students' progress in mastering the skills they need to decode written

language. To make an analogy with medical science, reading science has discovered not only the educational equivalent of treating diabetes but also the technology that monitors how the treatment is working.

Unfortunately, the similarities between reading science and the medical kind end there. A breakthrough in medical research soon leads to new clinical practice. In education, however, the science has collided head-on with the ideologies and economic interests of the panjandrums of public education.

Reading science is a mortal threat to what E. D. Hirsch has called the "Thoughtworld" of American education—the system of "progressive" beliefs about classroom instruction promulgated by the ed schools that monopolize teacher training. The Thoughtworld has a cult-like attachment to a Romantic theory of reading instruction called "whole language," which recently morphed into "balanced literacy" to make it sound more reasonable to dubious parents. Balanced-literacy true believers claim that to subject children to the "drill and kill" of direct phonics instruction is a form of child abuse.

The balanced-literacy cultists believe that learning to read is a natural process and that most children can intuit the alphabetic principle and the meaning of printed words with a little guidance from a teacher and through pleasant cooperative classroom activities such as "shared reading" and "reading circles." Basically, this approach says that kids can learn to read by reading—by immersing themselves in print. And for some children from literate homes, where print and articulate conversation abound, this approach can work.

Progressive educators don't cite scientific research to support their approach, however, because none exists—not one study based on ran-

domized field trials. In 2002, the whole-language-dominated National Council of Teachers of English passed a resolution attacking Reading First for favoring only "one model" of science and called instead for "implementation of diverse kinds of scientific research, including teacher research." Translation: teachers can evaluate instructional methods by observing their own classrooms, science be damned.

The National Council on Teacher Quality, a mainstream public education advocacy group, recently surveyed ed schools and found that 85 percent of their elementary education classes don't teach the principles of phonics and scientific reading instruction. "The resistance from many educators to [teaching phonics] has been palpable," the report concluded. Of course, interests other than pedagogical are at stake. If a major shift occurred in teaching methodologies, tenured jobs and professional development contracts from the \$500 billion-plus education industry would suddenly be up for grabs.

Such was the state of affairs when NICHD's chief reading scientist, Reid Lyon, and House education committee staffer Robert Sweet drafted the Reading First legislation, early in 2001. Lyon had just become President Bush's informal advisor on reading instruction, while Sweet was a former teacher and longtime advocate for science-based reading programs. With the president's encouragement, Lyon and Sweet consciously designed Reading First to do an end run around the deeply entrenched whole-language movement.

"We knew we were battling a culture of intellectual corruption and hostility to science in the education industry, and we had limited weapons to use effectively against it," recalls Sweet. "Reading First was created to be a catalyst, to provide a financial incentive for schools finally to start doing the right thing for the millions of kids left behind in reading." You could say that

Reading First was a \$6 billion federal bribe to get districts to do what they really should have been doing already.

Getting the program enacted required walking a political tightrope between Republicans wary of federal interference in local decisions and Democrats who liked spending more federal education dollars, but with no questions asked. Compromising, the Reading First legislation abandoned the idea of requiring participating districts to use only scientifically tested reading programs. Instead, districts could also

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use untested ones, as long as they adhered to the principles of scientific reading instruction: phonemic awareness, phonics, vocabulary, fluency, and comprehension.

It wasn't everything Lyon and Sweet wanted, but it was enough—or so they hoped. The two reformers bet that a critical mass of schools would sign on and implement the general principles of reading science, which would then produce evidence that this instructional method was lifting achievement in previously struggling schools. Such a real-life demonstration, they believed, would ignite a countercultural education movement of teachers, parents, administrators, and education activists who would spread the Reading First gospel.

Four years later, the evidence is starting to come in. More than 5,600 schools in 1,700 school districts nationwide have received Reading First grants. The participation level is

impressive in itself. It means that state education agencies and a large number of districts have pledged (in writing) to use Reading First grants exclusively to teach according to the principles of Scientifically Based Reading Research—a phrase that appears so often in the legislation that it has become an acronym, SBRR. So unless officials are lying and just grabbing the money, we now have a critical mass of educators willing to try the pro-science side of the reading wars.

We also know that 100,000 K–3 teachers are receiving training and continuous professional development in reading science. That represents a critical mass, too—one that takes on even greater significance if the Reading First teachers appear to be improving the academic performance of their low-income, at-risk students. Reading First has pulled off something of a coup just in removing all these early-childhood teachers from the ed schools' ideological orbit.

A comprehensive study by an outside evaluator will appear in 2007, measuring Reading First's influence on student achievement nationally. But some states and districts are already seeing significant improvement. When the relevant congressional committees hold hearings on NCLB reauthorization, they might start by looking to neighboring Virginia, where they'll discover a dramatic example of Reading First's power. With apologies to Dickens, we might call it a tale of two school districts—one welcoming Reading First, the other disdaining it.

The first, Richmond, offers a classic profile of an inner-city school district. Of its 25,000 students, 95 percent are black, more than 70 percent are poor enough to be in the free-lunch program, and 44 percent change schools during the year. Until 2001, Richmond's student test scores were among Virginia's worst. Only five of the district's 51 schools achieved the status of full state accreditation.

But 2001 is also when Richmond school officials embarked on an ambitious reform, whose centerpiece was a standardized reading program based on evidence from the NICHD studies. By the time Reading First funds were available in 2002, Richmond was already up and running with a phonics-based reading program called Voyager Universal Literacy. The district channeled the modest \$450,000 Reading First grant into a handful of its lowest-performing schools. But the principles of scientific reading instruction took hold throughout the district.

Since then, Richmond's test scores have skyrocketed. By 2003, the number of the district's schools achieving full state accreditation had climbed to 22. The next year, it rose to 39 and has now reached 44.

Because NCLB requires disaggregation of student performance data by race, we can further appreciate the extent of Richmond's turnaround by comparing the district with the Fairfax district, just across the Potomac from the congressional committees due to review Reading First.

Fairfax, one of the richest suburban areas in the U.S., consistently draws in new residents because of the perceived quality of its public schools. SAT scores for Fairfax's high school graduates stand well above the national average, and 90 percent of those grads go on to some form of higher education. But 17,000 of Fairfax's 164,000 students are African-American, and they're not doing so well; in fact, they're performing far worse than Richmond's black students. In 2004, only 52 percent of black Fairfax kids passed the state's third-grade reading test, compared with 62 percent for Richmond's black students. In 2005, the gap widened to 15 percentage points, with 59 percent of the Fairfax black students passing compared with 74 percent of their Richmond counterparts.

Even more remarkable, Richmond's third-grade reading scores are closing in on wealthy Fairfax's scores for all its students, 79 percent of whom passed the third-grade reading test in 2005. Since enacting its reforms, Richmond has moved from 114th in the state in reading (out of 132 districts) to 50th, compared with Fairfax's 36th.

Fairfax officials have said publicly that they're mystified by the low performance of the district's black students. It certainly has nothing to do with money. Millions of extra dollars for remediation

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programs have poured into the district's schools with higher proportions of blacks. One thing the district proudly refused to do, though, was take money from Reading First. The thensuperintendent said that he didn't want the federal government dictating how his district taught reading and that he preferred the reading programs he already was using. One of these, costing the district \$10 million per year, is Reading Recovery, the same whole-language program that the inspector general accused Chris Doherty of trying to keep from getting Reading First grants—which suggests that Doherty did something right after all.

The apparent connection between Fairfax's disappointing reading scores and its instructional method wasn't lost on several determined area citizens. Fairfax parent Maria Casby Allen and

retired Fairfax teacher and local teachers' union ex-president Rick Nelson teamed up to take the reading problem to the media. They circulated graphs showing how inner-city Richmond was outperforming rich and self-satisfied Fairfax. In one supporting document, Allen noted that "Richmond scores rose dramatically after schools adopted science-based reading programs four years ago," whereas Fairfax "was eligible for federal and state Reading First funding but objected to the science-based reading component."

Last year, Nelson addressed the Fairfax County Board of Supervisors, which oversees the school board's budget, noting that he had warned them for years about the low reading scores of the district's black students and had proposed adopting science-based instruction. "But no one listened," Nelson says. "Fairfax school leaders have chosen to continue fighting the reading wars. . . . School system officials know about the Richmond results. They are refusing to do what works for ideological reasons. The result is abuse of thousands of Fairfax County children."

This tale of two school districts has unfolded something like Reading First's framers had hoped. One district implementing Reading First principles showed dramatic reading improvement in its low-performing schools. As the good news spread, some parents and teachers in another district wanted to know why their schools weren't using the methods that were working magic elsewhere. Nelson and Allen failed to convince district officials, but they're not giving up. "Parents everywhere should compare the performance on third-grade tests of Reading First schools and other schools—then publicize the results," says Nelson. "Parents should also ask questions such as: 'What are your state and locality doing to train teachers in science-based reading instruction?""

From Alabama comes another Reading First success story. A poor state with lots of low-performing schools, Alabama is exactly the type of environment in which Reading First could demonstrate reading science's power. Alabama enthusiastically welcomed the program, becoming the first state to get its grant proposal approved; Reading First was in place in all eligible Alabama schools by the start of the 2002-03 school year, just eight months after the president signed the bill. The state's \$19 million annual program grant underwrites the instruction of about 33,000 students.

The Alabama schools seem to be getting a very big bang for their relatively few federal bucks. "We were huge supporters of Reading First from the beginning, and it has worked very well for us," says Katherine Mitchell, Alabama's assistant state superintendent of instruction and a former East Harlem elementary school teacher. "Our state is moving up, but our Reading First schools are moving up faster." On state reading tests, Reading First students rocketed from 29 percent at grade level in 2004 to 39 percent in 2005 and 46 percent in 2006. On diagnostic reading tests for early-grade children, the Reading First cohort has—astonishingly, since it encompassed the lowest-performing students in the state—almost reached parity with Alabama's broader student population.

Alabama's experience also shows how Reading First's instructional innovations can have a positive influence on all schools in a state or district, not just on those that participate in the program. For instance, Mitchell tells me that her department will now evaluate all elementary school reading textbooks to determine if scientific reading principles inform them—implying that the department will discourage those that lean toward whole language. And the state now requires all schools to use a highly developed diagnostic test, Dynamic Indicators of Basic Early Literacy Skills, to measure children's

progress in early decoding skills. Previously, only Reading First schools employed this powerful product of scientifically based reading research.

When Congress takes another look at Reading First, it shouldn't just consider good-news stories like these. It should also draw conclusions from the travesty that the program was allowed to become in New York City. In this chapter of the story, the problem with federal Reading First officials wasn't that they put too much pressure on states and localities, as the first

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inspector general's report charged, but that they were way too indulgent.

Reading First officials in Washington knew from Day One that the biggest school district in the country was also going to be their biggest headache. In 2003, as the initial Reading First grants went out to states and districts, New York's newly reconstituted Department of Education was marching boldly in the opposite direction. Mayor Michael Bloomberg had taken control of the city's education system. His schools chancellor, Joel Klein, hired über-progressive educator Diana Lam as the deputy chancellor for instruction. Lam swiftly dumped the Success for All reading program that was beginning to show results in about two dozen struggling schools and imposed balanced literacy.

It would have been one thing for Klein and Lam to stand on principle and say no thanks to federal money for a program that they didn't believe in. But Klein wanted his balanced literacy and \$200 million in Reading First money, too. When he realized that this scenario wasn't going to happen, and after much cajoling from state education authorities, the chancellor and his staff grudgingly settled for a phonics-based commercial reading program, though a relatively loose one called Harcourt Trophies, for 46 city schools and another 36 nonpublic (mostly Catholic) schools, also eligible for funds under the program. (Under the Reading First legislation, grants go first to the states, which then distribute funds to local districts as part of a competitive grant-review process; the nonpublic schools participate through the districts.)

But the outside grant reviewers the state had hired considered the city's pitch so poor that they gave it a failing grade—indeed, one of the lowest grades they gave to any of the district proposals. As the federal inspector general eventually discovered, New York State education officials then jumped in, arbitrarily adding the extra points needed for Gotham to achieve the minimum passing grade. The state education department shredded the relevant documents of the grant review and has fended off press queries about the process and about who was on the outside review panel. An official who declined to be identified for this article told me that the state education department was so anxious to have New York City take the Reading First grant—which meant all those millions flowing through the education department—that it guaranteed Klein approval if he applied.

It's not hard to see why an independent grant reviewer, picked for his knowledge of science-based reading instruction, would find the city's submission troubling. For starters, the city proposed spending a big chunk of the first year's \$37 million grant on things that had zilch to do with science-based reading instruction—\$3 million on library books, for example. (It is bal-

anced literacy, not explicit phonics, that fetishizes the idea of surrounding children with "authentic literature," believing that the backdrop will stimulate their reading lessons.) Further millions in the proposed budget were to go for school furniture and for text-books costing around \$350 per student, more than most college students pay for theirs.

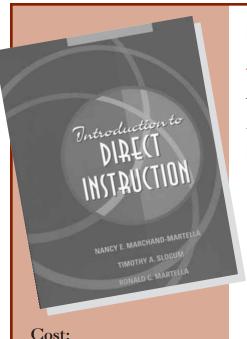
In submitting the proposal, Klein signed a statement attesting that the city had fully consulted about program selection with the nonpublic schools included in the grant. But officials in both the Brooklyn and New York archdioceses told me that no one had ever consulted with them. They remember receiving a call from the Department of Education one week before Christmas in 2003, telling them that if they wanted to participate in the Reading First grant they would have to come up with a list of eligible schools within two days. The Catholic school officials said that they had zero input on the selection of Harcourt Trophies as the

core reading program—or on any of the other details of the proposal.

Most troubling was the city's extraordinary bad faith, which clearly compromised Reading First's implementation. As part of the grant proposal, Klein signed a "statement of assurances" that included a pledge to "implement classrooms that are grounded in scientifically based reading research." He also promised that "only instructional materials, strategies, programs and assessments that have been validated by scientifically based reading research will be used in participating schools." But one day before signing that statement, Klein seemed less than enthusiastic about Reading First's programmatic requirements: "It's being done in the name of science," he told the New York Times. "And the question is: where's the science?" Klein made no bones about it: he signed on to the program for the money, not the pedagogy. "This is a significant amount of money for some

of our really highest needs programs," he noted. "It's a pragmatic decision."

Thanks to the state education department's inappropriate intervention in the grant-review process, the money that New York City received was much more than a "significant amount." The Reading First grant adds up to a minimum of \$1,500 per student (about 30,000 kids in total) for the participating Gotham schools—about \$1,000 more per child than Alabama has been spending in its successful implementation of the program. To get further perspective on how much New York is spending, I asked the founders of Direct Instruction and Success for All to estimate what it would cost to bring their programs to the city's eligible schools. Both came up with around \$600 per student. That figure would buy the most comprehensive, scientifically tested reading programs available today. But the city—or rather the federal government—is now spending 150 percent more for a program untested for effectiveness.



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How much improvement in New York school children's reading all this spending has brought about isn't clear, partly because the program was so late in getting under way. When the results come in, the picture will likely appear mixed, with better outcomes in those parts of the school system where the leadership has shown some enthusiasm for, and fidelity to, the program.

For example, Kathleen Cashin, the superintendent of Region 5, covering some of the poorest parts of Brooklyn and Queens, is a traditionalist who has always favored tightly scripted phonics programs. She encouraged her schools to participate in Reading First and now has twice as many in the program as the next-highest city region. Not surprisingly, early results in Region 5 are positive, with all of the schools that have gone through the two years of the program so far seeing their third-grade reading scores go up. The increases range from 10.5 percent at P.S. 215 to 36 percent at P.S. 65.

Unfortunately, in many other city regions the leadership, even when paying lip service to Reading First, remained committed to balanced literacy. Many New York Reading First schools, for instance, began with coaches and consultants provided by AUSSIE, a professional development firm steeped in balanced literacy and disdainful of phonics. According to an administrator and a teacher working in Region 10 in Manhattan, Reading First schools would do reading lessons in the morning using the Harcourt phonics program and then do writing instruction in the afternoon using the balanced-literacy approach—a violation of the spirit, if not the letter, of the assurances that Klein made to get the grant. Several Bronx schools dropped out of Reading First after two years, basically wasting millions of dollars in federal funds, and returned to balanced literacy. And the children still can't read.

One of the lessons that Congress ought to take from this unfortunate episode is the need to reprioritize Reading First funds. More financial help needs to go to places that have really embraced scientific reading instruction, are getting strong results, and are truly needy. Reading First grants are calculated according to a complex formula, linked to a district's previous share of total Title 1 federal

education spending. But that formula needs alteration. It's unconscionable that New York City, with its dubious record of Reading First implementation and an \$18 billion education budget, should get funding that on a per-pupil basis dwarfs Alabama's or Richmond's. Reading First's financial rewards should go to states and districts that produce results, not those wedded to business as usual.

Despite New York's wrong turn, the \$6 billion for Reading First has more generally been one of the best investments ever in federal education spending. It has already brought some remarkable reading breakthroughs in many parts of the country and among at-risk students. It has spread awareness of what should be going on in the classrooms and in the teacher-training institutions. It has shown that a comprehensive solution to the nation's reading crisis is right in front of our noses. If, in another decade, an unacceptable proportion of America's children still can't read by fourth grade, don't blame George Bush. Blame the education leaders in our states and cities who, offered the solution, didn't grab it. ADI

MARY DAMER



MARY DAMER

In Reading First Debate, A Vote for Chris Doherty

I've been waiting to read what I haven't read yet and so am putting it out there. Do I sometimes tense up at yet another Reading First regulation, another PPVT test coaches have to give, or state training that coaches have to attend? Yes, I admit I do cringe. However, in this age of cynicism and antiheroes where I've come close to dropping out of the voting process completely (and I was once a Chicago precinct captain for

the Independents), I have come to admire Chris Doherty as I do few if any public officials.

I remember before the inception of Reading First, hearing Chris speak at a meeting in Washington describing how states were going to be held accountable for the money that the government gave them for this grant which emphasized research-based curricula. States would have to actually implement the grants that were written. Living in Illinois, where grants seem always to be seen as the means to getting the candy before being ditched once the candy arrives, I couldn't believe that Chris really intended to enforce that level of accountability. Talking to him later, it became clear that he was an honest-to-goodness idealist and was describing a federal program unlike any I'd ever seen. Later that night I told my husband how the wolves would be at this person's door if ever state money was revoked or threatened to be revoked. A federal program with teeth and

enforced accountability? That was a whole new paradigm.

Later it seemed as if this hopeful new program would be funding the plethora of Reading Recovery programs around the country—but somehow the accountability had kicked in. I'm still not sure how that came about, but I sure admired it.

Has Reading First impacted states like Ohio and Illinois? Not really!! But there are plenty of other states ... districts ... schools where training in phonics was implemented only because of the money, accountability and stipulations of Reading First. A few weeks ago I attended a two-day phonics extravaganza put on by the state of Georgia for struggling readers. Think back a few years ago about where outside of Florida or Texas you could see any conference highlight phonics. Gosh, after Reading First was initiated, the IRA even started asking some speakers with a phonics-first rep-

utation to speak at their national conference. Sure, the speakers were tokens, but they were there.

It's unfortunate what's happened, but from my vantage point, Chris stood up to the old boys' no accountability doling out of money, stood up to Reading Recovery, which has produced some of the most pernicious word guessers in schools, and didn't let the wolves bother him. Too bad they finally broke down the door. These days we don't see many such examples of personal heroism.



BOB DIXON



The Burden of Science

Editors' note: Bob originally posted this to the DI listserv discussion list on Sept. 27, 2006.

A point of view I haven't seen expressed yet regarding the Reading First discussion is one that doesn't directly involve people and personalities. The legislation governing Reading First grants refers to the distribution of grants being based upon a state's application indicating the use of "scientifically proven programs." That's a legislated requirement of a bill with bi-partisan sponsorship. That wording places a huge burden on Reading First. Strictly speaking, it places a theoretically impossible burden on Reading First: to "prove" something in some of the hard sciences (e.g., biology) and all of the social sciences is a monumental challenge. Let's just say that "scientifically proven programs" really means instructional programs for which there is a preponderance of scientific evidence showing its effectiveness with the broad range of students for whom it is intended. That, alone, is a monumental challenge.

I think we could say that in higher education, there is a generally strong bent against scientific studies in education. For reasons that escape me, a very long time ago some educator read or tried to read Kuhn on paradigm shifts, and then made a monumental leap to the conclusion that because it's difficult or impossible to measure quarks (or some such really small things) without having the measuring device influence the behavior of the thing being measured, there must not be any external reality. Each of us constructs his or her own external reality (in the "radical constructivist" view). I don't quite follow the "moderate" constructivist view, to tell you the truth.

Now let's suppose that "person"—anyone—is given the job of directing Reading First. "Person" would put herself or himself in a difficult position from the start if she or he set out to violate the requirements of the Reading First legislation. If "person" has the slightest inclination to abide by the legislation, then the position is *still* almost as difficult. Maybe more difficult. Why? Because, as it happens,

there aren't very many educators (potential grant reviewers) out there who believe that science has any place in decisions about instructional programs and curricula. And there aren't very many instructional programs for which there is a preponderance of scientific evidence suggesting effectiveness with struggling readers.

In the meantime, most publishers were caught unawares and had no time to develop and test programs with the potential for demonstrating strong evidence. The editorial departments didn't have a prayer, so the marketing departments took charge. Some publishers were unabashed about claiming effectiveness upon evidence that didn't exist, or evidence that wasn't anything like "scientific." *Caveat emptor*. Used cars or reading programs. (We have examples of the alphabet in our program. Let's just call it phonics.)

A panel of scientifically-oriented educators had to review grants. That's a small club, if we're talking about people who are oriented toward—sold on—technically well-designed intervention studies. If someone had established a rule that no one belonging to this small club could be a reviewer if she or he had the slightest involvement in instructional programs, there would have been almost no one quali-

fied to review materials. There is a high correlation between scientificallyoriented reading research expertise and people who are involved in writing scientifically-oriented reading materials. Frank Smith wasn't ever going to try to develop a DI-like program, no more than Ed Kame'enui was going to urge schools to buy no programs and instead get a bunch of good literature books. I can't quite envision how a panel could not be "loaded" with reviewers with a scientific bent toward both reading research and reading instruction. What's the alternative? Get in equal numbers some rationalistempiricists and some constructivists in the name of fairness or diverse points of view?

The only thing that *could* have happened, if compliance with the law was an issue, did happen: not very many programs could possibly have passed even relatively light rigor as "scientifically proven," and not many reviewers could have been located who would have been whole-heartedly dedicated to the spirit and the letter of the law.

Complicating the whole issue (which started out as bi-partisan) is the coincidence—unfortunate, as it turns out-that Open Court and DI both have the same publisher, under the McGraw-Hill banner, and that President Bush and Terry McGraw (I've heard) are good friends. The conspiracy-minded among us have got to love that. Yes, there should be far more programs that have a reasonably substantial base of well-designed intervention study data behind them. In a perfect world, this most recent reauthorization of the Elementary and Secondary Education Act would inspire the widespread development of good reading programs. People should have a choice from among a set of outstanding reading programs. If Reading First could stay bi-partisan (or better yet, nonpolitical), then reading programs would probably improve in substance, rather than simply rhetorically. Who among us, even on a DI listsery, would

really care that much which reading program was used with poverty children, in particular, if most people were using a good, effective one—if not scientifically proven, then with some substantial preponderance of evidence?

And finally (thank goodness, you say), let's just make what is probably an unfounded, broad generalization about liberals and conservatives, with respect to beginning reading for children deeply immersed in poverty. For the sake of this illustration, let's just say that conservatives desperately want these chil-

dren to learn to read because achieving that goal is so much cheaper than not achieving it. And let's say liberals are compassionate, at best, or are just plain bleeding hearts. Clearly, not every liberal is unaware of the incredible financial cost to society when beginning reading fails, and not every conservative is insensitive to the quality of life failed readers can expect. My point is clear, I hope: even in the face of unfair generalizations, there is no *practical* difference between liberals and conservatives with respect to this problem. Everyone wants it solved. And I think it's safe to say

DI-ANNOUNCE Electronic List

An electronic list is now available: DI-ANNOUNCE. As its name indicates, DI-ANNOUNCE is an electronic list for announcements on resources for those studying or implementing Direct Instruction. List topics include the following:

- research articles, news articles, and other publications on DI;
- updates on DI implementations;
- meetings, conferences, and workshops on DI;
- authors' remedies for specific exercises in the DI programs that have been identified as being difficult for children;
- new DI products and resources;
- grant opportunities or awards for DI research or implementation;
- job opportunities for DI researchers or practitioners;
- sources of data on student performance for analysis or distribution.

Note that DI-ANNOUNCE postings are limited to ANNOUNCE-MENTS. The list is NOT a discussion list, and it is moderated. Any replies, jokes, or other off-task messages will be rejected. There is an on-line, web-based archive of postings for later reference and retrieval. In this way, the list is designed to be a streamlined tool for communicating information on the most critical developments in the field of Direct Instruction.

To subscribe, send a message to join-DI-ANNOUNCE@lyris.nifdi.org.

You will then receive a "welcome" message with additional information about the list. You can also go to http://lyris.nifdi.org/ to see an archive of past announcements sent to the list, including the "welcome" message.

The list launched last October. You are invited to join the list and send announcements as appropriate. Feel free to call Kurt Engelmann at the National Institute for Direct Instruction (NIFDI) via 877.485.1973 toll-free or email kurt@nifdi.org if you have any questions about the list.

that in the world at large, outside of education circles, no one knows about or cares about constructivism. Put another way, most of us get through the day depending on a verifiable external reality observed and described by science. Without doubt, science has a very long way to go with respect to the social

sciences, but science won't progress in any area (such as beginning reading) without *starting* somewhere. The alternative is to let people do what they've always done with basal reading programs, as well as supplements and so on: use the program that's easiest to teach and/or has the best illustrations.

P.S. I'm all for teaching kids to read so well that they can read and understand and appreciate—and maybe find inspiring—anything remotely resembling good literature. I just finished reading Dickens' "Bleak House," and I often wished I could read better than I do.

AL HOFMEISTER, Utah State University, Retired

AL HOFMEISTER, Utah State University, Retired

Zig Engelmann: A Passion for 'What Works'

The mid-1960s was a time of deep national unrest. The War on Poverty and the concern for the war in Vietnam were two examples. There were other national concerns. In 1966, Burton Blatt published a photographic essay, Christmas in Purgatory. This provided a searing portrait of life in a mental institution and brought national attention to the abuse of people with mental retardation who were committed to America's institutions. Nationally, a "deinstitutionalization" effort had begun, and parents and service agencies were developing programs to support persons with mental disabilities in local communities. The 10 years from 1965 to 1975 were the "Wild West" years of community-based services for persons with mental disabilities. This was a time when the institutionalization option was questioned—but before the federal and state laws of 1976 mandated that public education accept instructional program responsibilities for children and young adults considered "handicapped."

In the late 1960s the University of Oregon and the Pearl Buck Center in Eugene, OR, initiated a model program to provide educational and vocational services for teenagers and young adults considered "mentally disabled." The Pearl Buck Center was founded for children with disabilities by a holocaust refugee, Elizabeth Waechter, in

1953. While serving as the first program coordinator for teenage and adult services in 1968, I realized that many clients had spent their lives in a state institution, receiving no academic or vocational instruction. Those with an IQ of 25 to 50 were considered "noneducable" or "trainable." For the person classified as "trainable," the possibility of achieving any level of vocational or recreational literacy was rarely suggested by educational leaders of the period. One teacher textbook printed in 1965 included the following very explicit statement to new special education teachers:

Do not attempt to teach trainable children to read by means of phonics. It is a waste of time and effort. The concept and application of phonics requires a greater amount of intellectual capacity than these youngsters possess. It is entirely too abstract to grasp. One might as well teach them the theory of numbers. It can't be done.

It Can't Be Done: Reality or Challenge?

In 1968, with some financial support for instructional materials from the University of Oregon's Northwest Regional Special Education Instructional Materials Center, a reading program was initiated for teenage and young adult Pearl Buck clients. Two reading programs

were available to us. One was a Project Follow Through program, known then as DISTAR (Direct Instruction System for Teaching and Remediation). The reading instruction component of DIS-TAR is now known as *Reading Mastery*, and is published by SRA. We acquired a well-worn set of purple ditto copies that provided an instructional script. At that time, my only knowledge of Zig Engelmann was that of the senior author, employed at the University of Illinois. The other program, The Sullivan Reading Program, was then published by Behavioral Research Laboratories of Palo Alto. The DISTAR program used intensive, direct, oral instruction in small groups. Many of the Pearl Buck Center clients lacked the expressive oral language, and other behaviors needed to participate in any systematic group instruction, or other individual seated activities. The selected reading intervention was a combination of the two programs.

The Sullivan student materials served as extra practice materials and a measure of the degree to which the DISTAR program would generalize. The DISTAR curriculum sequence and teaching procedures provided the core of the program. We were not concerned with finding the best reading program. The research question was, "Can we teach reading to this population with *any* instructional program?"

Reprinted with permission. This article first appeared in Utah Special Educator, Vol. 26, No. 5 (May 2006), www.updc.org.

An initial formative test of the prototype program was conducted with five clients. Contrary to the prevailing professional predictions of the time, there was clear evidence of client progress.

The reading instruction was then expanded to 22 teenage and young adult clients of the Pearl Buck Center. This group had IO scores ranging from 25 to 47. The question of instructional concern was, "What are the academic and social prerequisites needed to participate in the selected instructional program?" Of all the prerequisite skills, the most important were the academic skills involved in "sound-symbol" relationships. For all practical purposes, the client who could learn the letter names or sounds for the letter symbols could succeed in the reading program. After four weeks, 11 of the 22 students mastered basic sound-symbol skills and required less reteaching as they progressed through the program. The IQ scores which had initially condemned this population to lifelong institutionalization had no significant relationship to reading success. Indeed, the correlation between reading success and I.Q. was slightly negative at -0.11. In contrast, one available measure of sound-symbol skills, the "letter-naming" subtest on the Wide Range Reading and Arithmetic Test (WRAT), showed a very practical relationship of 0.78. Client success continued, and several of the group became avid recreational readers.

For the clients, their parents, and those of us involved in designing and delivering the reading instruction, the implications were positive and lifelong. Contrary to the predictions of the

experts, there was much that could be done. To break through the ceiling set by IQ scores and "expert opinions," teachers were needed who cared enough to acquire technical competence, and who had access to a reading program developed by someone who successfully applied the science of instructional design. For us, that "someone" was Sigfried Engelmann. "Zig" resolved the confusion between the traditional psychological assessments of the time, and the science of instruction. For me, I was totally amazed by the fact that not only were the clients achieving vocational and recreational literacy skills, but the further most clients advanced in the reading program, the less reteaching was required to achieve the curriculum-embedded milestones. That finding was a major tribute to the instructional designer—Zig.

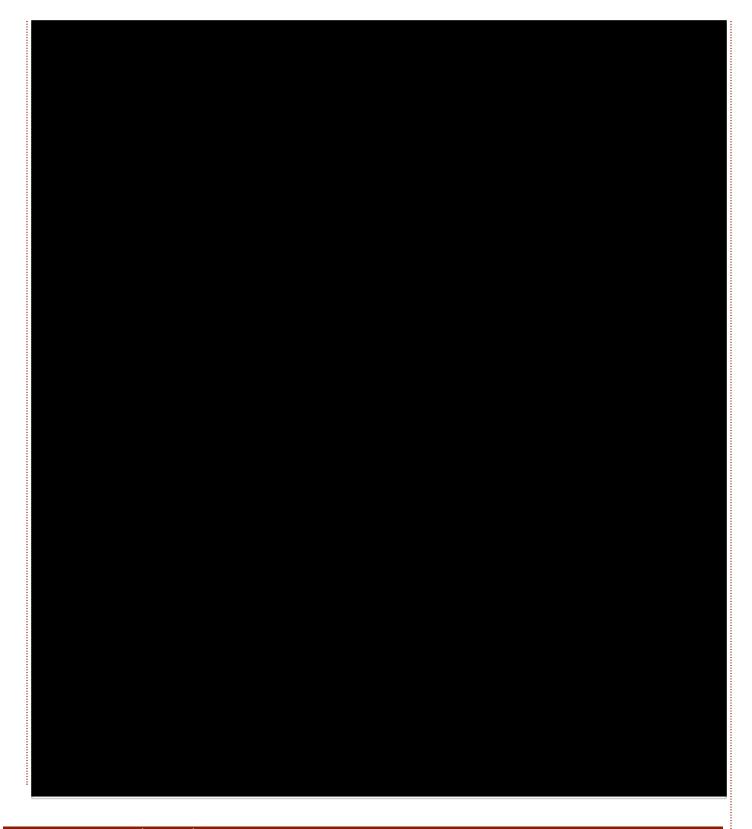
When I accepted employment at Utah State University (USU) in the summer of 1969, I found the same confusion between traditional psychological assessment and the science of effective, valid instruction. This confusion led to invalid and pessimistic client treatments and instructional projections based on psychological tests and labels such as "trainable." To give a valid instructional identity to USU's Special Education Department, the faculty turned to Zig Engelmann for guidance in the design of theoretical and practicum experiences. We found, in Zig, a rare and special blend of passion for serving the most vulnerable students and a deep respect for the science of instruction.

I can think of so many valuable lessons I learned from the "Zig" experience that helped shape my work and increased my expectations of students and teachers. In his own words, Zig shared the following about Direct Instruction:

The philosophy behind the program is basically simple. We say in effect, "Kid, it doesn't matter how miserably your environment has failed to teach you the basic concepts that the average 5-yearold has long since mastered. We're not going to fail you. We're not going to discriminate against you, or give up on you, regardless of how unready you may be according to traditional standards. We are not going to label you with a handle, such as dyslexic or brain-damaged, and feel that we have now exonerated ourselves from the responsibility of teaching you. We're not going to punish you by requiring you to do things you can't do. We're not going to talk about your difficulties to learn. Rather, we will take you where you are, and we'll teach you. And the extent to which we fail is our failure, not yours. We will not cop out by saying, 'He can't learn.' Rather, we will say, 'I failed to teach him. So I better take a good look at what I did and try to figure out a better way." (Zig Englemann, unpublished)

On behalf of the many teachers and students who benefited over the past 36 years—Thanks, Zig. If the 10-year period from 1965 to 1975 was the "Wild West" of special education services, then Zig was our "Wyatt Earp"!

CHARLES ARTHUR, Arthur Academy



CHARLES ARTHUR, Arthur Academy

Arthur Academy Charter Schools

The state of Oregon has a charter school law that allows local school districts to start up charter schools. A

long-time ADI member, Charles "Chuck" Arthur, was able to convince the David Douglas School District in Portland, OR, to allow him and his wife to start an all-DI school in the fall of 2002. They started the Arthur Academy charter school with only two kindergarten classrooms—and you can probably guess who the two teachers

were. By the end of the 2005-06 school year, the first school, in the David Douglas School District, had completed its fourth year. The Arthur Academy has now added three more schools. The next two schools, in the Woodburn and Reynolds school districts, completed their second year in 2005-06. The last school, in the Portland School District, has completed its first year.

Each school started with grades K-2 and added one grade each year up to fifth grade with one classroom for each grade level. For the 2006-07 school year, the enrollment across the four school buildings is 450 students with 19 classrooms. The student return rate is from 85% to 90% each year so that, over time, most of the students benefit from the program from kindergarten. Well-trained teaching assistants are used for a half day in each classroom.

The educational program includes Direct Instruction for all the basic skill areas as well as Core Knowledge for social studies. The schools use *Reading* Mastery, Reasoning & Writing, Spelling Mastery, and Connecting Math Concepts. The DI programs provide the skills for the students to apply in the Core Knowledge program. Core Knowledge programs focus on history, geography, science, music, art, and literature through high-interest themes and projects. These programs help provide general knowledge that strengthens basic skills. This kind of content and application learning is increased at each grade level.

Summary

The chart in Figure 1 summarizes the student achievement (SAT-10) test results for the 2005-06 school year with a total of 302 Arthur Academy students in four schools. Contrary to most schools, the Arthur Academy students are tested every year, beginning in kindergarten. New students were tested in the fall as well as at the end of the year along with all returning students. Fall tests were combined

with the previous spring tests for the first "Fall" bar. Note that this dramatic improvement in scores occurred in only one school year.

The chart shows that the Below-Average range included more than one-third of all the students at the beginning of the year. This fraction changed to one-sixth by the end of the year. By contrast, the two highest levels of performance increased dramatically. Even the number of students within the Average range was reduced.

What is most important, however, is to see what actually happened to students within each range, that is: How many moved up? How far? How many may have moved down? For example, it appears as though many of the Below-Average students bypassed the next range of Average and jumped to the Above-Average and even to the High Achievement range. Almost half of the students starting out in the Above-Average range moved into the High Achievement range and most of the students that started in the High Achievement range continued their high level of performance.

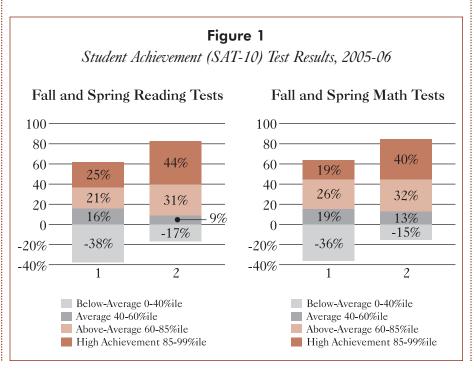
When just focusing on students in the top quartile, almost all of these stu-

dents stayed in this level by the end of the year, with most still making gains. The school with the longest record, in the David Douglas district, had 75% of its enrollment finishing in the top quartile.

These impressive results are mostly attributed to the instructional approach and techniques found in the specialized programs of Direct Instruction. As the young staff at each of the schools becomes more skilled with these programs, it is expected that additional improvements will be made.

A more detailed summary follows:

Below-Average. (0-40 percentile) Out of 114 students in reading at this level, 59 student, or 52%, improved two or three levels to the Above-Average or High Achievement range. Out of 108 students in math at this level, 50 students, or 47%, improved two or three levels to the Above Average or High Achievement range. A large portion of each of these groups improved well beyond the average level. The average gain for the group in reading was 39 percentage points. In math it was 35 percentage points. Some students that enter the schools Below-Average



require two or three years to catch up to grade level.

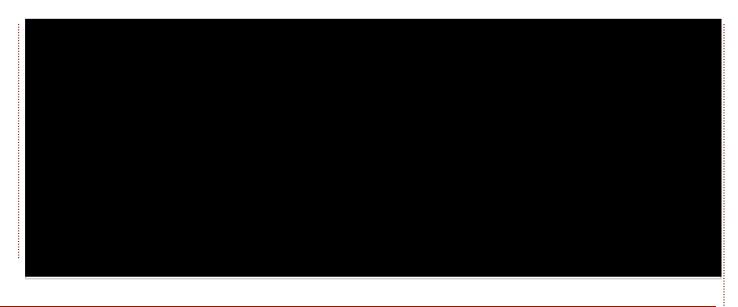
Above-Average. (60-85 percentile) A large portion of the students who started the year in the Above-Average range moved up to the High Achievement range by the end of the year, 29 of 64 students (45%) in reading and 37 of 79 (46%) in math. Only a few students moved down to the Average range. The tendency of this group was to move up. The average gain was 8 percentage points in reading and 7 in math.

High Achievement. (85-99 percentile) For those students who started out in the High Achievement level, most of them stayed in this range, 66 out of 76 (87%) students in reading and 53 out of 57 (93%) in math. Although students at this level do not have much room to move up the ranking scale, the tendency still was on the positive side, .5 percentage points in reading and 1 point in math.

With these figures, one can see that there is room for improvement, but it

can hardly be said that each population of students has not been served well. A large share of the low performing students made the dramatic improvements necessary for their future success in school and the high performers either made more gains or continued performing at a high level in relation to their national peers. The Arthur Academy charter schools are showing what can be accomplished using a full-immersion model of Direct Instruction and consistent support for DI.

MARTIN A.KOZLOFF



MARTIN A.KOZLOFF

Martin's Musings

Scaffolding Via Big Ideas

According to Ellis and Worthington, "Students can become independent, self-regulated learners though instruction that is deliberately and carefully scaffolded" (Ellis & Worthington, 1994, p. 30). What exactly is scaffolding? Here is the definition offered by Kame'enui and Simmons (1999):

Scaffolding is the help or guidance teachers give students as they acquire new knowledge. ... In cognitive scaffolding, the goal is for students to "get it," or understand the first step in the learning process. The role of scaffolding, however, is to eliminate the problems that could block students from getting it: not understanding or remembering the sound-meaning correspondence in learning to read, for example, or developing a dislike for the activity and giving up (p. 18).

Scaffolding also can help students apply knowledge—that is, to eliminate problems that block generalization and application; for example

forgetting a rule in a strategy or not carefully attending to progress.

How does scaffolding remove or prevent blocks to getting knowledge? In general, the answer is making things crystal *clear* and helping students *hold onto* that clarity as time passes. Kame'enui and Simmons (1999) say:

On new or difficult tasks, scaffolding may be substantial at first and then be systematically removed as learners acquire knowledge and skills. For example, scaffolding can be accomplished through multiple formats, including the careful selection of examples that progress from less to more difficult, the purposeful separation of highly similar and potentially confusing facts or concepts (e.g., mitosis and meiosis); /p/ and /b/ in early letter-sound correspondence learning, the strategic sequencing of tasks that require learners to recognize and produce a response, or the additional information that selected examples provide, such as highlighting the digits in a division problem (p. 18).

Big ideas are another kind of large scaffolding.

What are Big Ideas?

Here is what Kame'enui and Simmons say about big ideas. They are:

Concepts, principles, or heuristics that facilitate the most efficient and broad acquisition of knowledge. ... (They) focus on essential learning outcomes.

Capture rich relationships among concepts. Enable learners to apply what they learn in various situations. Involve ideas, concepts, principles, and rules central to higher-order learning. Form the basis for generalization and expansion. (Kame'enui & Simmons, 1999, p. 9)

In other words, big ideas can run through all of a curriculum or through major portions of a curriculum. For example, the teacher **introduces large units** or a series of lessons with a big idea.

"This next set of poems reveals the big idea that social progress has a price. I'll say that rule

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August 20–22 Haworth Inn and Conference Center Holland, Michigan again. Social progress has a price."

She then introduces daily lessons by reminding students of big ideas they are working on. Throughout the lesson she points out how current materials and tasks are derived from and help elaborate upon the big ideas.

"Today's poem is Blake's 'The Chimney Sweeper.' In addition to imagery and rhyme, be alert to hear the big idea. Everyone, what is the big idea these poems reveal?"

And she ends lessons and projects by reminding students that their work has been guided by and revealed the big ideas. In summary, a big idea helps students see the relevance of what they are learning and applying, to focus on important features of what they read and hear, and to organize in a meaningful way what they are learning. Despite day-to-day differences in the words, tasks, and materials, one constant is the big idea.

How to Find and Select Big Ideas

There are at least three sources of big ideas:

- Standards and objectives in a state's or a district's course of study.
- 2. Research suggesting the importance of certain big themes and skills. E.g., decoding words via knowledge of letter-sound correspondence is the most general and reliable strategy for early reading.
- 3. The teacher's analysis of the knowledge system—for example, themes in Greek tragedy.

There are at least three kinds of big ideas: central concepts, rule relationships or propositions, and theories or models. Here are examples of each type of big idea.

Central concepts. Central concepts can run through much of a curriculum.

They will help students focus on relevant features of materials (i.e., big ideas provide clues to what is important) and help students get the important samenesses despite differences in examples. A big idea in an early mathematics curriculum might be that the four operations—adding, subtracting, multiplying, and dividing—are all versions of the same thing, namely counting. Addition is counting forward by ones; subtraction is counting backwards by ones; multiplication is counting forward (adding) by groups; and division is counting backward (subtracting) by groups (Stein, Silbert, & Carnine, 1997). The number line might be a graphic organizer depicting the big idea and scaffolding students' applications of it. Imagine mathematics instruction that begins with rote counting (a verbal chain) and then rational counting (counting groups of objects—3 apples and 4 cookies). Soon children are taught that addition is counting forward, and are taught a simple (and general) cognitive strategy for addition, that involves counting.

6 + 5 = ____ Start counting forward from six. Count five times. Say the last number. ... *Eleven*. Write eleven in the space. Say the whole thing.

Six plus five equals eleven.

6 + ____ = 11. Start counting forward from six. Count until you get to eleven. Make a mark each time you count. How many marks? ... *Five*.

Put that number in the space. Say the whole thing. ... Six plus five equals eleven.

This cognitive strategy uses the big idea that addition is counting forward by ones. When the teacher introduces the next strategy—subtraction—she will tell students that subtraction too is counting—backward by ones. Students use a strategy very similar to the one for addition.

11-5 = Start counting backward from eleven. Count five times. Say the last number. ... Six. Write six in the space. Say the whole thing. ... Eleven minus five equals six.

Because they are using the same big idea, learning subtraction should be relatively easy—merely another way to count.

Here is another example of a central concept serving as a big idea. In teaching ancient Greek tragedy, or ancient Greek culture in general, a big idea might be belief in the inevitability of just retribution. For example, in the *Orestia* plays by Aeschylus, Clytemnestra conspires with Aegisthus to kill her husband, Agamemnon, who sacrificed their daughter Iphegenia before the expedition to Troy. In the first play, *Agamemnon*, the Chorus warns:

Among the wicked of mankind

An old crime breeds a younger crime.

Sooner or later, when the appointed day

Comes for the new crime to be born—

A Wrath, a Demon for the house,

Unfightable, unwarrable on, unholy,

A bold, black Ruin for the household—

Truebred to its ancestral type.

The next play, *The Libation Bearers*, continues the big idea. Orestes, the son of Agamemnon, is old enough to avenge his father's murder. He kills his mother. The Chorus says:

The anvil of Justice stands firmbased;

Swordsmith Destiny whets the blade;

And the glorious Avenger, profound in mind, the Fury,

Brings in for retribution a child,

To expiate the old pollution

Of the house at long last.

The big idea is continued in the final play, *The Eumenides*, where Orestes faces the same principle of justice and its consequences. The Chorus says to Orestes:

It is your turn for giving—let me gulp up

The scarlet broth from your living limbs. Let me get

Nourishment out of you, drinking an ill drink.

Without big ideas as scaffolding, Shakespeare's King Lear might be misunderstood as a story of a nutty old man, three daughters (two wicked and one sweet but naïve), a thunder storm, and a guy whose eyeballs get squooshed.

I will suck your life's blood dry, then hale you below

To pay the painful penalty for mother murder...

For mighty Hades is strict

In calling men to account under the earth.

His mind keeps records, Nothing escapes his control.

By stating this big idea before reading the plays, during difficult passages in the plays, and at the end, the big idea scaffolds students getting and generalizing the big idea from one play to the next, and later using the big idea to compare and contrast different plays.

Big ideas also guide students through reading, discussing, and making sense of American history. What are some big ideas that led people to leave their British homeland and establish colonies here; that led them to find subordination to the British crown legitimate at first and then illegitimate; that led them openly to oppose British domination both in word—the Declaration of Independence and in deed—the formation of militias prepared to fight the British? Among others, these big ideas included the notions, taken from Greek and Roman writers, and from Locke and Rousseau, that human beings have certain Godgiven rights that cannot be nullified by man; that the political state is a voluntary contract for mutual protection in which citizens agree to abide by laws and obey their governors as long as their governors do not demand more than is justified by norms of fairness; that when the demands of governors exceed norms of fairness, the social contract is violated and void: that therefore, the People (who are now simply Mankind) have the right to establish a new political relationship. These ideas—if displayed on the board, written by students, voiced frequently by the teacher, and then used by students in their own discussions and papers—would help students see the common threads running through historical persons, writings, and events.

Propositions or rule relationships. Propositions or rule relationships are another kind of big idea. Without big ideas as scaffolding, Shakespeare's King Lear might be misunderstood as a story of a nutty old man, three daughters (two wicked and one sweet but naïve), a thunder storm, and a guy whose eyeballs get squooshed. Likewise, MacBeth might be misunderstood as a story about an otherwise decent fellow who couldn't say no to his hardboiled wife, three creepy witches, a ghost, and a yucky beheading. However, a few big ideas—in the form of if-then rules or propositions—would help students see that both plays-and others of Shakespeare's plays—are more generally about what happens when the political organization of society is weakened, either by the king (Lear)

giving away his power or by the king (MacBeth) misusing his power. The rule is, when the political organization of society is weakened from the top, interpersonal relationships (for example, parents and children) and feudal relationships become confused and disorderly, personalities disintegrate, the realm becomes chaos, the bestial side of man is released from the moral restraining force of the idea of the realm to wreak destruction, and even nature goes mad.

The same big idea runs through more modern writing and could be used by a literature teacher to help students see sameness across literature types and centuries. For example, Yeats's poem, "The Second Coming," reveals the big idea that things fall apart, and when they do, primitive behavior emerges and destroys.

- Turning and turning in the widening gyre
- The falcon cannot hear the falconer:
- Things fall apart; the centre cannot hold;
- Mere anarchy is loosed upon the world.
- The blood-dimmed tide is loosed, and everywhere
- The ceremony of innocence is drowned;
- The best lack all conviction, while the worst
- Are full of passionate intensity.
- Surely some revelation is at hand;
- Surely the Second Coming is at hand.
- The Second Coming! Hardly are those words out
- When a vast image out of Spiritus Mundi
- Troubles my sight: somewhere in sands of the desert

- A shape with lion body and the head of a man,
- A gaze blank and pitiless as the sun,
- Is moving its slow thighs, while all about it
- Reel shadows of the indignant desert birds.
- The darkness drops again; but now I know
- That twenty centuries of stony sleep

Yeats's poem, "The Second Coming," reveals the big idea that things fall apart, and when they do, primitive behavior emerges and destroys.

- Were vexed to nightmare by a rocking cradle,
- And what rough beast, its hour come round at last,
- Slouches towards Bethlehem to be born?
- (W.B. Yeats, *Dial*, November 1920)

Similarly, a major portion of a curriculum on reasoning might be guided by two general rules: (a) Don't take the validity of statements at face value, and (b) examine the evidence, the words, and the generality of the statements. Specific rules to be taught—all examples of the two big idea rules might be:

- 1. Just because two things happen around the same time doesn't mean one causes the other thing to happen.
- 2. Just because you know about a part doesn't mean you know about the whole thing;

- Just because you know about a part doesn't mean that you know about another part.
- 4. Just because you know about a whole thing doesn't mean you know about a part.
- 5. Just because words are the same doesn't mean they have the same meaning.
- 6. Just because a writer presents some choices doesn't mean there aren't other choices.
- 7. Just because events have happened in the past doesn't mean they'll always happen.

These rules, as big ideas, help organize instruction and students' knowledge in a curriculum called *Corrective Reading: Comprehension* (Engelmann *et al.*, 1998)

Theories and models. Theories and models are a third kind of big idea. Theories and models consist of several interconnected concepts and rule relationships. Examples of theories and models to scaffold students' acquisition and application of knowledge include the following:

- 1. Life cycles. Birth, growth and development, reproduction, decline, death.
- 2. Cycles in civilizations. Emergence, growth and differentiation (e.g., division of labor, social classes), exhaustion, transformation. In fact, this is the theory that runs through Arnold Toynbee's massive work, *A study of history*.
- 3. Cycles in societies and in smaller social formations. Challenge, response, and consequence. This model runs through the two-volume curriculum called *Understanding U.S. History* (Carnine, Crawford, Harniss, & Hollenbeck, 1994). The big ideas are presented early in the curriculum, are used to introduce and later to summarize events and periods, and are used by

students to organize answers to questions.

Note that big ideas could all be presented visually as concept maps, which also help students to organize and activate knowledge.

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Why 'Sound Out' Irregular Words?

read by the following strategy. Students say the one sound for every symbol/letter, just like we have taught them, in left-to-right order and blend those sounds together without stopping. Then they say those sounds "the fast way" to pronounce the word.

Processing, or looking at, every letter/sound in left-to-right order ensures that students correctly identify the right word. Students who consistently process every letter in every word before deciding what the word is, read accurately. Eventually, they have seen each word enough times that they can very quickly identify words and identify them correctly every time.

Our goal in teaching irregular words is to allow students to continue using the same strategy that they usually employ. Before students recognize a word, they cannot possibly know whether or not the word is regular. When students look at an unknown word, they have no way to decide to choose a different strategy than the one they have learned on previous words. Students must begin by saying the sounds in order from left to right, just like they have before. They use the same sounds they always do for those symbols—even if those letters make a different sound in that word.

After the students have said the sounds in order, using the one and only sound we have taught them, then they need the teacher's help. They won't

In *Reading Mastery* we teach children to i hear the word by saying it the fast way, so the teacher says, "Yes, that's how we sound out the word. But, this is a funny word. Here's how we say the word." Then the teacher pronounces the word.

> This strategy is good because the students use the same strategy all the time to identify words-say the sounds in order left to right. Using this strategy for irregular words is unique to Reading Mastery.

It might seem like students would get confused, but they don't. Why don't they? Students are not confused because they learn a one-to-one correspondence that never varies.

For example: "was."

There is one and only one word that sounds out "www-aaa-sss." And it is always pronounced "wuz." As long as students carefully sound out the word "www-aaa-sss" they get the same answer every time, a funny word pronounced "wuz." It may take them a second to remember the way that funny word is pronounced, but they will get it right.

Most reading programs teach students that some words "can't be sounded out." That's not true. All words can be sounded out-even if the sounds don't create the exact correct pronunciation. Using those sounds learned and going left to right will prevent students from being confused about the identity of

words or how to figure them out. But if some words "can't be sounded out," what's a student to do?

Students who are not taught to sound out words left to right every time start trying other strategies. Bad news! Many begin to guess the identity of words as a whole unit. Only when students start looking at words as whole objects do students have issues with reversals, seeing "saw" as "was" backwards. If a reader sounds out each word left to right, there's no way to confuse a word that starts with "sss" with a word that starts with "www."

Another powerful advantage of this format is that it teaches students the sounds of irregular words in order. These irregular words then can be spelled correctly by the student. If a student knows that "said" is sounded out as "sss-aaa-ih-d," then the student can spell the word correctly. A student who has practiced sounding out "sss-aaa-ih-d" would never spell said as "sed."

You might ask, "If the irregular word doesn't use the correct sound for each letter, why use the sound at all? Why not just use the letters?" There are three parts to the answer.

First of all, even in irregular words, saying the sounds in left-to-right order brings readers closer to the correct pronunciation of the word than they can get any other way. So, saying the sounds in order is a good way to approximate the word and therefore be reminded of "how we say that funny word." Saying the sounds from left to

right is much better than guessing wildly, or looking at pictures.

Secondly, in *Reading Mastery I* and the first part of *Reading Mastery II*, we have not taught the letter "names" to students. So we cannot assume that they know the names. Therefore, the only way they can identify the letters/symbols that make up an irregular word is by the "sounds" of those letters/symbols. So spelling the words would not be helpful to children who don't know the letter names.

Third, starting in *Reading Mastery III* we *do* have students spell words. They spell words when they first learn them, and we also have students spell words when they make a mistake in decoding them. That spelling correction still makes students process the letters one at a time in left-to-right order, but by *RM 3* we can use the letter names.

Most Common Student Errors

The most common error students make is to say the wrong sound for each letter. Instead of saying the sound they have been taught for that symbol, students say the sounds in the word the way it is pronounced. What they are doing is simply saying the word slowly. This strategy depends upon knowing the word first, then saying the word very slowly. We don't want them to do that. They need a

strategy they can use when they *don't* know the identity of the word.

The next most common error is for students to sound out the word correctly, but then pronounce the word as it is sounded, instead of how it is actually pronounced. Saying an irregular word that way can get pretty weird ("wass" for was or "kawmeh" for come), but it comes from not paying attention. Students who make this error are on "auto-pilot" (i.e. the lights are on, but nobody's home) because what they have just said doesn't even make a real word.

Basically we can correct those two errors by simply re-doing the format again. We just make the students "Say the sounds that are written" when they say the wrong sounds. And we remind them of "how we say the word" if they pronounce the word wrong.

Most Common Teaching Error

Our most common mistake is to allow the students to "sound out the word" exactly as it is pronounced instead of saying the sounds for the letters that the students have been taught. If students are sounding out the word "other" for example, it is easy to forget the correct sound for "o" (which is like "ah") and let the students say "uh—th—er."

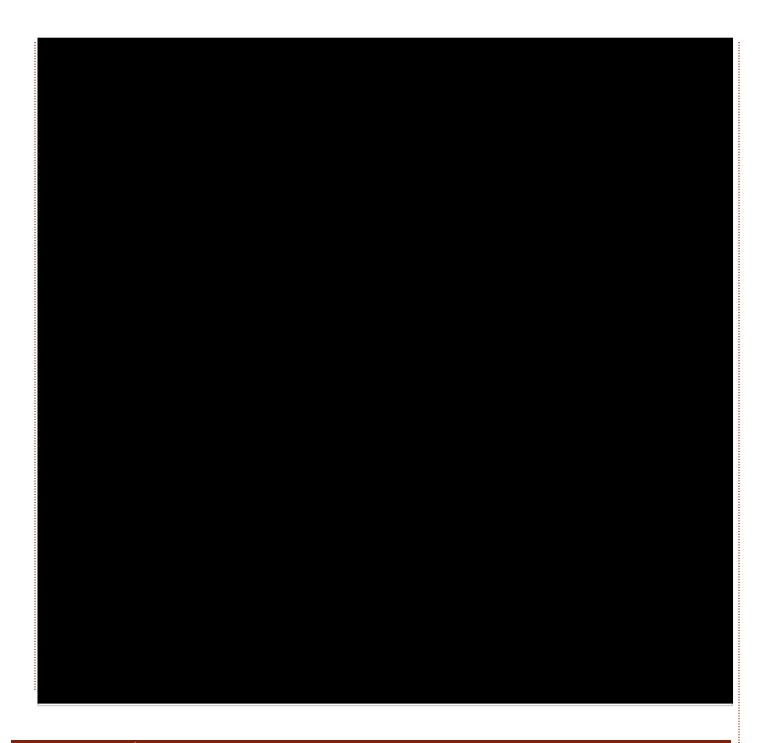
This creates problems when students fall into the trap of saying the word slowly instead of saying the sounds learned for each symbol. They start doing the same thing with regular words as well—waiting until the word has been said and then just saying it slowly when the teacher says to sound it out. Students who have fallen into this trap will say, "I'll sound out the word, as soon as you tell me what it is."

The Solution to This Problem

You want students to use the sounds they have previously been taught to sound out the word every time. In this way they can identify words they don't know yet. And even when they get to an irregular word and they hear that odd combination of sounds they remember that it is a "funny word" and remember "how we say the word."

It is important to prepare for lessons ahead of time by identifying the irregular words before the lesson begins and marking them in some discreet way. Be sure to look at the sounds and think about how each letter is supposed to sound. Making sure students use the sounding out strategy consistently is one of the greatest gifts a reading teacher can bestow upon students. The use of this consistent strategy makes for accurate readers who learn how to read "the fast way" and more quickly become fluent readers who can read for fun and enjoyment.

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Active Monitoring

When students are participating in DI lessons, guided practice, and independent practice activities in the classroom, it is up to the adult personnel present to keep students on-task and, just as importantly, keep them accurate in their responses. How can you do this most effectively, especially with a larger group? Proper active

monitoring is the answer. When the adults actively monitor the students, not only will their on-task behavior increase, but they also will be receiving the corrective feedback necessary to increase learning and improve mastery. Active monitoring should be done by the adults, during the original lesson delivery, and all the time when the

"scripted" portion of the lesson is completed. The same behaviors should be carried out by whoever is assisting in the classroom.

Circulate

Adults should move around the classroom looking closely at what the students are doing. It is not sufficient to scan from one position. You must get close enough to read what students have written and see the students'

papers, fingers, and pencils. This cannot be done effectively in classrooms where rows are not straight and where aisles are not wide enough for the teacher to stand on at least two sides of every student. Classroom arrangements that prevent the teacher from easily standing next to any student will have students practicing incorrectly or off task completely. If space is at a premium it may be necessary to push two rows of student desks together, so that students sit next to each other in pairs, leaving more room for aisles. Other than the ability to see the board at the front of the room, there is nothing more important to accomplish with your room arrangement than ready access to every student. The teacher should be able to quickly and easily have access to the space next to each student. The teacher and other adults must then be sure to move around and monitor while standing next to each student. Instructional assistants who are not teaching a group should be circulating and monitoring rather than sitting and correcting papers. The rule here should be: Every adult in the room should be involved in student contact when there are students present.

Correct

As the adults circulate they should be correcting student work. It is not sufficient to tell students to sit in learner position. It isn't enough to remind them to get back to work. Active monitoring is more than even rewarding them for working hard. Active monitoring means looking at the students' answers. It is as important to immediately attend to and respond according to the accuracy of written work as it is to attend to the accuracy of oral responses. That is so important we're going to say it again. It is as important to pay immediate attention to the accuracy of students' written work as it is to attend to the accuracy of their oral responses. We have seen many teachers who always correct oral answers that are wrong, but walk right past students

who were writing down incorrect answers in their written assignments.

The teacher's job is to motivate students to care whether or not they are doing their work right, so the adults must show that they both know and care who is getting it right. Active monitoring is most effective when the teacher appears to be excited about students getting correct answers and disappointed when they get things incorrect. Moreover, the teacher and assistants can complete a lot of their correcting at the same time. Adults can put a star (or a happy face stamp) or something next to every item they have looked at on a student's paper that is correct. Those items won't have to be corrected later. Equally importantly—the star has let the child know that the item was correct.

In some classes children stay on task without adult intervention for five or ten minutes at a time. Other classes need a lot of structure and frequent feedback from the adults to stay on task. In the beginning of the year, in some classes, the adults may need to praise and recognize on-task behavior every 60 seconds to keep the kids going the right way. In classes that need more frequent feedback on behavior, it is important to correct and give feedback to an individual for no more than a few seconds before quickly turning one's attention again to the whole class. Students love teacher attention and become quite good at finding ways to keep the teacher from quickly moving on. Active monitoring, especially of a class that is just learning how to work independently, does not include extended time with individual students. After a class has gotten to the point where all students stay on task easily, a teacher can spend a bit more time with each individual student. That extra time allows the teacher to correct several items at a time, put a

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star to indicate that everything is correct down to that point, and come back later and correct a bit further on the page. This "correcting while walking" procedure can save a lot of time later correcting at home.

An equally important component of active monitoring is to indicate when items are wrong. Adults should make a mark on the student's paper next to the incorrect item and tell the child something like, "Oops. That one is wrong. Look carefully and try it again." The adult can be sympathetic, but should not stop to help the first student with an error on an item. Such a practice (of not helping students with independent work) is fair only in a Direct Instruction lesson. In DI lessons there is always group instruction and guided practice of anything students are asked to do independently. That guided practice immediately precedes asking students to do the same exact task independently. If after a DI lesson the adults provide extended help with items on which students have just been instructed, the students will learn that they don't have to pay attention in class, because they will immediately get help even when they don't know what the teacher has just taught. These students will wonder why they should pay attention.

Instead when the adult monitoring sees an error, it is important to immediately move on to several other students and begin checking that same item—to see if others made the same mistake. The instructor should praise those who got it right and give them a star. If the teacher finds that three students have the same error, the teacher should immediately stop the class and provide a whole class correction—making sure that those three are paying attention this time. The correction should be worded exactly as in the original instruction. In the same amount of time that the teacher could provide a correction to one student, the teacher has now provided a correction to all the students. This saves the

time of making the same correction three times in a row and will give the teacher time to do three different examples as part of the correction—and do them with all the students. When the teacher is correcting papers, the mark made previously on the student's paper will indicate that this item should be reviewed and reinforced in the coming lessons.

Getting excited and enthusiastically praising correct academic responses is probably one of the most important functions of a teacher.

Positively Reinforce Both Behavior and Correct Academic Responses

Active monitoring requires that the adults reward students who are putting down the right answers on their papers. It is inadequate to reward students simply for being in learner position or being quiet. Students need to be learning. They can prove that they are learning only by doing the work and getting the right answers. Active monitoring includes circulating and rewarding students on the basis of whether or not they are correctly answering choral questions to the group. While students are reading, it is important to reward other students who are tracking with their finger. When the teacher is directly teaching, it is valuable to praise or reward students who correctly answer questions on individual turns. Getting excited and enthusiastically praising correct academic responses is probably one of the most important functions of a teacher. The same applies to written work. As students are working independently, even when only doing one item, as adults circulate and correct, they should provide some praise, recognition, or a "pat on the

back" for students who are accurate on the first attempt.

Giving recognition to students with correct answers while monitoring is important to help students (especially those who may not yet be intrinsically motivated) care about whether or not they are getting it correct. Classes who are not highly focused or concerned about their academic performance absolutely require this kind of extrinsic reward for being correct. Certainly any class in which independent work performance falls below 85% correct requires this kind of motivation. Teachers of Direct Instruction who complain that students don't seem to try hard to do their written work correctly are simply advertising the fact that they are not providing effective reinforcement as part of active monitoring. The reward should almost always be accompanied by enthusiastic praise such as, "Alright, Delmenio! You got that one correct," along with a star/+ on his paper (correcting). In second grade and below, this praise may be public and may be enough of a reward. But certainly in third grade and above it would be much better to give a behavior point, a bonus point, a star, a token, a scholar dollar, or some small reward along with the praise. Students learn to care about their learning from teachers who model that they care about how well students are doing their work.

It is critical for teachers to have a system in place where they can frequently reward small bits of good behavior as much as every 30 seconds if need be. The system needs to have an "open top" because it is very important for all the adults in the room to be able to reward a lot if the students need that kind of reinforcement schedule. Here's the rule: Teachers should reward good behavior at least three times as frequently as they are required to remind students how to behave. In a class where the teacher has to redirect the students back on task five

times in 20 minutes the teacher needs a system that allows him/her to reward people in the class 15 times during that same 20 minutes—or 45 times an hour if need be. If the teacher reaches a limit where he/she can't afford to reward someone—e.g., the class has reached the top of the chart or they have full points for the day—then the teacher has lost the ability to influence behavior. Sometimes it requires rewarding five or six students before the others tune in to what they are supposed to be doing. A reward system where the teacher can't reward frequently enough is ineffective and painful because there's nothing left to do but yell or nag.

Correct Off-task Behavior

After the adults who are actively monitoring have rewarded several students who are getting the right answers, they should begin to consequate, or provide consequences for, students who are not on task. Teachers must have a mild consequence that can be applied as many times as necessary during the day for students who are not bothering or remembering to do the task required of them. It is just as bad for students to fail to learn because they are quietly off task as it is for them to fail because they are disruptive. The consequence should be mild enough so none of the adults are tempted to just let a child "slide" because their behavior is not causing a problem for other students. If the consequence is too punishing, teachers may not want to administer it for "lesser offenses." A good consequence is to take away or cross off the kind of points being given when students are on task. That way a student can earn themselves back out of the "hole" by getting to work. The point of the consequences is to motivate students to work, not just annoy them. If it never works to get students back on task and always escalates into a big scene then the consequence is probably too harsh.

Another way to consequate students who are not engaged is by "taking" a

teacher point as part of the Teacher-Student Game. (See Fall 2006 edition of *DI News* for a complete explanation of the Teacher-Student Game.) Again, taking a teacher point in the game is a mild consequence, which means adults can do it with a smile and without causing bitterness and huge upset.

Teachers must have a system for providing corrective feedback in a way that can be done without tiring of it. It needs to be quick and relatively painless to administer. The definition of nagging is reminding students to fol-

Teachers should reward good behavior at least three times as frequently as they are required to remind students how to behave.

low the rules after they have failed to do what they should, without any consequence. Nagging can become a fulltime job. This "job," by the way, is one which students are happy to let the teacher have. If the teacher is willing to continually tell students when and how to behave, the students don't have to bother thinking about it themselves. This is the opposite of teaching them responsibility. Once students have been taught classroom expectations, and been given a couple of weeks to learn them, the teacher should provide a mild consequence for students who ignore what they are supposed to be doing. Avoid things that take too long or involve getting students to give you something, like taking tickets back from students, or punching a hole in their behavior card. The consequence needs to be something that is quick, easy to do, and doesn't require any cooperation from students to administer-because if they fail to cooperate it results in a big confrontational scene.

Teachers do not have any really scary consequences at their disposal, so they shouldn't expect the consequences to have any deterrent power. (It's hard to imagine students saying, "Oh my gosh! I don't ever want that to happen to me. I'll always be good now!") Instead what teachers need is just something that keeps reminding students of what the teacher wants. The consequence is something students would rather not have happen to them—but they can live with it if they have to. If it is too harsh the adults will have to be angry before they will administer it and then the whole classroom atmosphere becomes tense, negative, and uncomfortable. Instead teachers need something they can deliver in a friendly way, saying something like, "Gee, I'm sorry you're not working. I'm going to have to take a point off your chart. I hope I see you working soon so you can earn it back."

Summary

Whenever students are supposed to be engaged it is important for the adults in the room to actively monitor. They must work hard to motivate the students to stay on task. Adults must move around the classroom looking closely at what the students are doing. As the adults circulate they should be correcting student work (marking items right or wrong) and giving feedback on how students are doing. As the adults circulate they must, at the same time, reward the students who are getting the answers correct on the first try—in such a way as to motivate the other students to be accurate as well. And finally, actively monitoring does involve correcting the behavior of students who are not on task. ADI