# Direct Instructions

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# DI Successes Despite the Obstacles

The accomplishments of the 2002 ADI awards recipients are amazing. Their stories, summarized by Amy Griffin in this issue, encourage us all to work harder to achieve what they have shown to be possible. It is gratifying to know that these phenomenal success stories are representative of a larger and ever growing body of successes across the nation. Through their stories, the recipients share what they have learned in their persistent efforts to implement DI with integrity.

Not all attempts to implement DI are as successful as those of the awards recipients. Fortunately, we can learn from our failures as well as our successes if we study them with open minds. Muriel Berkeley and Carrie Amberge have done that and, in this issue, they share their insights into the variables that must be in place to ensure maximal success with DI. In her paper titled, "When Direct Instruction Doesn't Work," Carrie Amberge focuses on classroom variables that are under the control of the teacher. By juxtaposing what happens when DI does not work against what happens when DI does work, she shows clearly what teachers can do to ensure that their students learn.

In her article on the Baltimore Curriculum Project, Muriel Berkeley discusses a variety of outside-school factors that mitigate against successful implementations as well as some important within-school factors that are essential to success. She does an outstanding job of communicating the type of disciplined adherence to the model that is characteristic of highly successful implementations. This is a must read article for those who are involved or plan to be involved in schoolwide or district-wide implementations of DI.

One of the major obstacles that we all face in our DI work is this: We have to deal with the barrage of misinformation and outright untruths promoted by supporters of whole language and/or other approaches that are not research based (e.g., Reading Recovery). As DI successes have received more and more favorable press in recent years, the whole language attacks have become more and more intense and vociferous. Allington's (2002) paper titled, "What do we know about the effects of Direct Instruction on student reading achievement?" (www.educationnews.org) is a perfect example of the rhetoric filled with untruths that characterizes the whole language camp. Zig Engelmann and Gary Adams's letters of rebuttal to Allington's false allegations against DI (www.educationnews.org) are reprinted in this issue. One by one, Zig lays out the fallacies in Allington's "logic." Adams presents convincing evidence that Allington had not even read the report of DI research that he critiqued so vehemently.

The arguments put forth by Allington and others in favor of reading approaches that do not work are not new. They have been around for a long time. Although the terminology employed in the rhetoric and the names of the recommended teaching approaches have changed in some instances, the substance of what they say and do has not changed. The issues brought up in debates of today are strikingly similar to those that were aired in the last half of the 20th century when research showed again and again that whole language and whole language-like approaches to beginning reading instruction simply don't work. It's time

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for us to put this old debate to rest so that we can move on to asking really important questions such as those posed by Bob Dixon in his View From Askance column in this issue (e.g., questions about the role that phonemic awareness plays, or doesn't play, in beginning reading instruction).

Although most of us old-timers know well the whole language/Direct Instruction debate of the last half-century, newcomers to DI may not. In the belief that knowledge of that history can help us to confront today's obstacles more effectively, the debate is revisited in this issue. Martin Kozloff, in his own unique and analytical style, exposes the flawed logic and the rhetorical devices that Goodman used to launch the whole language movement. He critiques Goodman's 1967 and 1976 papers that portray reading as a "Psycholinguistic Guessing Game" and the miscue analysis that portrays errors as nonerrors. He cites studies which showed that Goodman's conceptualization of reading as a "Psycholinguistic Guessing Game" is just dead wrong.

Kerry Hempenstall's critique of the three-cueing system ties Goodman's early work to whole language as we know it today. The system's overemphasis on semantic and syntactic cues (i.e., meaning cues) at the expense of graphophonic cues (i.e., letter-sound correspondences) is simply another way of misconceptualizing reading as guessing and errors as indications that the learner has constructed meaning. Hempenstall makes the important points that the "running records" employed by today's Reading Recovery teachers (a) provide information similar to that provided by Goodman's miscue analysis, and (b) are based on the same flawed conception of reading. The current emphasis on "Reading Recovery" is but one example of how a flawed approach can change its name without changing its substance.

"Balanced Literacy" is another term that is used today to cloak the same old practices that failed as whole language. In my home state of Wisconsin, for example, balanced literacy is being promoted by the state department of instruction and various school boards. Teachers are strongly encouraged, if not "required," to attend training in balanced literacy instruction. In May of 2002, Professor Mark Schug of the University of Wisconsin, Milwaukee spoke against the balanced literacy program proposed for the Milwaukee Public Schools. His presentation is published in this issue in the hope that it will be helpful to others in the state and around the nation as they work to oppose the continued use of whole language under the guise of balanced instruction. Another must read for DI advocates is Louisa Moats' paper titled, "Whole Language Lives on as Balanced Instruction" (http://www.edexcellence.net/library/w holelang/moats.html).

The February 13, 2002, issue of Education Week carried a letter by Goodman in which he compared himself to Galileo and likened his critics to Galileo's enemies. He charged that "current efforts to narrowly define what constitutes scientific research in literacy and more broadly in education, and to decide whose results are to be incorporated into law, are clearly motivated by the same kind of political agendas that motivated Galileo's enemies." Lisa Leppin and David Ziffer, two frequent contributors to the DI listserv, wrote letters to the editor which tell how Goodman got it backwards. The fact that their letters were published in Education Week (February 27 issue) is an encouraging sign. The Leppin and Ziffer letters (reprinted in this issue) serve as examples of the kinds of things that each of us can do to contribute to current efforts to move education in the right directions. As Editor of DI News, I encourage your involvement and look forward to hearing about it. ADI-

# ADI Conferences

Save these dates

### 6th Southeast DI Conference and Institutes

June 10–13, 2003 Adams's Mark, Florida Mall Orlando, Florida

### 8th Mountain States DI Conference

July 7–9, 2003 Antlers Adam's Mark Colorado Springs, Colorado

### 29th National Direct Instruction Conference and Institutes

July 20–24, 2003 Eugene Hilton and Conference Center Eugene, Oregon

### 8th Midwest Direct Instruction Conference and Institutes

August 6–8, 2003 Holiday Inn Mart Plaza Chicago, Illinois



Lately, I've pinched myself upon awakening every morning. The Reading First Initiative. Is it real, or did I just dream it? The critics of this incredible piece of bi-partisan legislation are coming out of the woodwork, so I guess it's real.

Briefly, states apply to the Department of Education for grants to improve K–3 reading, in the areas of phonemic awareness, phonics, fluency, vocabulary, and comprehension. Critics call it a "phonics" program, apparently because it includes phonics at all, but certainly not because phonics is the sole focus of the initiative. Most of the money will go to schools and/or districts with the highest poverty levels and lowest achievement levels.

The ongoing and possibly growing criticism of phonics really does astound me. The reason it astounds me so much is this:

#### Phonics is not a teaching method. Phonics is not instruction.

Rather, phonics is (rather obviously, I think) a description of the relationship between English language, which (just as obviously) is oral, and English orthography, which isn't. To be "against" phonics is like being against subject-verb agreement. The relationship between English language and orthography simply exists. Each language with an orthography has some identifiable relationship to that orthography-some relationship that simply exists. Some writing systems are "more phonemic" than English, which is to say, they more regularly reflect symbol-sound correspondences. Some writing systems are alphabetic,

but don't use the Roman alphabet. Some writing systems are logographic (such as Chinese). Some are syllabic (such as Japanese).

Phonics *per se* is not a universal predisposition toward a given approach to reading content. Quite obviously, analyses of other languages and their writing systems yield other descriptions of relationships, many of which are not very "phonemic" in nature. Descriptions of other *phonemic* orthographies, obviously, are different from descriptions of English symbolto-sound relationships. It is an accurate *description* to say that the sound for X is /k/, if we're describing Greek.

A description of the relationships between English letters and phonemes, *per se*, has no particular implications for *instruction*. In fact, a challenge for most of us would be that of developing such a description initially without looking through instruction-colored glasses. (We can find pretty exhaustive descriptions at the library. Some are tainted with instruction and others are not.)

This requirement of looking at content objectively *before* making instructional decisions is a basic tenant of Direct Instruction design. When we talk about "analysis" in conjunction with Direct Instruction, we are assuming that we first have some instruction-free content to analyze. Otherwise, why do analysis? If we already know how we're going to teach something (meaning we're probably going to do what everyone else does), what would be the point of analysis? (As something of an aside, the traditional notion of "task analysis" is not part of the design of Direct Instruction. DI tasks *derive* from an analysis of content. Nothing derives from an analysis of tasks.)

The critics of "phonics" focus upon letter-to-sound relationships that are "irregular" in some sense, to some degree. A critic would point out that when we see the letter "t," we say one sound; when we see the letter "h," we either say one sound, or no sound at all (e.g., hour); and when we put them together, sometimes we say the two separate sounds (e.g., outhouse), but most of the time, we say one of two completely different sounds, the voiced and unvoiced "th sounds" (as in thin and then).

The fact that someone is criticizing these relationships involving "t" and "h" belies an instructional bias from the beginning. As a *description* of how "t" and "h" work in English orthography, there is neither anything to favor nor anything to oppose. The only real question with respect to a *description* is whether the description is thorough and accurate. If it is, then *as a description*, it is a "good" description. The idea of "opposing" a good description simply doesn't make any sense. We don't oppose good descriptions of syntax, or phonemics (sounds, but no letters).

For the instructional designer (in a DI approach to design), a good description is the critical point of departure for content analysis. Generally speaking, the goal of content analysis is to identify bases for generalization. (Good old "rote DI" is more obsessed with generalization than any approach to instruction I'm aware of.) In the course of doing an analysis of practically anything, even math, potential barriers to generalization are inevitable. There is *never* a question about whether there will be obstacles to overcome-such as the business of "t" and "h" described previously. Never.

Here is why the critics are so quick to dismiss phonics based solely upon a

thorough and accurate description of letter-to-sound relationships: the critics simply don't have an arsenal of knowledge of instruction for overcoming inevitable barriers to generalization. They are clueless. Thus, we get incredibly egocentric statements from critics of phonics, saying in effect, "There are irregularities in phonics, and I personally don't know how to overcome them to ensure that students generalize accurately, and if I don't know how, then I suppose no one knows how, and therefore, I have to conclude that phonics is a poor content approach to beginning reading instruction."

No kidding. Two people look at exactly the same thorough and accurate description of letter-to-sound relationships. One can't figure out how to get around problems, and that one punts. The other is a genius at figuring out ways to get around inevitable obstacles, and does so, and ends up effectively teaching beginning reading, using phonics as the content basis for doing so. The first one isn't even interested in how the second one pulled off such an incredible accomplishment. Basically, the "critics of phonics" (which, as I've said now more than once, doesn't even make sense) give up at the point of describing the content. They don't even know what they don't know. They are unaware of even the possibility that someone smarter than they are can effectively deal with all the problems inherent in the content.

Any reader familiar with DISTAR Reading and Reading Mastery has seen some remarkable, ingenious ways of dealing with a host of challenges that English phonics does, in fact, present. You probably know that those programs initially "regularize" "th" and other digraphs by tying them together and treating them as if they were a single grapheme. The "tie" gradually fades away. The outcome is accurate decoding. (The critic seems to hold the belief that instruction begins with outcomes, and therefore objects to temporary devices that help students move gradually toward an outcome at the end.)

The voiced and unvoiced "th" are relatively easy. Teach the more common of the two, and teach it thoroughly. Then introduce the other, after the first is fully mastered. This is in contrast to the inexplicable "instructional practice" of introducing things like this (or there, they're, and their) all at the same time. The "silent h" in "hour" is just an easier example of the same thing. The "th" in "outhouse" is an example of how morphology interacts with phonemics in English, and how that interaction is represented in print. Technically, the "th" digraph crosses a "morphemic boundary" between "out"

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and "house." Other examples of "morphemic boundaries" interacting with phonemics in English include situations such as: act + ion = action. When we cut all the jargon, we end up with a way of demonstrating that something that *appears* to be irregular at first blush might not be, if we look a little harder and dig a little deeper.

Ironically, this "DI approach to analysis" is more critical than the critics. For instance, the critics don't cite potential confusion among d, b, p, and q as "problems with phonics." Because—to understate the facts a bit—the critics tend not to be very instructionally oriented, they can't even identify all the genuine challenges of teaching beginning reading effectively, never mind efficiently.

In a previous "Askance" column, I wrote about poor phonics instruction. Unfortunately, I guess I used a naughty word in the title, and the column got itself published anyway. I'll briefly reiterate what I thought was the central message of that column, and which I think is still a central issue with respect to "phonics."

On one extreme, we have phonics as simply a description of orthography, apart from any instructional considerations. At the other extreme, we have "really good phonics instruction." Although we can look at any instruction analytically and make some fair predictions about effectiveness, the bottom line on "really good phonics instruction" is high beginning reading achievement, and high remedial reading achievement, brought about *efficiently*.

Either analytically speaking or empirically speaking, we have to recognize that somewhere between the extremes is phonics instruction that isn't so hot. I won't say that terrible phonics instruction is worse than whole language, but I will say that poor phonics instruction is probably a greater threat to the long-term health of really good phonics instruction. The unhappy fact is that people aren't that discriminating. If a critic points to poor phonics instruction and rightfully criticizes it, both that critic and whoever listens are more than likely to generalize the criticism to all phonics instruction. That's just a reality.

We can't stop people from jumping on the phonics bandwagon. What we can do, though, is always talk about *phonics instruction*, rather than "*phonics*." That is a strength of *Put Reading First*. It isn't a blanket endorsement of "phonics," divorced from instruction. Although severely limited by space, *Put Phonics First* discriminates among "types" of phonics instruction (synthetic, analytic, embedded, etc.). It emphasizes "explicit systematic" phonics instruction (in keeping with research findings). We should all make a similar effort, in casual conversations or workshops or speeches or publications, to *avoid* talking about "phonics" as if phonics *per se* was anything more than or less than a description of orthography. Simultaneously, of course, we can advocate "really good, systematic, explicit, phonics instruction." That's really what we mean, anyway.

Perhaps "hotter" than phonics these days is "phonemic awareness." This is a topic that drives me sort of nuts. I suppose I have a predisposition against the label itself. In DI circles, we don't talk much about making kids "aware" of various things. That sounds a lot to me like "exposure" or "covering topics." It's a little on the abstract side. We're interested in outcomes that are a bit more tangible. What can the kids do, and is it worth doing? In the most literal sense, it is difficult to imagine anyone without severe sensory difficulties not having some sort of phonemic awareness. The fact that a native speaker behaves differently to "cat" and "cats" is some indication of awareness, if completely subconscious.

Again, *Put Reading First* does a good job of translating an abstraction into actual tasks. The tasks are pretty clear. The rationale for the tasks in general, and some of the specific tasks, is less clear to me. In general, it is said (in *Put Reading First* and elsewhere) that phonemic awareness is a prerequisite to beginning reading, or possibly concomitant with beginning reading, at the very beginning.

Here's a question that must come to the mind of every teacher who used *DISTAR Reading* and its successors before phonemic awareness got real popular: if phonemic awareness is a prerequisite to learning to decode, how was I able to teach so many kids to decode without it? I'm venturing into an area where I have some strong feelings that I couldn't prove (at the moment) if my life depended on it. Having excused myself for being responsible for what I say, here's what I think: *SOME* phonemic awareness tasks are *PROBABLY* desirable but not strictly *NECES-SARY* as prerequisites for teaching beginning reading.

The potential usefulness of some phonemic awareness tasks depends completely on the method we're going to use to teach beginning reading. The oral onset-rime types of tasks make

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some sense *only* if we're using patterns with changing first sounds in our instruction. Otherwise, such tasks would no doubt promote "awareness" in some sense, but there would be no causal chain linking the oral task to reading instruction.

What about a task like this: I'll say a word, and you tell me the last sound in the word? Sounds sort of good, and phonemic, and seems to promote awareness, but I have to wonder about the causal links that connect this task to the reading instruction. Put another way, when during the reading instruction do we deal with the last sound in a word, and *only* the last sound in a word? I shouldn't even get started on syllables. I *hate* syllables. They are about as inconsequential in English language and orthography as anything I can think of. (I don't hate syllables in the broad picture: they're pretty useful when teaching a syllabic writing system, such as Japanese.) "Work on syllables" has been around for a long time. Only recently has such useless practice been elevated through a loose association with phonemic awareness.

On the other hand... oral blending. I don't think we *must* teach oral blending as a prerequisite to beginning reading. When blending is a critical part of explicit, systematic phonics instruction, the students learn oral blending as a by-product of the instruction. And oral blending isn't a goal, so I wouldn't get too excited about this particular byproduct of good instruction. On the other hand, the causal links from oral blending to blending are clear as a bell. If kids are taught oral blending (well) before they start decoding, can that help? I would think so. My guess is that the blending in the reading program would come about a little easier—and maybe a lot easier for some kids-if the students can already blend orally. But if the kids are going to learn to read anyway, just how much time would be devoted to oral blending prior to reading instruction? My guess is: not too much. If the kids are ready to learn oral blending to mastery, then they're also ready to learn how to read. The biggest question-an empirical one-is how to deal with oral blending and reading the most efficiently. In my mind, that's the *only* question.

I seriously doubt that this is an eitheror question. Guessing again (and I'll stop saying that now—you know I'm guessing), the most efficient and effective practice might be to begin work on oral blending slightly before reading instruction begins, and then to continue it for a little while in conjunction with reading instruction.<sup>1</sup>

1 Note that *DISTAR Reading* et al. taught a form of "oral blending" from the beginning, wherein kids learned to say things like "iccceee creeeeeam" fast. Yes, ice and cream happen to be syllables, but the activity doesn't "teach syllables." It teaches oral blending.

(This is a freebie for grad students looking for a dissertation topic.)

Amidst all this speculation, we have plenty of extant empirical evidence showing that kids can learn to blend without having first gone through the phonemic awareness variety of phonemic blending. The scientists in us are curious about the possibility of doing anything more effectively but especially more efficiently. But if we're going to tinker with something that isn't broken, we ought to be cautious about it.

What about segmenting? The link between phonemic segmenting and decoding is not as direct as that between oral blending and blending, but there is a link. One way of looking at segmenting is that it is teaching oral blending "backward and forward," which is a lot like saying that we're teaching oral blending really thoroughly. The most obvious benefit of segmenting shows up in spelling. Mastery of segmenting does not even begin to ensure accurate spelling. Rather, mastery of segmenting reduces the likelihood that a substantial number of "types" of error will occur. For instance, students who can orally segment are less likely to transpose letters that represent sounds in the oral word.

When students listen to individual sounds in *DISTAR Reading* et al. and come up with the word that those sounds comprise, they are orally segmenting. Segmenting and oral blending are very old news in Direct Instruction. They didn't derive initially from an examination of research, but from a rational, logical analysis of what students needed to know in order to reach certain important outcome goals.

*Put Reading First* makes this statement: "Children who receive instruction that focuses on one or two types of phoneme manipulation make greater gains in reading and spelling than do children who are taught three or more types of manipulation. One possible explanation for this is that children who are taught many different ways to manipulate phonemes may become confused about which type to apply" (p. 7).

The *Put Reading First* document doesn't list types of phonemic manipulation tasks in an order of priority, probably because the authors restricted themselves to findings from the National Reading Panel. My own take has probably emerged: just teach one or two types of phonemic manipulation if you teach oral phonemic manipulation at all, and make oral blending the first priority, and segmentation the second.

Yes, we should "start easy" and work our way along, but that doesn't mean we have to do different tasks that happen to be easier than the tasks we really want to teach. The beginning instruction on oral blending can, of course, be designed to be very easy.

I don't agree with one recommendation from *Put Reading First*, the idea of teaching "easier" types of phonemic manipulation first, then "harder" types later. That advice does sound intuitive, and it might be the best the National Reading Panel could find in empirical studies. Beyond that, though, it doesn't make any sense. "Ease of learning" doesn't have much to say about "usefulness of the tasks." That latter category is all we really care about.

Yes, we should "start easy" and work our way along, but that doesn't mean we have to do different tasks that happen to be easier than the tasks we really want to teach. The beginning instruction on oral blending can, of course, be designed to be *very* easy. Start with a word that just has two sounds. Make them both nonstop sounds. Make sure they are easy to pronounce. (We won't start with "or.") Model the blending. Model it again. Lead students through it. Model it again. Check the students out. Check them out again, a bit later. If we have to, model it again. Lead the kids through it again. Do that as many times as necessary. Don't talk to them about phonemes and the distinctive characteristics of phonemes and allophones and all that stuff someone might talk about during some sort of odd inservice. If they learn to blend that first word "by rote," don't lose any sleep. Do a different word like that. If you started with a vowel-consonant word, switch to a consonant vowel word. Maybe use one sound in common to the two words.

That's easy. Over time, there are numerous ways to make it more difficult—not because we have an *a priori* desire to make things more difficult, but because the outcome for the skill is much more difficult than this. This is not rocket science. This is the relatively easy part of designing instruction. (The hard part was analyzing content for generalization. I've seen Zig Engelmann do that, and it seemed more difficult to me than rocket science. *Lots* of people are rocket scientists.)

In addition to phonics *instruction* and phonemic awareness *instruction*, *Put Reading First* (and the National Reading Panel) focuses on fluency, vocabulary instruction, and comprehension. I won't discuss any of that now. I've just stayed with phonics, phonics instruction, and phonemic awareness because of the vast, misguided, vitriolic criticism of phonics in general, and the National Reading Panel findings, as summarized and reflected in *Put Reading First*.

If I sound a bit zealous in my defense of certain aspects of phonics instruction, I plead guilty. But I hope no one mistakes that for the almost religious fanaticism with which too many in the educational community exercise upon the basis of some obscure belief system, incomprehensible not only to people in the DI choir, but, as it is becoming more clear, to a vast number of educated, rational adults outside of the field of education.

I really do have to pinch myself every day. Nonetheless, I guess an unrelenting vein of cynicism runs through me. Will the dream turn into a nightmare at some point? While we're riding high, is there anything we can and should be doing to prevent, or at least, delay a nightmare? If there is, we should take a rest from enjoying the triumphs and spend more time doing and promoting rationalism, first, and the scientific investigation of genuine questions, real inquiry showing empirically far more than we have—despite being at the head of the pack in this area—that what we already have isn't broken, as well as cautious, well reasoned inquiry aimed at broadening our collective knowledge.

In truth, I'm already having nightmares. In the midst of the dream—the *intent* of the No Child Left Behind Act, and movements associated with it—I see a child out there oblivious to all this excitement, someone who isn't benefiting from any of this, someone whose status is far less than that of a pawn in a huge political game. That's the nightmare. And I'm awake. ADI-

### AMY GRIFFIN, Association For Direct Instruction

# 2002 Excellence in Education Awards

At times it seems the world of education is rife with bad news and negative commentary. Students aren't learning, teachers aren't teaching, political agendas and bureaucracies have priority over effective methodologies, and there is a general disagreement about what really works to teach ALL children.

There are, however, many positive examples of success in schools throughout the country, and each year, the Association for Direct Instruction gets a glimpse of those successes through a call for nominations in the categories of Excellence in Education, The Wayne Carnine Most Improved Student Award, The Wesley Becker Research Award, and The Wesley Becker Excellent School Award. We receive nominations from throughout the country, and the Board of Directors of ADI has the most challenging task of selecting the award recipients. The nominations prove that the work being done in the field with Direct Instruction is indeed fruitful, and they show what is possible when the only agenda one works under is the one that puts students first and ensures

that students indeed experience success and learning in the classroom.

What follows is a brief introduction to the Award Recipients of 2002, and some examples of their excellence in the field of education. The Excellent School award appears as a separate article, following this article.

# Excellence in Education

### Gary Kolumbic, Teaching

Gary Kolumbic is the Literacy Coach for Eshelman Avenue School in Lomita, California. He is responsible for bringing *Reading Mastery* and other DI curricula to



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Eshelman school, which eventually led to the school winning a National Title I Distinguished School Award in 2001. Principal of Eshelman, Winnie Washington, shared the genesis of the changes that took place in their school—he went to Eshelman because the principal of his previous school would not allow him to continue to use phonics with his Special Education students. "In the spring of 1992, Gary came into my office seeking to fill a vacant position in an Upper Learning Handicap classroom stating that 'all students can learn' despite the challenges they face and only desired an opportunity to make his vision a reality. That opportunity was immediately provided and Gary became a part of Eshelman the following semester. It wasn't long before his vision became a 'reality' and it became obvious to our staff that his reading program, SRA-*Corrective Reading* was not only providing effective results with his students, but could be proven beneficial for ALL of our students."

The letters of nomination from his colleagues give Gary Kolumbic credit for the turn around Eshelman School has made. The teachers and paraprofessionals are grateful to Gary for his dedication and vision. Gary not only provided the vision of what was possible, but also the time and labor it takes to make implementation a success: managed and secured the private fund grants dedicated to the DI program including the planning, scheduling, and monitoring of teacher training in Eugene, OR; he set up reading classes based on reading ability rather than fanaticism with which too many in the educational community exercise upon the basis of some obscure belief system, incomprehensible not only to people in the DI choir, but, as it is becoming more clear, to a vast number of educated, rational adults outside of the field of education.

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Gary Kolumbic

Eshelman school, which eventually led to the school winning a National Title I Distinguished School Award in 2001. Principal of Eshelman, Winnie Washington, shared the genesis of the changes that took place in their school—he went to Eshelman because the principal of his previous school would not allow him to continue to use phonics with his Special Education students. "In the spring of 1992, Gary came into my office seeking to fill a vacant position in an Upper Learning Handicap classroom stating that 'all students can learn' despite the challenges they face and only desired an opportunity to make his vision a reality. That opportunity was immediately provided and Gary became a part of Eshelman the following semester. It wasn't long before his vision became a 'reality' and it became obvious to our staff that his reading program, SRA-Corrective Reading was not only providing effective results with his students, but could be proven beneficial for ALL of our students."

The letters of nomination from his colleagues give Gary Kolumbic credit for the turn around Eshelman School has made. The teachers and paraprofessionals are grateful to Gary for his dedication and vision. Gary not only provided the vision of what was possible, but also the time and labor it takes to make implementation a success: managed and secured the private fund grants dedicated to the DI program including the planning, scheduling, and monitoring of teacher training in Eugene, OR; he set up reading classes based on reading ability rather than age or grade; established an orderly and easily maintained schoolwide reporting system that each week tracks the reading progress of every child; and oversees the remedial program that provides extra reading instruction for any child that drops below expected performance level.

The following words by teacher Christian Mendez echo what many others feel about the contributions of Gary Kolumbic to Eshelman School. "Gary works tirelessly to ensure that the schoolwide reading program runs smoothly and effectively. Mr. Kolumbic is always available to help teachers in any way he can. Gary has demonstrated and shared with me more effective teaching techniques. He has assisted me with properly grouping students by testing them to find their individual reading levels. Whenever a student is having a difficult time, Gary is there to give advice and suggestions to help that student. Gary is not only an outstanding Reading Coordinator, but an inspiring role model to the students and teachers he works with."

### David Parr, Teaching

One thing that stands out about the nomination packet for David Parr is that each of the nomination letters was written by parents who are affiliated with the School Site Council (SSC) or the Parent, Teacher, Student Association (PTSA) of Presidio Middle School in San Francisco, David is a teacher at Presidio Middle School. It seems that a majority of support for his use of DI comes not from within the district administration, but from the parents, the SSC, and the PTSA. Boots Whitmer, one of David's nominators, provided this rationale, "He deserves this award not only because of his teaching skill and dedication to his students' success, but because he has steadfastly refused to use curricula inferior to Direct Instruction despite intense pressure from the unenlightened San Francisco Unified School District."

The letters describe David Parr as totally dedicated to improving the school and the performance of his students, and giving quite liberally of his time for after school tutoring, parent meetings, and PTSA meetings. In 1999 Presidio Middle School received an Academic Performance Award from the State of California for improvement in STAR9 test scores. While regular performing students retained their status or made slight gains, the most underperforming students made major strides. The SSC realized it was the work of David Parr that had made those gains possible. Mr. Parr described his first introduction to Direct Instruction as life changing, and has since continued to used DI in his classroom despite refusal by other teachers to engage the program and pressure from within the school system to eliminate the use of DI.

Colleagues have viewed the student successes as "one-trick wonders" or "flukes" even though the gains are consistent. Others are beginning to take notice though, and are interested in replicating success. At a meeting earlier this year, an Instructional Reform Facilitator from one of the district's lowest performing schools took note of Mr. Parr's track record and after classroom visits, that underperforming school will have six DI classes this school year.

And true to the Direct Instruction philosophy, Boots Whitmer closed her letter with these words, "If the judges of this award see fit to bestow it on Mr. Parr, the prestige of this award will give him the additional ammunition and credibility to see that Direct Instruction gets greater use in the San Francisco Unified School District. The real winners, then, will be our students, and that is the way he would want it!"

### Maggie Hanohano, Staff Development

Maggie Hanohano is the Reading Coordinator for the Pihana Na Mamo Project of Hawaii. From the many letters in support of the nomination of Maggie, it is apparent that her efforts and dedication to improving the academic performance of Hawaii's students have truly made a significant difference in not only the educational community, but for entire communities. As Dr. Gloria Kishi stated in her letter, "Maggie has been crucial in supporting Hawaii's schools in their implementation of sound, research-based programs in the area of reading. Because of her efforts, Hawaii is beginning to see improved results in reading."



David Parr



Maggie Hanohano

Maggie's has brought DI trainers and curriculum developers to Hawaii, and as Dr. Kishi wrote, "Her vision has also led to the development of a core of local, Hawaii-born and raised Direct Instruction trainers and coaches whose skills and knowledge have led to over 40 schools in Hawaii implementing Direct Instruction programs and strategies. This work is being done in some of the most challenging of schools where long-term failure in reading achievement had often led to discouraged and disheartened teachers, families, and administrators. Several of these schools are now becoming beacons for other schools, with teachers, administrators, families and students renewed and reenergized by their successes." Of course, all this is accomplished through an unwavering dedication to doing what's right regardless of the amount of hours required to make the mission a success.

Maggie ensures that schools and personnel receive adequate staff development, funding, training, and curriculum services, enabling schools statewide to implement Direct

Instruction with the required fidelity. Maggie Hanohano is a model of total dedication to her profession and to the lives she impacts through her work. Kathleen Dowd shared these words regarding Maggie, "Without Ms. Hanohano's vision, dedication, and bravery in promoting Direct Instruction strategies and programs, many of Hawaii's schools would not have coherent plans for reading instruction and would not attain their reading goals. This is truly a case where one person made a difference for students, families, teachers, schools, communities, and our state."

### Kip Orloff, Staff Development

The letters of support for Kip's acknowledgement of Excellence in Education tell a story of a woman who diligently works with the only goal in mind of all students learning and the goals that are inherent in that process: of inciting excitement in teacher's to embrace a particular curriculum that they may not want, of acting as a partner to schools to reach their goals, and of knowing what works so that children learn and not stopping until each person involved is fulfilling their role. Kip is an Educational Consultant who has been involved with DI for over 30 years. In the 21 letters that were written to support Kip, the theme in each of the letters is that Kip works selflessly, truly understands DI curriculum and how to teach others so they also understand, is totally knowledgeable, professional, sincere, and an inspiration to many.

I will let the words of those who know and have worked with Kip describe the impact she has had on their lives and the schools in which she's worked.

"Kip Orloff is a terrific Direct Instruction consultant. Add to that fact she is a warm and wonderful person, and you have qualities of someone who can accomplish good things in schools. It has been my privilege to work with Kip in a variety of settings, including teacher training workshops and implementations in schools. Kip is methodical in any effort she undertakes. She is meticulous about the details of training, such as the wording of formats, steps in exercises, correction procedures, and the sequence of training events. In implementations at schools, she attends carefully to the endless details that are necessary for a school to be successful."—Dr. Gary Johnson, Co-Author, Independent Consultant

"Kip entered into a difficult and challenging situation when she arrived at Lindbergh. She brought with her a loving and caring spirit that understood the challenges we faced. She saw through the years of academic struggles and disappointments that teachers faced year after year, the new teacher's challenges, and the district's failure to clearly state its role and position in the DI process. She was able to create a vision (the big picture) and capture the sincere concerns and desires of the teachers to provide a curriculum that would ensure student mastery and achievement."-Katherine Brown, Charles A. Lindbergh Elementary

"Kip firmly believes that poor and minority children will achieve at the same high levels as other students *if* they are taught at those levels. In other words, high expectations coupled with good schools and good teachers really do make a difference."—Therese Snyder, Educational Consultant

### Dr. Benjamin Lignugaris/Kraft, University Teaching and Research

A crucial role in the education of children is the education that teachers receive in preparation for the classroom.

Dr. Lignugaris/Kraft is a professor in the College of Special Education and Rehabilitation at Utah State University. He teaches courses on effective instruction, conducts research on teaching and teacher preparation, and coordinates the Direct Instruction reading and language arts practicum. He has also written numerous chapters and refereed journal articles, and provided workshops and presentations with the focus of effective instruction for students with disabilities. Dr. Terry Miller of Idaho State University provided this rationale, "Dr. Lignugaris/Kraft's high educational standards and his dedication to effective instruction for all students are an inspiration to his university students and fellow colleagues. His research and work in teacher education.



Kip Orloff



Dr. Benjamin Lignugaris/Kraft

collaborations with educators across the country, and involvement with parent education programs promote and sustain the use of Direct Instruction and other research-based practices in public schools."

Dr. Marion Tso of Eastern Washington University affirms the depth of quality under which Dr. Lignugaris/Kraft operates. "One of the most important things I learned from Dr. Lignugaris/Kraft was to always move a step further than what was required. Ask questions, find the answers, and ask more questions. This is the process that keeps education moving in a positive direction. I now teach at the university level. I use strategies that I learned from Dr. Lignugaris/Kraft. My hope is that I can teach these strategies to university students so that they in turn will use them to teach the many children they will be responsible for in their teaching careers. Thus, the education of more and more children continues to improve because of the contributions of Dr. Lignugaris/Kraft."

Don Stenhoff, a graduate research assistant at Utah State described some attributes of working with Dr.

Lignugaris/Kraft as a mentor, such as his advocacy for the students with whom he works, the opportunity he provides for students to teach and work with him in classes, the succinctness of his writing and guidance he provides for students, and the overall thoroughness of his approach to teaching. "As a major professor, Ben models several aspects that are desired in a mentor. One quality is Ben's passion for research. During student research studies, Ben guides students through the necessary steps in understanding the logic of design and implementation of a study. He meets frequently with his students and spends the time needed in order to understand outcome measures. There were several times that he and I met at 7:30 in the morning to discuss the data collected during the week. Though busy with several other responsibilities we would sit at the table until all aspects of the data were looked at and analyzed and a direction for the coming week was decided. These sessions also served as a learning experience for me. Ben would discuss out loud the process he used to analyze the data. As the study progressed that discussion was shifted to me and we both conversed about the analysis of the data."

The picture painted of Dr. Lignugaris/ Kraft by those who supported his nomination is one of determination and admiration. They made it apparent that he operates under strict guidelines of quality and excellence.

### Dr. Cathy Watkins, University Teaching and Staff Development

Dr. Cathy Watkins is a professor of special education at California State University, Stanislaus and the Director of the Center for Direct Instruction at the university. In a letter of support for Cathy, Frank Smith and Linda Youngmayr said that, "Dr. Watkins is both an academician and a practitioner. She works tirelessly in the name of educational success for all students. Direct Instruction is lucky to have her as its advocate, as she has stayed the course, through many educational trends, relentlessly promoting the use of research validated educational practices and programs." From the letters by those who have worked with Cathy, her dedication to effective instruction on many levels is apparent. She not only promotes effective tools to the students she teaches at the university level, but she also goes into the field and consults and trains in schools desiring a Direct Instruction implementation.

Kenneth Stangl shared this experience of working with Cathy in the field.

"Dr. Cathy Watkins is the best partner in education that Keyes Elementary School has ever had.

"While serving at Keyes Elementary School as principal, I was introduced to Dr. Watkins by a county schools administrator who knew that I was interested in implementing a Direct Instruction reading program. She systematically and patiently explained the pros and cons of a schoolwide implementation to the superintendent and me. She prepared and presented a presentation to the school board using researched based data. She cautioned the school board that the board's support and the support of the administration are crucial to the success of the program. Once she was convinced that the district was committed to providing the support, the staff training, and the materials for effective implementation, she agreed to coordinate our implementation.

"Unlike other consultants that I have worked with, Dr. Watkins did not limit herself to one-day workshops and phone conversations. She immediately became a presence on the school campus. She coordinated trainings, ordered materials, helped with assessment and set up the student groups with their teachers for the fall." Stangl continues with an account of her presence in the school in the fall modeling lessons, coordinating testing and placement, and working with the teachers and administration through the implementation process. This particular scenario is highlighted here to show the range of work that Cathy does. In the letters written on behalf of Dr. Watkins, her work at the university is equally in-depth.

These words were written in the rationale for Cathy's nomination, "Finally, when all the documentation is examined as a whole, it is clear that Dr. Watkins considers her work to be more than just a glorified vocation. Her dedication



Brittany Dale Martin

to the education of all students is clear. She produces the extra effort that can only occur when an individual sees a greater purpose to her work. Ultimately, this is the most compelling evidence supporting her nomination."

### Wayne Carnine Student Improvement Award

The Wayne Carnine Student Improvement award is granted to nominated students who have shown improvement academically, behaviorally, or a combination thereof. The students receive a cash reward for their accomplishments.

### **Brittany Dale Martin**

The winner of this year's award is Brittany Dale Martin from the Roger Bacon Academy in Leland, North Carolina. Brittany is under the custody of her grandparents, who enrolled her in the Roger Bacon Academy with academics as the top priority. Brittany enrolled in the Academy as a second grader, testing into *Reading Mastery I*, lesson 11. She knew her sounds, but her reading was below grade level. Brittany fast tracked through *Reading Mastery I* and finished second grade at *Reading Mastery II*, lesson 130. In third grade, Brittany placed into *Horizons C/D*. In March of this year, Brittany was in *Horizons C/D*, lesson 105 and passed the *Reading Mastery V* placement test. She will enter fourth grade in *Reading Mastery V*.

In North Carolina, third-grade students are required to take the North Carolina Department of Public Instruction End-of-Grade test. At the beginning of third grade, students are given a pre-EOG test, and students scoring at III or IV demonstrate mastery of subject matter and skills that indicate they are prepared to do thirdgrade work. Brittany scored at achievement level IV. She scored at or above 90% of students in North Carolina who took this test.

Amidst this success, at one point Brittany's grandparents were forced to move from Leland and moved to a location that placed them 45 minutes away from the Academy, one way. Because Brittany was experiencing so much success and the excitement and confidence that went with her accomplishments, her grandparents drove Brittany and her sister to the Academy everyday, nonetheless. Mark Cramer, Headmaster of the Roger Bacon Academy commented that, "With the proper teaching techniques and the use of Direct Instruction Reading Mastery, Brittany blossomed. Once Brittany learned to read there was no stopping her. Brittany gained the selfconfidence she needed to be successful. With her acceleration in reading this only boosted Brittany to excel in all subject areas. She gained a love for reading and a love for school." "Throughout the summer Brittany

attended the local Library Reading Program. At the end of the program Brittany received an award for reading the most books. In only four weeks Brittany had read 150 books."

### **Daniel Shea**

Daniel Shea is a runner-up for the Student Improvement Award. Daniel is a student at Martin Kellogg Middle School in Newington, Connecticut. Dr. Christopher Banach, a special education teacher at Kellogg who nominated Daniel, said Daniel's reading ability had plateaued by seventh grade. Dr. Banach attended a presentation of SRA reading materials and he began a pilot program with a small group of identified special education students using *Corrective Reading*. He began instruction in January 2001. Dr. Banach stated that the students were pleased with the program and made rapid progress.

In the fall of each year, Connecticut students are tested with the Connecticut Mastery Test. One component of the test is the Degree of Reading Powers (DRP). In the fall of his seventh-grade year Daniel's DRP score was 29. Four months later he was retested and his score was 39. Dr. Banach stated that, "Typical gain scores for students with a full year of instruction average between 3 to 5 more points but Danny gained 10 points with just 4 months of instruction."

Dr. Banach's words describe the profound changes that can occur when a student begins to experience something different-success. "While numbers in terms of scores are an important measure of progress or lack of same, what is of paramount importance is the transformational effect of Direct Instruction's impact on Danny's sense of well being. Danny no longer has behavioral episodes of complaining about school, stating a desire to quit school or questioning the worth of attending school. Instead he has demonstrated more initiative, competency and most importantly a strong sense of self-satisfaction with his new found ability to read."

### **Patrick Vinson**

Patrick Vinson of Brentwood High School in Brentwood, Tennessee is also a runner-up for the Student Improvement Award. Patrick's mother, Linda Vinson, a former Direct Instruction teacher, nominated Patrick. Patrick was adopted at birth and over the years has been diagnosed with a variety of disabilities—Fetal Alcohol Effects, Traumatic Brain Injury (damage to the brain stem), Bell's palsy, Learning Disabled, and Mentally Handicapped. His mother said, "At points in Patrick's 17 years, all of the above labels have academically and behaviorally described Patrick. What those labels do not describe is the real Patrick!"

In her letter, Linda described some of Patrick's struggles to



Daniel Shea



Patrick Vinson

accomplish tasks that often come easily to others, such as crawling, sitting, talking, and learning. At one time Patrick was enrolled in a special education program that utilized the whole language approach. His mother eventually moved him to the school where she taught, which utilized DI. "Not only did he achieve, he excelled!" Linda credits the use of *Reading* Mastery, Corrective Reading, and Language for Learning as the programs that differentiate her son's experience from the "countless other Special Education students who have not had the privilege of Direct Instruction programs."

Linda provided the following achievement information. He will enter the 12th grade in August 2002. "His current classification is 'Other Health Impairments,' and he is served in regular education classes, as well as special education classes. His current IQ is a full scale 69. Before moving from Florida, he passed the 'Florida Writes' test and has a documented 11th grade reading level. At Brentwood High School Patrick is enrolled in 11th Grade English, Pre-Algebra, Work Study, Innovations and Inventions and resource special education classes. Along with his classes, he works at a

bagel shop for on-the-job training. He has passed the required TCAP in reading, and is working to pass the TCAP in math. When he passes the TCAP Math, Patrick will graduate with a regular diploma. You have to admit, this is pretty remarkable for a young man who the doctors, psychologists, neurologists, behavioralists, and many teachers all said he would not learn to read, write, compute or, for that matter, walk or talk."

### Wesley Becker Research Award

The Research Award went to lead author Gregory J. Benner from the University of Nebraska, Lincoln. Contributing authors were Alexandra Trout, Philip D. Nordness, J. Ron Nelson, and Michael Epstein from the University of Nebraska, Lincoln, and Maria-Louisa Knobel, Alice Epstein, Ken Macguire, and Rodney Birdsell from Beatrice Public Schools. Their paper is entitled, "The Effects of the Language for Learning Program on Receptive Language Skills of Kindergarten Children." The study assesses the effects of the Language for Learning program on the receptive language skills of a general sample of kindergarten children, and the results indicate that Language for Learning produced both statistically and educationally significant effects on the receptive language skills of children. The full text appears in the Journal of Direct Instruction, Vol. 2, No. 2, Summer 2002, pp. 67-74 or is available online at www.adihome.org.

Beacons of light in the sometimes dim world of education—light that others can follow. The aforementioned individuals represent a spectrum of experiences that of themselves indicate the validity of Direct Instruction. Perhaps



Gregory J. Benner

these brief summaries provide a morale booster for those already engaged in the battle for effective instructional tools, and as a bit of proof for those who are not only speculative about DI, but those who adamantly oppose it. The Association thanks those who answered the call for nominations for sharing a part of these lives, and we congratulate the recipients. ADF

### KIP ORLOFF and THERESE SNYDER

2002 Excellent School Award Eshelman Avenue Elementary: A Profile of Success

"Come to the edge," he said. They said, "We are afraid." "Come to the edge," he said. They came. He pushed them And they flew.

### -Guillaume Apollinaire

What is the genesis of change? Is there a catalytic event, a need, a leader who generates action, an opportunity for risk-taking, timeliness, or a person of vision who sees what is possible? Perhaps all of these elements make for change and help to produce events that forever affect lives.

### The School Community

The lives that are forever changed are the ones that are part of Eshelman Avenue Elementary School in Lomita, California. This successful school sits in the middle of an urban commercial area with a diverse and densely populated neighborhood not far from Lomita Naval Station. Lomita has an ever-changing population of immigrants from Mexico, Central and South America, Asia, the Middle East, and Africa. Like most of the schools in the Los Angeles Unified School District, the majority of the 726 students attending Eshelman are Hispanic. There are eight additional languages

spoken at the school which finds 24% of the student body classified as English Language Learners (ELL). The majority of the students come from low-income disadvantaged families with 73% of them qualifying for free and reduced lunch.

Eshelman began to see a need for change in 1996 when the academic scores had gradually begun to decline. A Special Education Teacher Trainer for LAUSD had been including Direct Instruction curriculum training as part of the staff development for all Special Education teachers new to the district.

SRA provided training and one of the teachers participating was Mr. Gary Kolumbic. Gary began using *Corrective Reading* with his Special Day Class (SDC) at Eshelman. Gary, a caring, thorough, and committed teacher became enthusiastic about the success he achieved with his students. His success generated interest in bagel shop for on-the-job training. He has passed the required TCAP in reading, and is working to pass the TCAP in math. When he passes the TCAP Math, Patrick will graduate with a regular diploma. You have to admit, this is pretty remarkable for a young man who the doctors, psychologists, neurologists, behavioralists, and many teachers all said he would not learn to read, write, compute or, for that matter, walk or talk."

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using additional Direct Instruction programs to address the academic decline at the school. SRA agreed to supply materials for an extensive pilot. Winnie Washington, the principal, was ready for a challenge and a change, and perhaps a little competition with the surrounding schools in District K of LAUSD. Dr. Richard Vladovic, superintendent of District K is quoted as saying, "Winnie sometimes doesn't ask, she just does." Eshelman, with Winnie's leadership, had become a LEARN school which means that teachers, parents, and community members share the decision-making process for the school. A "school family" was created with a clear academic mission where the faculty took ownership and pride in their work and the school. Dr. Vladovic recalls that Winnie told him, "Give us time and we will deliver." The plan for change had begun.

### Looking at Accomplishments

Beginning in 1998 and over the course of the past 5 years, Eshelman has remained focused on its academic mission. The school has benefited financially from consistently meeting and surpassing the California API (Academic Performance Indicator)

### Stanford 9 Test Scores:

Read	ling			
Gr.	1998	1999	2000	2001
1	36	34	56	77
2	30	35	38	56
3	34	36	48	52
4	23	37	37	58
5	38	31	46	41
Lang	juage			
Gr.	1998	1999	2000	2001
1	32	31	40	64
2	28	35	36	56
3	37	44	58	61
4	32	47	49	63
5	39	33	48	56

goals set by the state. The API is used to compare schools to each other and to gauge each school's improvement. In 1999, the State of California began to rank schools within the state based on the school's API using a scale from 1 to 10. A rank of 10, for example, means that the school's API fell into the top 10% of all schools in the state based on the SAT 9 tests taken by California students. In 1999 Eshelman was ranked 4 compared with all California schools and 6 when compared with schools with similar demographic profiles. In 2001, Eshelman was ranked 6 compared with all California schools and 9 when compared with schools of similar demographics.

The rise in student achievement has been documented on national norm-referenced assessments as well as statespecific assessments. The SAT 9 data from 1998 to 2001 indicate that student achievement scores in reading, language, spelling, and math have made impressive increases. In 1998 only 18% of the fourth graders were at or above the national average in reading. In 2001–2002 54% of the fourth graders are performing above the national average, 7 points ahead of the state average and 25 points ahead of Los Angeles Unified fourth grade average.

Whether comparing grade level growth or looking at groups of students moving from grade to grade, the achievement is impressive. Equally impressive are the scores at Eshelman in comparison to scores in Los Angeles Unified (LAUSD), Los Angeles County (LAC-this includes hundreds of school districts that are not part of LAUSD), and the State of California. In 2001 Eshelman students outperformed average scores in LAUSD, LAC, and in California in reading and language in Grades 1 through 4. Grade 5 outperformed LAUSD and LAC and fell just below the average in California.

In addition to having great pride in student achievement, the teachers in the "Eshelman family" have benefited from Direct Instruction. They have gained insights into the use of powerful DI strategies to enhance daily instruction. They have learned to align students to the correct programs, teach students to mastery, analyze student performance, and make data-driven decisions. Joanne Vegher, a Kindergarten teacher, expressed reservations about a script stifling her creativity and undermining her ability to adjust instruction to her pupils' needs. Mrs. Vegher now believes completely in Language for Learning and Reading Mastery. "It has structure but within that structure there is a great deal of flexibility," and "If children need to move up or down, its easy to move them gracefully," she declares. Teachers report that they are energized for work each day and that working together on a clear academic mission has enhanced their professional development.

In the past few years this school has increased student achievement, refined instructional teaching strategies, greatly reduced student misbehavior, and been recognized for success. Newspaper articles in the *Los Angeles Times* and the community newspaper, *The Daily Breeze* have praised the school for its academic achievements and for the individuality of the curriculum choices they have made to assure student success. This school is the only school in LAUSD using DI as the instructional curriculum for all students.

In the spring of 2002, the school was notified that it would be recognized as one of California's Title I Achieving Schools. Soon after, it was announced that Eshelman was selected as a national Title I Distinguished Schools Award winner! Change can be a very good thing!

# How They Did It!

Change is integral to the continuing success of the school and the expanding vision for excellence. Much of the success at Eshelman is due to key elements of the DI implementation design, including a full-time literacy coach, development of a coaching cadre, consistent monitoring of student progress, grade-level collaboration, and administrative support. Under the strong leadership of Mrs. Washington, and the Literacy Coach, Mr. Kolumbic, the teachers have received intensive and consistent inservice training, classroom coaching, and follow-up advanced DI workshops. Block scheduling, homogeneous grouping, small-group instruction, adequate time allocated, pacing schedules, and performance benchmarks were set.

### **Direct Instruction Training**

The implementation grew from Mr. Kolumbic's Corrective Reading experiences with his SDC students. SRA provided initial training for the school with limited follow-up during the pilot. Los Angeles County developed an Applied Research Program with the help of Doug Carnine and Jerry Silbert. The schools were to use a research-based curriculum. Since Eshelman was currently using DI curriculum and had expanded the pilot to include all the staff, they chose to be an ARP school. Los Angeles County Office of Education (LACOE) provided support to the school with off-site training, technical assistance, and consulting services. Mrs. Washington, Mr. Kolumbic, and many of the teachers have attended the DI Conferences in Eugene. Staff members have visited other DI schools in California and Wesley Elementary School in Houston, Texas.

### **Maximized Resources**

With a change in administration at LACOE, the ARP was dropped and Eshelman applied for and received two grants from private foundations. These grants enabled the school to plan for consulting services on a regular and expanded basis. The school draws on a variety of resources to support the implementation, including Federal Title I funding, state and local funds, grants and private funds, and services from parents and community volunteers. The school allocated resources for training instructional assistants in DI so that they could deliver instruction to small groups of children under the supervision of teachers. These assistants are included in the systematic, on-going training and coaching support at the school.

### Site-Based Management

The first step taken to increase its internal capacity for change was the move to become a LEARN school which focuses on greater site-based management and shared decision-making. To facilitate communication, collaboration, and coordination through-

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out the school, a Literacy Coach position was created for Gary Kolumbic. He facilitates the use of DI curriculum, monitors program and instructional quality, manages materials, monitors student progress, administers tests to students, and works with ancillary people in the school. Gary and the coaching cadre provide support across three tracks to all grades at this year-round school.

### **Professional Development**

Prior to the DI implementation, the predominant method of staff development at Eshelman was listening to a featured speaker at a short one-day workshop. Topics covered did not necessarily relate to actual instructional activities taking place in the classroom or to the needs of the students and teachers. When California implemented class-size reduction, there was an influx of teachers having no teaching experience, no student teaching, and limited college classes dealing with educational methods or curriculum. DI training assisted new staff members in learning how to be effective reading and language teachers. The staff has elevated their skills and teaching expertise to expect mastery learning to occur. Initial training, in-class coaching, extensive on-going inservice, and development of supportive and coordinated activities to reinforce reading and language lessons has added power to the excellent instructional delivery of the DI lessons. Now teachers exchange ideas and share information with one another and apply new solutions to identified problems.

Now that the school has built an internal structure, the staff is developing the expertise necessary to become self-sustaining. For external assistance Eshelman has relied primarily on DI consultants.

# Parent and Community Collaboration

The "school family" works with the "home families" by including them in the decision-making process for the school. The parents are informed about the DI curriculum, grading process, student progress, school management, and the vision for the school. Mr. Kolumbic has held parent education classes which teach parents how to be effective using *Teaching Your Child to Read in 100 Easy Lessons*. Community volunteers serve in the school and private foundations and community service groups lend financial and material support.

### How Success is Maintained

The consistent collection of data assists the teachers in evaluating student progress and mastery. The focus on student mastery, weekly lesson progress charts, and continuous progress monitoring helps Mr. Kolumbic, the coaches, consultants, and the teachers keep the mission on track!

Additionally, five specific practices support the school's success:

- articulation and maintenance of a clear vision that the staff carries out,
- goal setting in line with the vision,
- allocation of adequate instructional time and resources,
- providing time for on-going professional development, and

• flexibility and openness to change.

Change has enveloped this successful school and has been encouraging to everyone involved. Fear and trepidation have been replaced with confidence and skill. They were given the time by LAUSD, and they did deliver indeed!

The teacher said to the students, "Come to the edge." They replied, "We might fall..." The teacher said again, "Come to the edge." And they replied, "It's too high." "Come to the edge!" the teacher demanded. And they came... and she pushed them... And they flew!

From: Eshelman Avenue Procedural Manual With thanks from Wesley Elementary School ADA

### CARRIE AMBERGE, University of Florida

# When Direct Instruction "Doesn't Work"

"The Direct Instruction creed is if the student has not learned, the teacher has not taught" (Adams & Engelmann, 1996). The methodology behind Direct Instruction is to provide a sequence of skills to all students in an accelerated manner, through the teaching of generalizations. As a beginning teacher, I have found it very difficult to gain respect as a competent educator among those who are more experienced. A hierarchy exists, and as a graduate student, I have realized and come to accept my position at the bottom. At the same time, I know that I, too, have a voice and experiences to support it. I have become quite the advocate for Direct Instruction because I know it works, I have seen it work, and I understand why it works. My frustration has grown immensely because I see so many of these experienced teachers use Direct Instruction incorrectly, altering the possibility of amazingly successful outcomes.

A complete set of *Reading Mastery* books sits on a shelf in a teacher's office collecting dust in a D-rated school. "They tried those last year and they didn't work." This same teacher picks up a *Corrective Reading* book on occasion and randomly selects a portion of a lesson as a "fun activity," disregarding the intent and function of the program.

Two third-grade males are working together on the same Corrective Reading level. The first student is able to read approximately 120 correct words per minute. The second student reads approximately 50 correct words per minute. The teacher explains that the second student has no phonological awareness, yet she does not understand why he is constantly frustrated and gives up while attempting to complete the lessons in a book that does not address his specific needs or appropriate level. The first student is bored and reads ahead instead of working at his peer's slower pace. Neither of the students was given a placement test, and the teacher is unaware of what programs were used with these students the previous year.

Another teacher says, "We don't have time to repeat sections when students

make two or more errors. They make so many mistakes; it would take forever to complete one lesson!" This teacher was also surprised when she saw how well my student was doing in the same math program she was using in her classroom.

One teacher's philosophy on Direct Instruction is, "I've been doing this long enough, so I know which parts are good and what doesn't work. I just do it the way I want to, and ignore the script." She has not established any rules and does not use specific praise to build on the students' self-esteem as learners. For these reasons, the students are rarely on-task and have no desire to learn. The same teacher gets frustrated with the students, and does not understand why they perform poorly on the mastery tests.

To reiterate, Direct Instruction truly doesn't work when:

- 1. The students are not given placement tests to determine the appropriate program and level.
- 2. It is not used consistently in the order presented.
- 3. The teacher does not repeat a section until the students are firm.

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To reiterate, Direct Instruction truly doesn't work when:

- 1. The students are not given placement tests to determine the appropriate program and level.
- 2. It is not used consistently in the order presented.
- 3. The teacher does not repeat a section until the students are firm.

- 4. The teacher alters the program, and chooses not to follow the script.
- 5. The students are not given specific praise to build their confidence in their own abilities.

One of the largest educational studies ever conducted by the Department of Education is known as Project Follow Through. It began in 1968 and was completed in 1976. Costing almost \$60 million, the study examined 79,000 children in over 180 communities. The purpose of this research was to analyze which teaching methods worked best with disadvantaged children in the areas of basic skills, higher-order thinking skills, and self-esteem as learners, which are known as the affective results (Lindsay, 2001). Direct Instruction was consistently proven to be most effective in all three areas.

Direct Instruction works when:

1. Children are placed into a program at their performance level.

- 2. The teacher establishes a positive learning environment with clearly defined rules.
  - 3. The teacher follows the program's script, uses appropriate signals, and repeats items until firm (at least 80% mastery).
  - 4. The students are given specific positive praise, building on their strengths and motivating them to succeed.

As a young teacher, I tend to be idealistic. I believe that through teaching, I can change the world. When presented with a new curriculum, every teacher is a skeptic. The first time I went to a training seminar, I was very hesitant to accept this unfamiliar teaching method. What people do not seem to understand is that using a script does not mean losing your own voice. The writers have already discovered scientifically the natural progression of skills being taught. The script allows you to concentrate on *how* you are presenting the material, and focus more on the students and giving them the support they need. For educators, the most important thing to understand is that Direct Instruction works for a reason. All of the intricacies within the program serve a purpose, and it is understanding that purpose that makes a strong Direct Instruction teacher. It is not questioning the validity of the program, but instead questioning our own teaching practices to ensure that all students are learning to their fullest potential. ADF.

### References

- Adams, G., & Engelmann, S. (1996). *Research* on Direct Instruction: 25 years beyond DISTAR. Seattle, WA: Educational Achievement Systems.
- Lindsay, J. (2001). Direct Instruction: The most successful teaching model. Retrieved November 25, 2001, from http://www. jefflindsay.com/EdcuData.shtml

### MURIEL BERKELEY, Baltimore Curriculum Project

The Importance and Difficulty of Disciplined Adherence to the Educational Reform Model

Educational research has identified effective methods of raising student achievement, but has not yet established how to put these methods into consistent practice. Whereas several instructional models have proven effective in significantly improving student performance in low performing schools, large-scale implementations of these models have produced inconsistent results. One reason for this may be that local and state education officials overburden schools by insisting that they implement too many initiatives concurrently (Hatch,

2001). Despite their support for one or more reform models, their actions may actually make implementation more difficult.

The Baltimore Curriculum Project (BCP), funded by the Abell Foundation, brought Direct Instruction (DI) and core knowledge (Core) to six Baltimore city public schools in 1996. Twelve other schools took on DI and Core subsequently. Evidence from the implementation of DI and Core in Baltimore city schools has indicated that the potential effectiveness of this curricular intervention has been diluted by the intervention of local and state education officials. However, some of these schools have been more successful than others. At City Springs Elementary, for example, test scores have risen consistently since the combined implementation of DI and Core. We believe that academic achievement (as measured by the Comprehensive Test of Basic Skills and the Maryland School Performance Assessment) has increased at City Springs because (a) the school has focused strictly on a high-fidelity implementation of the reform model, and (b) DI focuses on systematically accelerating the progress of every child. In this article, we describe

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Copyright 2002 by Lawrence Erlbaum Associates, Inc. Reprinted by permission of the publisher. *Journal of Education for Students Placed At Risk*, 7(2), 221–239. implementation of DI and Core at City Springs, as well as the distractions that interfered or threatened to interfere with implementation.

# *City Springs Before DI and Core*

In the spring of 1996, City Springs Elementary was a place of failure for both students and teachers. Many children could not read, and test scores were abysmal. No remnant of a onetime implementation of "Success for All" remained. Children listened to teachers only when they felt like it, roamed the halls, and left the building. The faculty, spinning like tops, reacted to one crisis after another. When DI was implemented the following fall, the primary focus was behavior management, as the faculty had to establish order before they could teach children to read and write. A Maryland State Department of Education (MSDE) report written in the fall of 1996 described City Springs as a "phoenix rising from the ashes" (Maryland State Department of Education [MSDE], 1997-1998).

# *The Reform Model: DI and Core*

BCP was created by the Abell Foundation in 1996 to develop a challenging, structured curriculum with daily lesson plans available to any public school that wanted to use it. With the curriculum used at Baltimore's Calvert School and Home Instruction Department (now Calvert Educational Services) as its model, BCP decided between the available alternatives on the basis of research done on each program's effectiveness. BCP relied on the Educational Resources Information Center database as its primary source of research.

All of human knowledge is available for teaching, but writing realistic lesson plans for the elementary and middle school grades requires paring down all human knowledge—a daunting task. Therefore, the first decision BCP made was to use the curricular scope and sequence of the Core Knowledge Foundation as a guide for what to teach. Because the Core Knowledge Foundation had already devoted considerable resources to paring down "the whole realm of knowledge," BCP chose to use the fruits of their work.

The next question that BCP tackled was how to teach the basics: reading, writing, and mathematics. BCP's research on the effectiveness of exist-

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ing programs uncovered two possible reading programs: DI and Success for All. At that time Success for All was only a reading program, whereas DI programs existed for teaching mathematics and writing as well. Emulating the Calvert model, BCP wanted to put together a complete curriculum that would be as internally consistent as possible, rather than functioning out of an amalgam of multiple programs, requiring different approaches at different times of the day. BCP reasoned that it would be more practical to train teachers to use a curriculum that stressed consistent teaching techniques. BCP also thought that children would be more successful if they could focus on skills and content, rather than adapting to different teaching approaches throughout the day. In addition, the DI programs included all the phonics, phonemic awareness,

grammar, and mathematics recommended by the Core Knowledge Foundation. The DI reading and writing programs also included some of the geography, history, literature, and science recommended by Core. After BCP began implementation, a study commissioned by the Core Knowledge Foundation recommended DI's *Connecting Math Concepts* and "saxon math" as the two math programs that were most closely aligned to Core.

There were two other features of DI as a school reform model that attracted the attention of BCP: (a) behavior management, and (b) a system to frequently monitor student progress and performance. DI teachers are taught to ignore children who misbehave based on the idea that many children are so starved for adult attention that they will do anything, including misbehave, to get it. Teachers learn to positively reinforce the behavior they want while ignoring the behavior they do not want. Teachers learn to elicit attention to task and successful completion of tasks. DI's student progress and performance monitoring system allows teachers to catch academic problems before a child falls behind, or to accelerate the academic achievement of those students ready to move ahead. BCP decided to use DI programs for reading, writing, and mathematics because the programs had been demonstrated to be effective, because they were aligned with Core, because they included programs to teach basic academic skills, and because they incorporated systems to manage student behavior and monitor student progress and performance. BCP's choices of DI and Core were validated by An Educators' Guide to Schoolwide Reform (American Institutes for Research, 1999). This guide listed just two elementary school reform models backed by solid research that extolled their effectiveness: DI and Success for All. There has not been as much research on Core (a newer reform), but the guide did list Core as "promising" (American Institutes for Research, 1999, p. 4).

After the BCP staff decided to use DI programs for reading, writing, and mathematics, they were left with the task of writing lessons for the geography, history, literature, science, music, and visual arts content in Core. BCP wrote lessons for Grades K-2 in 1996 and 1997, Grades 3 through 5 in 1997 and 1998, Grade 6 in 1998 and 1999, and Grade 7 in 1999 and 2000. Eighthgrade lessons are expected to be completed in 2001. BCP revised its lessons for Grades K-5 in 1999 and 2000, and is continuing to revise them. As written, the lessons have proved too time consuming, given the basic academic needs of most Baltimore city children.

Between 1996 and 2001, 18 Baltimore city public elementary schools have worked to implement DI and Core. BCP recommends the use of DI programs to teach children to read, write, compute, and reason; it recommends Core for teaching children critical information in geography, history, science, literature, music, and visual arts.

### DI

Three key principles in DI schools are the following:

- 1. Every child will learn.
- 2. If the child has not learned the teacher has not taught.
- 3. The teacher must not assume what the child knows.

Teachers can meet such a high standard only if they have effective tools, if they are given effective training in how to use these tools, and if they are allowed to concentrate fully on the task at hand. DI principals know how to analyze lesson and test data, how to identify and solve classroom problems, and how to identify and solve instructional problems.

DI is an effective tool for teachers to use with any student, but is particularly effective with children struggling to master basic academic skills. Jonathan Mooney and David Cole were students not fortunate enough to have been enrolled in schools that used DI. Describing the agony of school for children who do not learn easily, they wrote, "we explored our histories and our wounds from growing up in a cruel educational system that told us at an early age we were lazy, stupid, and crazy" (Mooney & Cole, 2000, p. 20). In contrast, learners do not get frustrated when their teachers are using DI correctly because the authors of DI programs teach every prerequisite for a skill before the student is asked to perform it. When students do not mas-

Teachers can meet such a high standard only if they have effective tools, if they are given effective training in how to use these tools, and if they are allowed to concentrate fully on the task at hand.

ter a particular skill, teachers do not blame the child, but rather analyze their own teaching to see what went wrong and how to fix the problem. DI teachers are trained to check how well students are learning each step, giving them the necessary help to succeed. Students are grouped homogeneously for instruction, allowing those who learn more quickly to progress as rapidly as they are able, and other students the time they need for success.

A leading obstacle to the academic achievement of disadvantaged children has been that they often have inadequate vocabularies for academic pursuits (Biemiller, 2001; Hart & Risley, 1995). Unaware of this, teachers might interchange one word for its synonym, potentially leaving disadvantaged students in confusion. For example, a non-DI teacher may use *answer* in one sentence and *reply* in the next. Students who do not know that answer and reply are synonyms are lost. DI lessons are scripted to insure that teachers use consistent language when they teach. The DI teacher would not substitute reply for answer without explicitly teaching that the two words have essentially the same meaning.

Another barrier to the academic success of disadvantaged students is insufficient background knowledge (Hirsch, 1987). If one thinks of the brain as a room with strips of velcro hanging from the ceiling, then the velcro is like background knowledge; it is what provides the scaffolding to situate new knowledge. As new knowledge is introduced it moves through the room and sticks onto a piece of velcro (if one is available). Typically, disadvantaged students do not have the velcro, or background knowledge, for new knowledge to attach to, and so may not be interested and may not learn. Students who do have background knowledge more easily retain whatever new knowledge is introduced, thereby further building their base of background knowledge. Many educational programs fail to serve disadvantaged children well because they make assumptions about what children learn outside of school. Because DI authors and teachers do not make assumptions about what their students learn outside of school, DI programs systematically develop critical background knowledge before explicitly applying and linking it to new knowledge.

Because disadvantaged children may have less academic vocabulary and background knowledge, efficiency of instruction is essential. Disadvantaged students' school time is precious and must not be wasted. Students cannot afford to mislearn information, because relearning material that one has learned incorrectly is more time consuming than learning new material. DI curriculum designers anticipate student errors, and design materials to avoid those mistakes. Students are taught one piece of information and given extensive practice with that information before a potentially confusing concept is taught (e.g., d and b, longitude and latitude, metaphor and simile).

In DI schools, teachers are trained not only to make no assumptions about what academic background children bring to school, but also to make no assumptions about what behavior they might expect. Teachers are taught that any behavior a teacher expects, they must teach. DI teachers make clear all possible behavioral expectations, such as how to walk in the hall, how to work independently, how and when to move around the classroom, and how to sit.

In addition to teaching every necessary step for the acquisition of academic skills, DI teachers monitor their students' performance thoroughly. Students with low academic skills are monitored verbally. Once students are able to read and write, teachers monitor academic performance through their written work. Teachers learn to monitor in class while the students are working, so that they might catch errors before they become habits. Any work that is not checked in the classroom is checked before the next lesson, so that students can correct their errors as quickly as possible.

### Core

Core encompasses a rich body of knowledge including literature, geography, history, science, music, and visual arts. Founded by E. D. Hirsch, the Core Knowledge Foundation recommends that these subjects be taught in grades Pre-K–8. Hirsch pointed out that without clear agreement on what should be taught at each grade level, children will encounter gaps in their schooling (Hirsch, 1987).

### The Implementation Schedule

BCP's original implementation plans called for schools to first implement DI reading and language programs. Once faculty were familiar with those programs, DI mathematics and spelling programs were to be introduced. Finally, once faculty were comfortable with the DI programs, implementation of Core was to begin. DI programs were introduced first because of the necessity of reading and language skills to all other learning. BCP also anticipated that the techniques teachers learned through implementing DI would help them more effectively teach Core.

The initial schedule for the implementation of DI and Core specified a 3year phase-in of the complete curricu-

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lum. The first year was to be dedicated to implementing the DI reading and language programs, the second year to DI mathematics and spelling, and the third year to Core. BCP underestimated how much teachers and principals would have to learn to implement DI effectively, and how much teacher turnover would slow the progress of implementation. By the third year of the implementation, faculty were still concentrating on becoming proficient with DI techniques and helping children reach grade level in reading. As a result, full implementation of Core was delayed.

### **Uneven Results**

The results of whole-school reform efforts typically differ significantly from school to school. Educators have data about what makes schools effective, but little information about how to use that data consistently to make schools effective (Olson, 2001). Eighteen Baltimore schools have used DI and Core, but they have not all gotten the same results. The results at City Springs Elementary School have been among the most impressive. The remainder of this article presents information and reflection about what has made City Springs successful with DI and Core.

# Within-Model Obstacles to DI Reform

Some obstacles to the implementation of DI are inherent to the model itself. DI is capable of almost unbelievable results because of its intricate curricular design and teaching techniques (refined over more than 30 years). Understanding the design and learning the techniques, however, is difficult and takes time. The DI model allows schools to accelerate the learning of every child, but successful implementation requires consistency and concentration. Teachers and administrators must be able to focus on the DI implementation because each person has so much to relearn.

Teachers must practice new techniques and learn the specific curricular content. Because DI lessons are scripted, teachers do not write lessons. Nevertheless, they do need to develop familiarity with the wording to pay attention to student responses and correct errors promptly. Teachers must report weekly on how many lessons they have taught and how their students have performed.

Principals, in turn, learn how to interpret the data their teachers give to them weekly. They learn how to solve instructional problems, how to secure additional training for those teachers who need it, and how to regroup and reschedule to meet students' changing instructional needs. Instead of helping teachers improve their lesson plans, principals help teachers use DI scripts correctly; complete an adequate number of lessons; correct children quickly and thoroughly; and maintain ratios of at least three specific praises to each criticism, three teacher initiated interactions to each student initiated interaction, and three correct academic responses to each incorrect one. Principals must also learn how to stretch all available staff, including assistants and secretaries where appropriate, to cover all instructional groups, and how to schedule the school day to ensure that students get the instructional time they need to succeed. With DI, paradigms shift and roles change.

# Within-School Obstacles to DI Reform

Schools that commit to implementing DI and Core face many obstacles in addition to the inherent difficulty of implementing the reform. Some of the obstacles come from within the school and others come from outside it. Obstacles imposed from outside the school are the most damaging to the reform. The obstacles coming from within are largely a byproduct of human nature, that is, fear of and resistance to change. Fortunately, these obstacles disappear as people see children learn, and as they become accustomed to new ways. Every year since implementation began in Baltimore, BCP has surveyed teachers asking them what they think about using DI. Teachers' support for DI has increased the longer they have used the program, and they have consistently reported that DI programs are effective and increase student achievement.

Faculty who are committed to implementing DI and Core are committed to working hard at something their colleagues are not doing, that their supervisors do not like, that faculty of schools of education have told them is wrong, and that professional development activities discourage. The mindset of many people trained in departments of education is that children can learn almost effortlessly by discovering knowledge, and that drilling them with phonics or math facts is harmful. Comments such as, "DI is uncreative," "DI is bad for children," and "DI will not prepare students for the Maryland School Performance Assessment Program (MSPAP)," are omnipresent.

Many educators told BCP that teachers would refuse to use DI. However, at the 18 schools where DI was implemented, at least 80% of the teachers voted to bring the program into their schools. After the decision was made, any teacher who did not want to implement DI was allowed to transfer to another school. Not one teacher

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chose this option. However, after the first year of DI implementation, one teacher did leave City Springs Elementary School for reasons related to the program (a number of others left for other reasons), and we suspect that there have been a few teachers at other DI-implementing schools who left because of the decision to adopt DI. Teacher mobility data indicates that there are no more teachers leaving DI schools than leaving other Baltimore City schools. The teacher who cited DI as her reason for leaving City Springs has since sought out and returned to a DI school. Nonetheless, the anti-DI sentiment in the education profession is a constant distraction. Instead of concentrating on learning DI programs and techniques thoroughly (a multiyear challenge) teachers must often use their energy to learn and utilize non-DI activities that are viewed as good preparation for the MSPAP, although these activities may dilute the effects of DI on student achievement.

Other obstacles to effective DI implementation are those that hinder academic achievement in all urban schools: inadequate resources and student and teacher mobility. Only a few urban schools are fortunate enough to patch together sufficient resources (through special grants) to address the needs of children affected by neglect and abuse. The characteristically high student mobility in urban schools interferes with a school's efforts to provide all students with the necessary academic skills. Even if a school is providing its students with an effective education, children often transfer into the school with inadequate skills. Therefore, the faculty must cope with trying to remediate transfer students without impeding the momentum of those students who have been in the school longer.

High teacher mobility in urban schools is caused in part by the difficulty teachers experience in managing disadvantaged urban school students. For example, one highly trained and motivated DI teacher came to City Springs because she wanted to teach urban children using the tools DI provides. Although she was successful, she left after 2 years to get away from the stress of managing children who needed constant reinforcement to stay on task. At City Springs, during our first several years of implementation, teacher mobility increased because we had to move some teachers out who were not committed to working as hard as a full implementation of DI requires.

Despite barriers to change, whether a professional environment hostile to DI, inadequate resources, or student or teacher mobility, DI has invigorated every school that has adopted it. The learning of the children, the joy they take in their learning, and the success of the program eventually silences the doubts that inevitably accompany early phases of implementation. The difficulty of effectively implementing DI programs does not go away, however. Continuity of implementation is therefore essential.

# *Obstacles to DI Reform From Outside the School*

The single biggest obstacle to the effective implementation of DI and Core is the channeling of school staff's concentration and energy into other initiatives, imposed on the school from outside. Over the last 5 years in Baltimore, pressure on principals to raise MSPAP scores, combined with MSPAP experts' assertions that DI will not prepare students to do well on MSPAP (despite the fact that they know little about DI) has been the primary obstacle to effective implementation of DI and Core. The pressure to raise MSPAP scores comes from Baltimore City Public School System (BCPSS) supervisors and from threats (backed up with action) from the MSDE that principals will be publicly shamed and lose their jobs if MSPAP scores do not increase.

The supervisors of Baltimore city public school principals are called area executive officers. During the first 2 years of DI implementation, the DI principals did not all report to the same area executive officer. Their executive officers were busy with schools that were not using DI and left implementation of DI to the schools. A single area executive officer was given responsibility for the DI schools beginning with the 1998-1999 school year. During the first 2 years of implementation, principals of DI schools worked collaboratively with BCP to solve common problems, such as how to show DI academic gains on the BCPSS report card, or how to get dispensation to avoid giving student assessments based on the city curriculum that DI schools were not using. The BCP DI-Core principal collaborative did not dictate to its members. Members discussed common problems

and suggested a variety of solutions; principals were free to choose the solution that they thought would be most appropriate for their school community. The area executive officers were generally flexible and cooperative about listening to the BCP-DI principal collaborative. However, different principals responded to the ubiquitous MSPAP pressure differently. For example, during the first year of implementation, BCPSS administered citywide assessments every quarter that mimicked MSPAP and were based on the BCPSS curriculum. The BCP-DI principal collaborative successfully

People who are not experienced with DI often underestimate the difficulty of learning and implementing DI. Because of this, too many other demands are placed on the schools; these other demands distract principals from fully implementing DI.

received dispensation from these assessments, which required a total of 3 weeks of instructional time, plus countless hours of teacher time for grading. One DI principal, however, did choose to interrupt DI instruction for 1 week in the fall to give the assessment. The area executive officer of that principal interceded and ordered the principal to stop giving the current assessment, as well as assessments in the second and third quarters. The principals differed on how much professional development time and instructional time they devoted to MSPAP preparation, but none focused all instructional time and professional development time on DI.

### The DI-Core Area

At the end of the second year of implementation, BCPSS created a DI–Core area and put all the DI–Core schools under one area executive officer, who was a strong proponent of DI. This was a step toward institutionalizing DI–Core within BCPSS, leading in many ways to stronger program implementation. Five of the 6 schools that began implementation under his leadership got off to a faster start than any of the previous 11 schools had. After the creation of the DI–Core area, BCP staff did not have to run between area executive officers to get dispensations of one type or another.

On the other hand, the DI-Core area executive officer has not been inclined to give dispensations from area mandates; the mandates come from the DI-Core area staff. The staff at the DI-Core area office has less experience utilizing the DI and Core programs than many of the school-based staff. People who are not experienced with DI often underestimate the difficulty of learning and implementing DI. Because of this, too many other demands are placed on the schools; these other demands distract principals from fully implementing DI. No longer can principals choose the approach they think best for their school communities-every school has to use the same approach to each issue.

The DI–Core area mandates different goals for the DI–Core schools than the goals of the BCP DI–Core reform. The first goal of the DI–Core reform is accelerated progress through the DI programs, and the second is learning the Core material. The DI–Core area requires the schools to report quarterly on two milestones that do not support a focus on rapid progress through DI programs: (a) Each teacher must teach three DI lessons per week in each DI subject, and (b) Each student must be given Core quarterly assessments that have been created by the DI–Core area.

The expectation that each teacher teach three lessons per week in each DI subject has had unintended but predictable consequences. Attempting to standardize how many lessons

groups will complete in 1 week has proved impossible. Some instructional groups, depending on the material being taught, the learning rate of the students, and the instructional skill of the teacher, are able to complete many more than three lessons per week, whereas others cannot complete even three per week. The artificial standard of three lessons per week encourages teachers to push struggling students too quickly, while discouraging them from moving proficient students through programs as quickly as they could. Furthermore, the completion of a certain number of lessons per week does not necessarily reflect real progress. Inexperienced teachers sometimes move their students too quickly, and when they realize that the students have not achieved mastery, they are forced to move them back to repeat lessons. When the DI-Core area established the completion of three lessons per week as a quarterly milestone, they directed teachers' attention away from two crucial areas: (a) ensuring that students master the content of each lesson and (b) encouraging proficient students by accelerating lesson progress beyond three lessons per week.

The second milestone mandated by the DI area is student performance on area-created Core quarterly assessments. The DI-Core area pushed the implementation of Core more quickly than BCP had by mandating these quarterly assessments. BCP maintains that reading and language are fundamental to learning and must be emphasized until students are performing on grade level. The DI-Core area requires schools to give a quarterly Core assessment regardless of how quickly students are mastering reading and language. Teachers, many of whom are already overworked, must find the time and energy not only to teach Core, but also to give and grade the assessments. The result of this mandate is that there are fewer resources available to bring students to proficiency with reading and language and teachers to proficiency with DI. When

the teachers have reached proficiency with DI, they will be more effective at teaching Core because they will be able to use what they learn about curriculum design and instructional techniques from DI.

The DI area office has also required other activities that have distracted school-based personnel from thoroughly implementing DI. During the first year of the DI–Core area, the question of how to accurately reflect children's instructional levels on their report cards became a problem. In the first years of DI implementation, the BCP

When the teachers have reached proficiency with DI, they will be more effective at teaching Core because they will be able to use what they learn about curriculum design and instructional techniques from DI.

DI-Core principal collaborative worked out solutions to this problem. The report card must explicitly state the child's grade level; academic grades are also to reflect that level. DI brings a more precise and higher standard for grade level than schools typically have before implementing DI. In the early years of implementation, therefore, students' grade levels and grades drop because of the new more precise measurement and higher standard. The drop in grade level and grades upsets students and their parents. The BCP DI-Core principal collaborative devised a scale for interpreting the correlation between DI levels and grade levels that was more forgiving during the early years of implementation, and more accurate as the implementation continued and students reached higher levels of DI programs. The DI-Core area, however, decided to require schools to use a

strict interpretation of DI levels and grade levels. There was a strong and negative reaction from parents when the first quarter grades came out. As a result, the DI–Core area changed its position. Considerable teacher and principal learning time was lost due to the debate and its aftermath.

Another DI–Core area action that set back implementation of DI was the transferal of principals from one school to another. One summer, eight DI-Core schools received new principals. In all but one case, the new principals came from other DI schools and were already familiar with DI. Nevertheless, in addition to continuing to learn about DI, the principals had to familiarize themselves with new communities, faculties, and student bodies. Principals of DI schools have to learn many things to become effective DI managers. For example, they have to learn exactly what each DI program teaches, when to use which program, and how to interpret and manage DI data. Transferring them to new schools only slows their acquisition of these important areas of knowledge.

Although the DI–Core area has never stressed the importance of implementing DI correctly, it has sent the message to DI–Core schools that effective implementation of DI and Core is the primary priority. The principals are held accountable for raising MSPAP scores with the strategies identified by the area office, and for turning in paperwork by announced deadlines. Clear focus on doable priorities is necessary for success.

### **MSPAP:** The Test

MSPAP is a performance-based assessment given to all public school third, fifth, and eighth graders each May. The test is designed to assign scores to schools rather than to individual students. The school scores are based on the performance of students in reading, writing, language usage, mathematics, science, and social studies. Students are tested for half a day for 5 days in a row. All the students in the same grade do not take the same test. The state assigns students to testing groups. Some testing groups perform scientific experiments, whereas others perform historical, geographic, or economic analyses based on data given in the test. Some testing groups use mathematical skills to design rooms or tracks, whereas others analyze or write poems and stories. Each group engages in different kinds of activities in the course of the week. Groups are assigned scientific, literary, or mathematic work; others perform data analyses.

All items ask for written answers of varying length; there are no multiplechoice items. Maryland teachers are hired each summer to score the tests. To insure that all scorers use the same standard, teachers are trained to use detailed scoring rubrics.

Although the schools get a reading score, the test does not assess reading directly. On some forms of MSPAP, students are asked to read a passage and then answer some analytical questions. On other forms, they perform a task based on written instructions, and answer questions based on the task. In either case, a student might read and understand the passage or instructions, but use a format in answering the question that the rubric does not allow. Students might have a problem not with reading but with how they interpreted the question or framed their answer.

### **MSPAP** Fear

MSPAP is feared by teachers, principals, and other administrators because MSDE uses MSPAP scores to decide which schools to label "reconstitution (takeover) eligible." Out of these, they decide which schools to reconstitute. The label of reconstitution eligible shames a school's faculty while threatening careers.

### **MSPAP** Pressure

Pressure to raise MSPAP scores comes from both BCPSS and MSDE. The schools follow every suggestion they are given about how to raise MSPAP scores, but because MSPAP experts offer differing advice, their efforts do not provide a coherent educational program. One pervasive recommendation is that classroom teaching should look like MSPAP testing, for example, that children should be seated at desks arranged in groups of four or five, rather than in rows. In contrast, whereas DI programs do include group work, in most DI classrooms, desks are arranged in rows.

MSPAP instruction requires that students problem solve in groups, and

In the fall of 2000, the MSDE auditors gave the DI–Core schools high marks for positive school climates, focused students, explicit teaching, positive reinforcement, students on task, and effective student management.

then write answers individually. MSPAP preparation does not focus on the acquisition of necessary skills before assignment of related tasks. DI lessons, on the other hand, introduce necessary skills and repeat them until the entire class is at mastery. Once students have mastered the skills taught they are often assigned to group activities based on newly acquired skills. The MSDE has said that one of the purposes of MSPAP is to change classroom practice. Perhaps they want classroom practice to "look like" MSPAP. However, research has suggested that DI is more effective than MSPAP-directed classroom teaching (Adams & Engelmann, 1996; Gersten, Woodward, & Darch, 1986). However, the importance of raising MSPAP scores is of primary importance in Maryland. Officials of both

MSDE and the BCPSS are very clear that raising MSPAP scores is a top priority. Although both MSDE and BCPSS officials have endorsed the implementation of DI and Core, they have also made clear that raising MSPAP scores is more important than implementing DI or Core.

MSDE auditors visit DI-Core schools that are reconstitution eligible, which includes City Springs and most of the DI-Core schools (these schools became reconstitution eligible based on test scores prior to implementing DI). In the fall of 2000, the MSDE auditors gave the DI-Core schools high marks for positive school climates, focused students, explicit teaching, positive reinforcement, students on task, and effective student management. They criticized the schools for the lack of a number of elements theoretically linked to success on MSPAP. They said that the schools do not use MSPAP-like rubrics. Although DI instruction does teach students to use rubrics to evaluate their own work, these rubrics do not resemble those used on MSPAP.

The MSDE auditors also criticized the schools for not using performancebased instruction. By performancebased instruction, they were specifically referring to teaching children by giving them problems to solve or other tasks to perform. DI programs do give children problems to solve and tasks to perform, but only after children have been explicitly taught the requisite skills and have demonstrated that these skills have been mastered. The MSDE auditors also criticized the DI schools for not differentiating instruction, that is, providing appropriate instruction to different children. Differentiation of instruction in DI schools happens largely by reorganizing instructional groups to accommodate student needs, and by providing as much or as little practice as the individual requires. The MSDE auditors thought that the DI schools did not provide adequate higher order questions. DI programs actually explicitly teach students to think through higher order questions (Carnine, 1991). Finally, the MSDE auditors questioned the connection between DI programs and the Maryland Learning Outcomes (MLOs), on which MSPAP is based. Elaborate alignments have been done that have shown where the MLOs are met in DI programs.

The DI-Core schools might have been better served if the auditors' comments had focused on the considerable positives they found in the schools. Positive school climate, focused students, students on task, and effective student management are not easy to achieve, but the auditors' reports placed pressure on the schools to change their priorities and foci. However, if the schools were to change their priorities and their DI techniques to more closely resemble MSPAP, they might lose what they have achieved. Schools that responded to the auditors comments by using professional development and instructional time to address these comments took away from professional development time that could have been spent helping teachers become more proficient in DI techniques, and instructional time that could have helped children get further ahead in DI programs.

Baltimore schools are being pushed to show immediate results. When schools in Baltimore take on the challenge of implementing DI-Core, they may not even be given the 5 years that is generally thought to be minimum for a reform to become institutionalized. In fact, test scores often go down in the early years of implementing any school reform. Gilmor Elementary School was in its second year of implementing DI when MSDE handed over management to Edison Schools, based on its test scores from its first year of using DI and several years prior. When test scores were announced for Gilmor's second year of DI implementation, both MSPAP and Comprehensive Test of Basic Skills (CTBS) scores had risen,

but by then MSDE had taken DI–Core out of the school. MSDE announced that it was taking over Westport Elementary/Middle School after the school had been implementing DI for 3½ years, although Westport's eighthgrade MSPAP scores had risen more than the eighth-grade scores of any other city school, and overall, the middle school had the highest composite index of MSPAP scores in its history. MSDE felt that the MSPAP scores were not high enough.

MSDE's emphasis on raising MSPAP scores as quickly as possible is so

The principal's message to teachers about the importance of handling behavior consistently and effectively and of implementing DI as it was designed to be used was unambiguous.

strong that a MSDE official told City Springs that they should decrease their efforts with low performing students and focus instead on teaching higher performing students, because the higher performing students would be able pull up the school's MSPAP scores. Inherent to any DI implementation is the focus on teaching every child effectively. It is not possible for a school to implement DI well and simultaneously ignore or shortchange low performing students.

# The Focus at City Springs Elementary School

The focus at City Springs Elementary School from Day 1 of implementation has been on using DI and Core as they are intended to be implemented, as defined by the BCP and the National Institute for Direct Instruction. During the first and second years of the implementation, years when the priorities were to be DI reading, writing, spelling, and mathematics programs, the principal devoted her time and energy to learning about the design and techniques of DI, and she held her teachers accountable for the same. The principal's message to teachers about the importance of handling behavior consistently and effectively and of implementing DI as it was designed to be used was unambiguous. The principal noticed when teachers let their praises fall below their corrections, when their lesson progress fell below what was possible, and when students' written work showed lack of mastery or was not checked. In addition, when the principal noticed a lapse in implementation she informed the teacher in question. Several teachers left the school because of the relentless pressure to perform. The principal did not distract herself or her teachers from the implementation of DI with initiatives recommended by MSPAP experts. She knew that the faculty had chosen DI as the tool to best teach students critical academic skills, and that the students would be unable to perform on MSPAP until they had mastered reading, writing, and mathematics skills.

During the first year of implementation, City Springs and BCP applied to be partners in the New Schools Initiative (NSI). NSI is a BCPSS venture to allow nonprofit organizations to work with Baltimore city public schools that are exempt from some systemic directives. The original purpose of the NSI was to see if flexibility from systemic operations can allow schools to come up with effective educational programs to meet the needs of all students, including those considered to be "special education." City Springs and BCP have been able to use their NSI partnership to protect City Springs from some BCPSS systemic initiatives that they felt would interfere with the effectiveness of the DI programs.

City Springs, with the support of its NSI partner (BCP), does not use the milestones that the DI–Core area prescribes. For its quarterly milestones, City Springs predicts the percentages of students at each grade that will work in the appropriate DI program for that grade. This focuses the school on progress through programs. The City Springs faculty uses DI programs all day with students who are below grade level in academic skills. They use Core lessons with students who are performing at or above grade level.

When City Springs and BCP planned for the third year of implementation, the year when BCP had originally planned to introduce Core, they decided that they needed to focus on basic academic skills for another year. Teacher turnover had interfered with the development of a faculty proficient in DI techniques, which in turn had interfered with student progress. A significant portion of the student body were still below grade level. During the third year of implementation, therefore, City Springs continued with a full day of DI programs, including a second reading period.

City Springs began the fourth year of implementation with an introduction of Core customized for City Springs by its own faculty. Progress in basic academic skills during the first quarter was disappointing, however, and the faculty decided to replace the Core instructional period with a second reading period for those students whose progress indicated that they would not stay on or above grade level.

City Springs opened its fifth year of implementation (2000–2001) with a full day of DI programs, including two reading periods. The faculty asked to do this for the first month of school because a full day of DI programs sets a tone of productive academic work for students, and the design of the programs helps new teachers get a rhythm of instruction characterized by effective corrections, adequate repetition, and students achieving mastery. Later in the fall, teachers began to introduce Core to students who were on or above grade level. The Core lessons allow teachers to extend the skills emphasized in DI writing lessons. With the Core lessons and the writing activities, the teachers work to incorporate all

City Springs' CTBS scores in the early grades have been increasing for several years, reflecting the growing effectiveness of instruction in kindergarten in recent years.

that they have learned from DI lessons about effective teaching: modeling, leading, testing, and correcting, until the children's work shows that they have mastered the material.

Throughout the 5 years of implementation, professional development for City Springs faculty has focused on clear faculty needs with regard to behavior management and DI techniques. The principal has resisted pressure from both MSDE and BCPSS officials to teach faculty about various aspects of MSPAP preparation. Similarly, she has resisted pressure to alter the school's curriculum to include MSPAP preparation.

If the implementation of DI and Core is allowed to continue at City Springs, the use of Core will increase with students who are performing on or above grade level. Faculty are fine tuning Core lessons in preparation for increased use, as an increasing number of students are on or above grade level in reading. Extended writing activities will be part of the Core lessons, as will the effective teaching techniques that teachers have learned from their DI experience.

# Results of DI–Core at City Springs Elementary School

City Springs' test scores prior to the implementation of DI and Core were very low. City Springs had the reputation of being one of the worst performing schools in the city. Baltimore city public schools are judged primarily by their MSPAP scores (third and fifth grades only), and secondarily by their scores on the CTBS, a norm referenced test, at all grade levels.

Although City Springs' MSPAP scores are still well below the state standard of 70% of students reaching proficiency in reading, writing, language usage, mathematics, science, and social studies, its composite index of MSPAP scores has increased every year since the implementation of DI and Core in 1996. This is highlighted in Table 1.

CTBS scores have been increasing at City Springs, particularly in the early grades, as shown in Table 2.

The median percentiles of City Springs 2001 CTBS reading scores at first (82nd percentile), second (63rd percentile), and fifth (67th percentile) grades were higher than the median of the rest of the DI-Core schools as a whole and higher than the citywide median. The median percentiles of City Springs 2001 CTBS math scores at first (61st percentile), second (65th percentile), third (60th percentile), and fifth grades (50th percentile) were higher than the medians for the DI-Core schools as a whole and higher than the citywide median, as shown in Table 3.

City Springs' CTBS scores in the early grades have been increasing for several years, reflecting the growing effectiveness of instruction in kindergarten in recent years. DI's success at moving children to higher grade levels is dependent on teaching children to read in kindergarten. The increase of scores at the upper grade levels may have been possible in 2001 because effective teaching in kindergarten and first grade allowed school leaders to turn their attention to the upper grades.

Test scores cannot tell the whole story of a school. City Springs has not always provided a quiet, orderly environment for learning, but it does today. Students perform in reading celebrations and compete in math rumbles (math fact competitions similar to spelling bees), as well as spelling bees. Fifth graders are studying a seventhgrade U.S. history program. In 2000, five City Springs fifth graders' CTBS scores earned them places in the advanced academic program at Roland Park Middle School, Baltimore's premier middle school. No one at City Springs remembers such success previously. In the spring of 2001, fourth and fifth graders who were studying U.S. history visited Monticello, where they told their guide about Thomas Jefferson's accomplishments as our nation's third president, explained the significance of the Declaration of Independence, and discussed the Louisiana Purchase and the Lewis and Clark expedition. They visited the U.S. Courthouse for the District of Maryland, where they asked Judge Andre Davis about the implications of the first 10 amendments to the U.S. Constitution on teachers' right to search students' lockers, on the Ku Klux Klan, controversial rap lyrics, and Timothy McVeigh's execution.

### Conclusion: Focus on Teaching Every Child

If our public schools are to reform themselves to teach every child effectively, they need dedicated principals and teachers trained in effective instructional tools. Principals and teachers need freedom from distractions so that they can focus on teaching. It should be no surprise that educational programs like DI have been shown to be ineffective if they are not used as they were designed to be used. The pressure on Baltimore city public schools to raise MSPAP scores immediately is so great, and the consequences of not raising scores so painful, that there are serious disincentives to trying any research-based

### Table 1

Percentage of City Springs Third and Fifth Graders Scoring Satisfactory on the Maryland School Performance Assessment Program

Grade and Subject	1994	1997	1998	1999	2000
(1	Before DI–COR	E)			
Grade 3 reading	1.3	3.4	6.5	10.1	9.3
Grade 3 writing	6.5	11.8	9.4	18.3	23.6
Grade 3 language usage	0.0	13.6	15.6	15.7	27.3
Grade 3 mathematics	0.0	1.7	11.5	5.9	5.7
Grade 3 science	6.5	0.0	7.8	11.3	12.7
Grade 3 social studies	0.0	2.9	7.8	11.3	12.7
Grade 5 reading	2.0	9.3	10.2	11.8	10.9
Grade 5 writing	5.9	7.0	27.0	23.5	20.0
Grade 5 language usage	0.0	14.3	34.4	20.6	36.4
Grade 5 mathematics	0.0	8.8	4.8	0.0	16.4
Grade 5 science	0.0	1.8	4.8	8.8	30.9
Grade 5 social studies	2.0	3.5	4.8	11.8	20.0

Note. DI-Core = Direct Instruction-Core Knowledge

### Table 2

City Springs Comprehensive Test of Basic Skills Medians 1998–2000

	1997–1998		1998–1999		1999–2000		2000-2001	
Grade	Reading	Math	Reading	Math	Reading	Math	Reading	Math
1	28	8	43	18	65	71	82	61
2	26	14	30	14	39	18	63	65
3	28	18	28	12	31	16	50	60
4	20	9	30	9	14	21	32	38
5	14	9	12	13	22	47	67	50

### Table 3

### 2001 Comprehensive Test of Basic Skills Medians: City Springs, DI–Core, BCPSS

	City Springs		DI-Co	re Area	BCP	BCPSS	
Grade	Reading	Math	Reading	Math	Reading	Math	
1	82	61	65	54	54	51	
2	63	65	43	43	39	41	
3	50	60	40	39	42	41	
4	32	38	33	30	33	33	
5	67	50	44	31	41	34	

*Note.* BCPSS = Baltimore City Public School System, DI–Core = Direct Instruction–Core Knowledge

school reform. Schools feel safer following whatever the latest MSPAP wisdom is. Most Maryland schools are using MSPAP preparation activities. It would be interesting to see what effect research-based reform efforts could have on MSPAP scores if they were fully implemented, rather than being diluted by MSPAP preparation.

Results at City Springs suggest that effective implementation of DI with some Core can raise test scores. If City Springs continues to have the flexibility to continue with the DI–Core reform, we expect scores to continue to rise as we teach more Core and continue to refine our DI expertise. Even City Springs, however, has not been entirely sheltered from systemic distractions. What might happen to test scores if a school or group of schools were told by MSDE and BCPSS that they would be held accountable not for MSPAP scores, but for 5 years of faithful implementation of a research-supported reform? <u>ADF</u>

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### SIEGFRIED E. ENGELMANN, National Institute for Direct Instruction (NIFDI)

# A Response to Allington Allington Leveled Serious Allegations Against Direct Instruction

### March 2, 2002

Allington leveled serious allegations against Direct Instruction. All the key ones are false. In his paper, "What do we know about the effects of Direct Instruction on student reading achievement?" Richard Allington indicated that the research on Direct Instruction is tainted and not accurate, that the results of the Follow Through project show that Direct Instruction does not consistently improve student performance, that there are data on long-range effects of Direct Instruction that reveal some sort of negative effects, and that the data on Direct Instruction's effectiveness are misrepresented in research studies and the publisher's promotional materials. All these allegations are false.

First, Project Follow Through: Allington uses a quote from Stebbins et al. as if it has implications for the performance of Direct Instruction schools. It doesn't. The quote does not even refer to the Direct Instruction model but to the overall performance of the entire Follow Through project. The quote: "In general Follow Through's externally stimulated compensatory interventions do not seem to have been a reliable tool for raising the average test scores of groups of disadvantaged children." This statement is absolutely true. The 13 major sponsors and the self-sponsored models, as a group, did not

improve performance of students at all. The models that did the absolutely poorest job and performed far **below** the mean of the comparison children who had no special programs were programs that resemble whole language. Specifically, the third graders in Weikart's model (Cognitively Oriented Curriculum) performed far below the 20th percentile in math and language, and only at the 22nd percentile in reading. They were outperformed by the control groups in basic skills, cognitive skills, and affective measures.

In contrast, Direct Instruction not only performed the highest in comparison to other models, but it also performed more than a standard deviation above the control groups in everything—including basic skills, cognitive skills, and affective measures.

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school reform. Schools feel safer following whatever the latest MSPAP wisdom is. Most Maryland schools are using MSPAP preparation activities. It would be interesting to see what effect research-based reform efforts could have on MSPAP scores if they were fully implemented, rather than being diluted by MSPAP preparation.

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Allington Leveled Serious Allegations Against Direct Instruction

#### March 2, 2002

Allington leveled serious allegations against Direct Instruction. All the key ones are false. In his paper, "What do we know about the effects of Direct Instruction on student reading achievement?" Richard Allington indicated that the research on Direct Instruction is tainted and not accurate, that the results of the Follow Through project show that Direct Instruction does not consistently improve student performance, that there are data on long-range effects of Direct Instruction that reveal some sort of negative effects, and that the data on Direct Instruction's effectiveness are misrepresented in research studies and the publisher's promotional materials. All these allegations are false.

First, Project Follow Through: Allington uses a quote from Stebbins et al. as if it has implications for the performance of Direct Instruction schools. It doesn't. The quote does not even refer to the Direct Instruction model but to the overall performance of the entire Follow Through project. The quote: "In general Follow Through's externally stimulated compensatory interventions do not seem to have been a reliable tool for raising the average test scores of groups of disadvantaged children." This statement is absolutely true. The 13 major sponsors and the self-sponsored models, as a group, did not

improve performance of students at all. The models that did the absolutely poorest job and performed far **below** the mean of the comparison children who had no special programs were programs that resemble whole language. Specifically, the third graders in Weikart's model (Cognitively Oriented Curriculum) performed far below the 20th percentile in math and language, and only at the 22nd percentile in reading. They were outperformed by the control groups in basic skills, cognitive skills, and affective measures.

In contrast, Direct Instruction not only performed the highest in comparison to other models, but it also performed more than a standard deviation above the control groups in everything—including basic skills, cognitive skills, and affective measures.

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Allington apparently needs help in basic logic. His confusion of the fact that Project Follow Through could be a perfect failure in exceeding the performance of the control groups, and that Direct Instruction could perform very well is a confusion of part and whole. It would be a lot like somebody saying, "The Tigers are the worst basketball team in the league; therefore every player on the team is the worst player in the league."

Allington laments that, "This conclusion [about the overall poor performance of Follow Through] is omitted from the Direct Instruction promotional materials." His position is paradoxical. Including the results of the other models would simply show the low level of performance achieved by approaches that use the idiom Allington promotes (the knowledgeable and sensitive teacher who knows when and how to teach anything). The model that followed this philosophy most rigorously, the Open-Education Model (British Infant School), performed the lowest of all models, even worse than Weikart's, and far below the level of the control groups in all areas.

Allington concludes that, "the reading achievement of poor children in control schools (with no Follow Through project) was no different than that of children participating in Follow Through programs," as if this conclusion implicates Direct Instruction in any way. The statement is absolutely true. The comparison children performed around the 20th percentile. The overall mean for the various Follow Through interventions was also around the 20th percentile.

The official analysis of Follow Through, conducted by Abt Associates concluded that the Direct Instruction schools achieved the highest performance in rural areas, in urban areas, on basic skills, on cognitive skills, on self-image in all

### subject areas—reading, math, language, and spelling.

The House et al. report that Allington cites as an "independent evaluator" was commissioned by the Ford Foundation, which had sponsored many programs based on the idiom of learner self-selection and developmentally keyed instruction (e.g., the Open Classroom model). The House analysis has been discredited by members of the scientific community who have no stake in the commercially published Direct Instruction programs. Allington attempts to make much of

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the "variability issue," but the House report's assertions about the range of variation have been shown to be inaccurate. (See Gertsen, R. [1984]. Follow Through revisited: Reflections on the site variability issue. *Educational Evaluation and Policy Analysis*, 6, 411–423.)

Allington draws the conclusion that Direct Instruction research misrepresents facts. These allegations are serious—possibly libelous, but most certainly false. Allington quotes Stahl et al. who indicate that "both Adams and Engelmann are associated with *Reading Mastery*." I am associated with *Reading Mastery*. Adams is not, in any way. The book we co-authored, *Research on Direct Instruction*, lists Adams first because it is his meta-analysis. He performed the meta-analysis completely on his own. He had me write the chapters on the features of Direct Instruction.

In his preface, Adams writes: "... as a professor who teaches research courses I saw a need for a book that described what Direct Instruction was (and wasn't) and presented an objective research review.... So I called Zig Engelmann and told him that I felt there was a need for a comprehensive meta-analysis of Direct Instruction research. I asked him if he would write a description of Direct Instruction (which evolved into the first three chapters of this book). He agreed and I began compiling the data for the meta-analysis.... I completed the meta-analysis and was stunned at the results. Because I teach research courses, I know that very few popular educational programs actually work and that the effect sizes of those that are reputed to be effective are small. The DI meta-analysis revealed the largest effect sizes that I had ever seen."

Stahl et al. further assert that "we have, in a cursory survey using ERIC, found a number of relevant studies not included in the Adams and Engelmann review, including some studies that did not find salutary effects for DISTAR in beginning reading." Indeed their investigation was cursory. The critical question is not whether some studies were omitted from the analysis but whether any of these studies met the selection criteria for the analysis. Studies were not included in the meta-analysis "if they did not include: means and standard deviations of the groups, the use of an acceptable comparison group, and the unbiased assignment of subjects into groups" (page 34 of Research on *Direct Instruction*). All studies that were listed in ERIC and other relevant databases at the time were included in the meta-analysis.

Furthermore, there is a long list of studies that provide additional documentation for Direct Instruction's success but were not included in the meta-analysis because they appeared after the meta-analysis was completed or did not meet all the criteria of the meta-analysis—Seattle, Washington's comparative study; schools in Moss Point, Mississippi; Wesley School in Houston, Texas; the A.S.A.P. schools in Utah. There is also a list of 15 studies that address various details of the Direct Instruction programs that produced highly significant results. Six additional studies show highly unpredicted outcomes that were achieved using Direct Instruction principles. All these studies were based on the principles of Direct Instruction as articulated in *Theory of Instruction* by Engelmann and Carnine (1991). None of these 21 positive studies were included in the meta-analysis.

Allington, using logic that apparently only Allington understands, however, drew the conclusion that the book presented "... only some of the evidence available," but "... I would go further and note that Adams and Englemann [*sic*] freely mixed research on explicit instruction with studies of the commercially available Direct Instruction programs. Thus, their promotional review exaggerates the effects of Direct Instruction." Allington's assertion presents the real exaggeration. All but 4 of the 34 studies in the analysis use commercial Direct Instruction programs. One of these four was a program written by the Direct Instruction authors, but not published (the legal concepts). Two were based on Direct Instruction principles and practices articulated in Theory of Instruction and in Reading Mastery. And one was based on behavioral principles articulated by Engelmann and Becker in their series on teaching (Teaching 1: Classroom Management).

Here's a challenge for Allington. Identify **one** study in the meta-analysis that uses "explicit" instruction rather than commercially available Direct Instruction programs or a program that has an unquestioned foundation in those principles that are unique to Direct Instruction (for the studies that did not use programs developed by Engelmann, et al.). Here's an option for Allington. Identify one study that met the selection criteria used for the meta-analysis that was published at the time the meta-analysis was conducted but that was not included in the meta-analysis. I'll bet he cannot meet either challenge.

Allington makes another part–whole fallacy when he refers to the Houston high school dropout rate as though Houston is synonymous with Direct Instruction. Allington implies that the performance of Houston high schools is related to the performance of Direct Instruction elementary schools in Houston. In fact, during the 1990s Direct Instruction was used in just a handful of schools in Houston, which

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means that the current dropout rate in high schools is not the result of Direct Instruction but of the kind of practices that Allington promotes. Beginning 3 years ago, the Rodeo Institute for Teacher Excellence began funding 18 Direct Instruction schools in Houston, and there are others, including Wesley Elementary.

In a study of the Rodeo schools and comparison schools in Houston in 2000–2001, researchers from the Texas Institute for Measurement, Evaluation, and Statistics found that those schools implementing Direct Instruction outperformed the control schools significantly. Specifically, the authors concluded that the Direct Instruction implementation "accelerated students' development of prereading and word reading skills" in kindergarten and first grade, and students maintained gains in skill acquisition over comparison students in the second grade. Seventy-three to 78% of the students at the Direct Instruction schools scored above the 50th percentile on the SAT-9 Reading tests, but only 46 to 54% of the students at the control schools scored above the 50th percentile. In other words, these schools did well, regardless of what the whole of Houston did.

Allington asserts that "... average reading achievement at Houston's widely publicized Direct Instruction site, Wesley Elementary School, [has] declined steadily from first grade through fifth grade. By the end of fifth grade average reading achievement at Wesley rests in the 30th percentile range."

Here are the true numbers on Wesley from the Houston Independent School District (HISD) Research and Accountability web site (http://dept.houstonisd.org/research/). In 2001, fifth graders scored at the 54th NCE in reading on the Stanford Achievement Test. This was indeed lower than the first grade score (64th NCE), but above the scores for second through fourth grades. So Allington was wrong on two accounts-the percentile of the fifth graders (well above the 30th percentile) and the advertised steady decline from first through fifth grades.

Next, Allington refers to "several long-term effects of Direct Instruction [that] were reported by Schweinhart and Weikart" (*Educational Leadership*, 1998). I wrote a rebuttal to that article that appeared in the March 1999 issue of *Educational Leadership*. The rebuttal showed that the Schweinhart and Weikart study did not meet the minimum criteria for a scientific study. It didn't record the number of children correctly; it didn't have matched groups; it classified the status of some students when it had no information about the status of these students; it performed calculations that resulted in mathematically-impossible numbers; and it produced no significant data on any long-term differences that could be identified as a function of early programs. In fact, the editors of Educational Leadership wrote this about my analysis of the High Scope research: "A detailed analysis of research methods suggests the improbability of a link between preschool experience and adult criminal behavior."

No rebuttal of my attack on the research was ever published in *Educational Leadership* even though Schweinhart and Weikart submitted one. Why do you suppose the publication didn't publish the rebuttal?

As far as an increased dropout rate for Direct Instruction is concerned, several studies have followed up students who went through more than 2 years of Direct Instruction. They show that the dropout rate of Direct Instruction students, as well as their assignment to special education, is significantly less than that of the comparison students. For example, see Meyer, L. A. (1984). Long-term academic effects of the Direct Instruction Project Follow Through. *Elementary School Journal, 84*, 380–394.

Finally, Allington asserts that "achievement in schools using Direct Instruction varies widely with a few schools showing stable scores or modest improvements and others showing achievement declines."

We are currently working with a dozen schools in Baltimore. According to Allington's assertion at least some of them should be performing worse now than when we began working with them several years ago. There are no such schools. On average they are up around 25% in all subject areas. Granted, not all of them do equally well. But those that follow the requirements we have for implementing Direct Instruction—not using competing programs, providing adequate schedules, keeping current data on lesson progress, and most of all, teaching the programs in a technically sound manner—have the best results.

The school that performed the lowest 5 years ago—City Springs Elementary—has followed the program requirements most closely and has shown the greatest gains. See "The

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Importance and Difficulty of Disciplined Adherence to the Educational Reform Model" in Volume 7 of JESPAR (*Journal of Education for Students Placed At Risk*) by Dr. Muriel Berkeley, President of the Baltimore Curriculum Project, for details.

Specifically, City Springs school went from being 115th in a district of 120 schools to being 12th overall and 5th in fifth-grade reading. The school was and is 98% African-American and in a neighborhood considered among the worst in Baltimore for crime, violence, and failure. When we began with the school, not one student in the third grade nor one in the fifth grade passed the Maryland state test. Last year, 50% of the fifth graders passed the reading test, and 75.9% passed the math test. Furthermore, the median score of fifth graders was the 67th percentile in reading on the Comprehensive Test of Basic Skills (CTBS) and the 50th percentile in

math. The school is only the second Baltimore City school in the history of Maryland's school probation program to be removed from the list of failed schools. The current fifth graders perform about 1½ standard deviations above the fifth graders we started with 5 years ago.

One more challenge to Allington: identify one school with a truly disadvantaged student population (not one with displaced middle-class or working-class children) that uses "literature-based" approaches consistent with all the things you have "learned about teaching" and that performs anywhere near the level of City Springs. Produce one anywhere in the country. I'll bet you that you can't do it. And I'll bet you that we can turn around any school that implements Direct Instruction according to the numbers. That school will have all Kindergarten children reading by the end of the school year (not reciting stories as they look at pictures, not guessing on the basis of "context," not reading signs or playing cloze games, not discussing and then reading what they discussed, but reading). And the acceleration will continue as the children go from grade to grade. This is not a promotional claim but something I will bet the ranch on. ADJ

# A Response to Allington

I must admit that I was a bit stunned by Richard Allington's comments about me and the quality of my meta-analysis of Direct Instruction (DI) programs in my co-authored book, Research on Direct Instruction (www.edresearch.com). As many of you know, Allington has served on the Board of Directors of the International Reading Association (IRA) and served as President of the National Reading Conference. Currently, he has an endowed chair position at the University of Florida and is a self-described "researcher by training and vocation." In his position paper, he provided many examples of what he described as flaws in my research analysis.

Dr. Allington is a perfect example of why I wrote the book. After being a university professor for 17 years, I decided to start a consulting company (Educational Achievement Systems) to provide objective research reviews, to assist school districts in selecting research-proven programs, and to evaluate innovations through pilot testing. Because I had heard complaints about Direct Instruction for years, I decided to do a meta-analysis on that topic. As the size of the literature review grew, the focus changed from a simple metaanalysis to a book. I asked Siegfried Engelmann, the originator of Direct Instruction, to write an explanation of Direct Instruction while I conducted the meta-analysis and wrote a review of Project Follow Through.

Around the same time, Jan Hartleben and I were investigating the outrageous claims of the makers of "The Phonics Game." They claimed that they could improve school grades in as little as 18 hours of instruction. We gave them our "Educational Mirage Award." In our 20+ page investigative report (www.edresearch.com), we described

their questionable advertising and lack of research evidence to support their claims. Because of the timing of our announcement of the award and the release of the DI book, I got some interesting mail; half of the people said I was pro-phonics (based on the DI book) and half said I was anti-phonics (based on the "Phonics Game" report) and most had not even read what I wrote beyond the titles and maybe a few paragraphs. What I expected was that someone would contact me to suggest I had missed a study or two in my meta-analysis-a fear that anyone who conducts a meta-analysis has. I heard nothing on that topic.

This brings me to Allington's accusations. According to him, I am biased and part of the DI group who has "manufactured evidence." For Allington to make that claim involving someone's reputation, he should have evidence. After reading what he has written, however, it is apparent that either he has never read anything by me or he is fabricating claims purposely. Given his reputation as a member of the IRA Hall of Fame (www.reading.org/dir/ex/hallfame.html) I am stunned by his impugning my reputation based on false or misleading claims.

### The Case Supporting Allington Not Reading My Book

First, let me tell you why I don't think Allington has read my book. There are many examples I could use, but I will cite only a few. First, Allington states that my meta-analysis includes only short-term DI studies. On pages 48 and 51, the meta-analysis shows that 17 studies lasted less than a year and 17 lasted over a year. The effect size can be calculated per comparison and per study but all of the results show large effect sizes: .95 for studies less than a year and .78 for studies more than a year. Second, Allington said that DI research studies are old. On page 44, the age of the publications was analyzed (1972-1980: 6 studies, 1981-1990: 22 studies, 1991-1996: 6 studies) and all of the effect sizes were large (.73, .87, 1.00, respectively). I also analyzed the data 8 other ways: by type of student, age/grade of student, academic subjects, test, research design, teacher, fidelity checks, and country. No matter which way the data were analyzed, the results were consistent: implementing DI programs resulted in large effect size gains.

Because Allington stated that the positive findings were based on research conducted by DI-connected persons, I decided to re-analyze the data comparing DI- vs. non-DI-connected researchers. I was able to categorize each study with one exception: the study by Hill Walker et al. (1983). Although I know that Dr. Walker does not work directly with Engelmann, I decided to pull the Walker et al. study out of the analysis because they are both University of Oregon professors. The results of this analysis (which Allington could have easily done on his own in less than 15 minutes) disprove his criticism. Fifteen of the studies were conducted by researchers who have been somehow connected with Direct Instruction. In contrast, the majority of the studies (18 studies) were conducted by non-DI-connected researchers. The effect size for studies by DI-connected researchers was .99a large effect size. The effect size for studies by non-DI-connected researchers was .76-also a large effect size. On April 1st, a more thorough explanation of this analysis will be available on my web site

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(www.edresearch.com). Again, I wonder why he made statements about reliance on DI-connected researchers. Is it because he doesn't even have my book, even though he is making negative statements?

At this point, I became curious about what Allington was saying about me in other places. I have not read through all of his recent writings, but I found another example of not reading. On page 96 of Schools That Work (2nd ed.), citing an article by Stahl, Duffy-Hester, and Stahl (1998), Allington wrote about a widely distributed research review by the publisher of Reading Mastery. Stahl et al. were writing about my book, but the Reading Mastery review that Allington mentioned is actually written by Bonnie Grossen. Her authorship is clearly noted on page 1 of that review. It appears that Allington did not read my book or Grossen's research review.

#### The Case of Allington Doing Shoddy or Deceptive Scholarship

The reference to the Stahl et al. article reminded me that Allington is guilty of at least selective, if not shoddy, scholarship. Besides misrepresenting my work, Allington ignores a sentence in the Stahl et al. article that goes directly against another point that Allington attempted to make in his position paper. Allington belittles the results of Project Follow Through, and yet ignores Stahl et al.'s sentence, "DISTAR was the only program that produced achievement in poor students that was near the national average" (p. 346). In contrast, Allington in his position paper rejects the Project Follow Through findings and uses a quote from Abt Associates, the authors of the Project Follow Through report. The authors said, "In general Follow Through's externally stimulated compensatory interventions do not seem to have been a reliable tool for raising the average test scores of groups of disadvantaged children" (p. xxix). They are describing the comparison of the average of the nine Project Follow Through models to the average control group scores. Without close reading, Allington appears to be making a case against Direct Instruction, but his quote is not even about the results of the DI Model.

Chapter 6 in my book describes the actual results of Project Follow Through in depth, and I would recommend that Allington read it. The Direct Instruction Model was superior on basic skills, cognitive, and selfesteem measures. In contrast, the scores of students in the control group

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were superior on all three measures in comparison to five of the nine Project Follow Through models. Although Allington states that the publisher of DI programs never provides comparisons showing the results of the control groups, a graph on page 37 of Grossen's Reading Mastery research review shows a comparison of all nine models to control groups. Again, it appears that Allington did not read my book or Grossen's research review, but that did not hinder him from making incorrect comments about my work. For those who are interested in more information about Project Follow Through, I would suggest that they read chapter 6 in my book, which provides 32 pages of information.

I guess I would feel uncomfortable if I ignored some of his more outrageous comments. In the first paragraph of his position paper, Allington says that in the report of the National Reading Panel (2000), there is no mention of Direct Instruction. Like my book and Grossen's review, I suggest that Allington actually read this report. According to my count, Engelmann's name is mentioned 34 times and the term "Direct Instruction" is mentioned over 50 times. (I stopped at 50 because I became tired of hitting the Find button). I suggest that readers go to the National Reading Panel report (www.nichd.nih.gov/publications/nrp/ report.htm) where they can verify my statement.

Allington also said that I mixed research on explicit instruction with research on the commercial Direct Instruction programs. I did not. I would challenge him to find one study in my meta-analysis that is on explicit phonics, not Direct Instruction. He can forward the citation to me at edachieve@attbi.com. Why make such obviously false statements in public? He states that I missed some studies, which favored non-DI programs. What were they, using the criteria described on page 34? Again, what studies did I miss?

My reputation is based on my objectivity. I have been called as an expert witness in many special education legal cases involving methodology. I have been on the winning side every time. If I was truly biased in my viewpoint, I doubt that I could continue this unbeaten record of 16 cases.

I imagine that I could continue on, picking false statements from his position paper, but it is time for him to back his claims. In the last few years, he has co-authored several books on reading instruction (Schools That Work, Classrooms That Work, and What Really Matters for Struggling *Readers*) and many articles and position papers. In this position paper, he described himself as a "researcher by training and vocation." Based on that claim and based on the fact that he is extremely critical of others' research, I expected that he had conducted many research studies, especially

involving longitudinal data, showing the effectiveness of what he proposes in his books, articles, position papers, etc. Using ERIC, I found 102 publications, but no studies with longitudinal data supporting his suggested reading approach. Moreover, there were no short-term studies. Obviously, he believes in his approach, based on his prolific publication record, but I just can't find the research evidence that what he recommends actually works. I would suggest that the reader go to my web site (www.edresearch.com) where they can conduct their own ERIC literature search on "Allington, Richard." Maybe I missed an experimental study with equivalent groups, acceptable assessment measures, appropriate statistical analysis, and other expected components of a typical research study. Anyone can send me a citation of an Allington research article that they think meets these criteria. If I receive nominated research articles, I will post that citation and provide a review based on research

methodology. In this way, others can "evaluate my evaluation."

#### The Challenge to Richard Allington: A Comparison Between Reading Mastery (DI) Versus His Reading Program

As a consultant to school districts, I suggest that district administrators field-test the adoption of new innovations. This means that I conduct a study comparing the existing academic program to the proposed new program. The idea is to create a process of research-based decision-making: selecting programs based on what works best based on their own research findings. Here is the challenge: I will search for a volunteer school district and I (with other acceptable research consultants to both sides) will design a study comparing the *Reading Mastery* (DI) program to the Allington approach. Another option would leave me out of the process; I could select objective researchers, who must be approved by both sides. The DI group will be contacted and they would provide the necessary teacher training, materials, etc. and Allington's group would do the same. Let the results speak for themselves.

I have a mailing list of the superintendents, curriculum directors, and reading specialists from the 500 largest school districts. They will be contacted to see if they are interested in participating in this study. Also, I will ask for volunteer school districts on my web site (www.edresearch.com) beginning April 1st. I have not talked to anyone connected to Direct Instruction about this proposal. I will contact both Richard Allington and Siegfried Engelmann for their responses to this challenge. Their responses will be posted on my web site.

Also, I will be sending my book *Research* on *Direct Instruction*, Bonnie Grossen's review, and the National Reading Panel report to Dr. Allington. *ADL* 

#### MARTIN A. KOZLOFF, University of North Carolina, Wilmington

Rhetoric and Revolution: Kenneth Goodman's "Psycholinguistic Guessing Game"

## Introduction

Promoters and teachers of whole language argue that:

- 1. Whole language is more effective than other forms of reading instruction.
- This alleged superiority reflects specific features of whole language; e.g.,
- a. "Implicit" instruction that is less focused on precise learning objectives, involves less teacher direction, and requires students to construct knowledge of phonic and spelling rules (Goodman, 1986).
- b. Much instruction on specific skills (e.g., phonics) is given as needed, during mini-lessons.
- c. There is an emphasis on learning in what are called "authentic con-

texts"; e.g., learning phonics (which sounds go with which letters) and vocabulary during independent reading and when watching and listening to the teacher read books (Smith, 1985).

 These design features flow from a more adequate understanding of language and reading (Daniels, Zemelman, & Bizar, 2000; Powell & Hornsby, 1993).

Recent research on reading and assessments of whole language challenge the claim of greater effectiveness. Specifically,

 Controlled longitudinal experimental research shows that instruction on phonemic awareness, decoding, involving longitudinal data, showing the effectiveness of what he proposes in his books, articles, position papers, etc. Using ERIC, I found 102 publications, but no studies with longitudinal data supporting his suggested reading approach. Moreover, there were no short-term studies. Obviously, he believes in his approach, based on his prolific publication record, but I just can't find the research evidence that what he recommends actually works. I would suggest that the reader go to my web site (www.edresearch.com) where they can conduct their own ERIC literature search on "Allington, Richard." Maybe I missed an experimental study with equivalent groups, acceptable assessment measures, appropriate statistical analysis, and other expected components of a typical research study. Anyone can send me a citation of an Allington research article that they think meets these criteria. If I receive nominated research articles, I will post that citation and provide a review based on research

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Recent research on reading and assessments of whole language challenge the claim of greater effectiveness. Specifically,

1. Controlled longitudinal experimental research shows that instruction on phonemic awareness, decoding, teacher, is precisely and logically sequenced, and provides systematic distributed practice is reliably superior for a wider range of students than implicit (less focused) instruction that requires students to construct their own knowledge (Fletcher & Lyon, 1998; Foorman, Francis, Fletcher, Schatschneider, & Mehta, 1998; Gough, 1993; Liberman, 1999; National Reading Panel, 2000).
Evaluation research at state and county levels shows that achievement of students taught with whole language and Reading Recovery—the remedial branch of whole language

reading fluency, spelling, and com-

prehension that focuses on specific

skills, involves explicit communica-

tion of rules and strategies by the

county levels shows that achievement of students taught with whole language and Reading Recovery the remedial branch of whole language—is not as high as claimed by whole language proponents and is less reliably effective than instruction provided by field tested curricula involving focused, teacher-directed instruction (Chapman, Tunmer, & Prochnow, 1999; Heibert, 1995; Moats, 2000; San Diego Unified School District, 1999; Stahl, McKenna, & Pagnucco, 1994).

It is important as well to examine the conceptual apparatus of whole language. What assumptions are made? How is reading understood? How are methods of assessment and instruction derived from the conceptualization of reading? If the assumptions and/or conceptualization of reading are flawed, then whole language assessment and instruction derived from a flawed foundation are likely themselves to be flawed. If so, this may help to explain the (at best) uneven effectiveness of whole language.

### Goodman's Guessing Game

Whole language proponents cite Kenneth Goodman's 1967 paper ("Reading: A psycholinguistic guessing game") as one of the first in their canon-the paper that fostered the whole language movement, or revolution (Goodman, 1976) and continues to guide and legitimize whole language activities (Pappas & Pettegrew, 1998). Goodman clearly saw the paper the same way-as offering "a more viable scientific alternative" to what he dubbed "preexisting, naive, common sense notions" about reading that "interfere with the application of modern scientific concepts of language and thought to research on reading" (Goodman, 1967, p. 126). Let us take Goodman at his word. Let us examine

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his "more viable scientific alternative" to see how he crafted a new foundation for reading research and instruction; to determine whether it satisfies the criteria for a viable or even scientific alternative; and to understand better how his ideas were so easily accepted and spawned the whole language movement.

In simplest terms, Goodman presents a conception of reading as a guessing game. He provides no logical, empirical, or commonsensical support for this conception. He then presents a highly selective set of passage misreadings by a child. These misreadings are not called errors; they are "miscues." These misreadings are interpreted in a way that fits Goodman's guessinggame formulation (although other interpretations—from the phonic and word centered approaches he disparages—are more obvious and reasonable). Goodman then uses the misreading examples as verification of his conception of reading—although the only credible use of the examples would be a demonstration that it is possible to interpret misreadings that way. The paper ends by suggesting that the implication for instruction is teaching children to play the guessing game more skillfully. Following is a closer examination of the logical structure of Goodman's paper.

## The Opening Gambit

Goodman's paper begins with a common rhetorical device—caricature of a self-created adversary. Specifically, he creates a binary opposition of then current conceptions of reading and their associated methods of teaching: "phonic centered" and "word centered." He reduces these approaches to a few statements that would lead readers to agree with Goodman that these conceptions are simplistic and must be wrong. For example,

...the common sense notion I seek here to refute is this: 'Reading is a precise process. It involves exact, detailed, sequential perception and identification of letters, words, spelling patterns and larger language units.' In phonic centered approaches to reading, the preoccupation is with precise letter identification. In word centered approaches, the focus is on word identification... (p. 126).

Goodman then writes, "In place of this misconception, I offer this..." —his allegedly "more viable scientific alternative" foreshadowed in the paper's abstract.

Note the artful way that Goodman sets up the reader.

1. He labels the phonic and word centered approaches "common sense notions," despite the great deal of scientific research done in support of each one—especially the approach that advocated teaching phonics in a systematic way during beginning reading. Yet, he does not cite this research or even hint that there was any. These approaches are not presented as bodies of knowledge that may have some flaws. Rather, in contrast to his self-valorized "scientific alternative," readers are to consider them mere common sense notions.

2. In contrast to standard practice in science, Goodman presents no data that the phonic and word centered approaches do not work. He conducts no experiments-indeed, he cites no research at all-showing that whole language instruction (derived from his guessing game formulation of reading) is more effective than the phonic centered and word centered approaches he wishes to replace. And, although he calls them "misconceptions," he does not analyze the intellectual apparatus behind the phonic centered and word centered approaches (e.g., their theories of reading) to show they are logically flawed.

In other words, Goodman does nothing to (in his own words) "refute" these common sense notions. His only claim to readers' attention—and the only warrant for his "scientific" alternative—is an unsubstantiated opening pitch that there are two preexisting alternatives; that these alternatives are merely common sense notions; and that they are misconceptions.

## The New Model

Goodman then presents his "scientific" alternative.

... I offer this: "Reading is a selective process. It involves partial use of available minimal language cues selected from perceptual input on the basis of the reader's expectation. As this partial information is processed, tentative decisions are made to be confirmed, rejected, or refined as reading progresses." More simply stated, reading is a psycholinguistic guessing game. It involves an interaction between thought and language. Efficient reading does not result from precise perception and identification of all the elements, but from skill in selecting the fewest, most productive cues necessary to produce guesses which are right the first time. The ability to anticipate that which will be seen, of course, is vital in reading, just as the ability to anticipate what has

In contrast to standard practice in science, Goodman presents no data that the phonic and word centered approaches do not work.

not yet been heard is vital in listening (pp. 127–128).

That is Goodman's new conception of reading—his more viable scientific alternative. Goodman's conception consists of the following propositions—taken from his initial statement (above) and from the summary of his "model" at the end of the paper.

- 1. "Efficient reading does not result from precise perception and identification of all the elements."
- 2. Reading "involves an interaction between thought and language."
- 3. "Reading is a selective process."
- 4. This selecting process "involves partial use of available minimal language cues..."
- 5. Efficient reading results "from skill in selecting the fewest, most productive cues..."
- 6. These cues are at first graphic cues (p. 135).

- These cues are "selected from perceptual input on the basis of the reader's expectation." They are "guided by constraints set up through prior choices, his language knowledge, his cognitive styles and strategies he has learned" (p. 135).
- 8. These cues provide "partial information."
- 9. The reader "forms a perceptual image using these cues and his anticipated cues" (p. 135).
- 10. The reader "searches his memory for related syntactic, semantic, and phonological cues."
- 11. This memory search "may lead to selection of more graphic cues and to reforming the perceptual image" (p. 135).
- 12. These cues are "necessary to produce guesses which are right the first time."
- The reader then "makes a guess or tentative choice consistent with graphic cues. Semantic analysis leads to partial decoding as far as possible" (p. 135).
- 14. This partial information "is processed, tentative decisions are made to be confirmed, rejected, or refined as reading progresses."
- 15. "If no guess is possible, he checks the recalled perceptual input and tries again" (p. 135).
- "If a guess is still not possible, he takes another look at the text to gather more graphic cues" (p. 135).
- 17. "If the tentative choice is not acceptable semantically or syntactically, then he regresses, scanning from right to left along the line and up the page to locate a point of semantic or syntactic inconsistency" (p. 135).
- "When such a point [semantic or syntactic inconsistency. MK] is found, he starts over at that point" (p. 135).

- 19. "If no inconsistency can be identified, he reads on seeking some cue which will make it possible to reconcile the anamolous [*sic*] situation" (p. 135).
- 20. "If the choice is acceptable, decoding is extended, meaning is assimilated with prior meaning and prior meaning is accommodated, if necessary" (p. 135).
- 21. "Then the cycle continues" (p. 135).
- 22. The above propositions enable one to see reading as a "psycholinguistic guessing game."

### Rhetorical Devices and Logical Fallacies in Goodman's Guessing Game

Goodman's new conception of reading is unsatisfactory in several ways.

#### It is speculation, not science.

A defining feature of science (in contrast to metaphysics, opinion, fantasy, and madness) is that propositions, arguments, theories, and conceptual schemes are judged viable and scientific not because proponents say so, but on the basis of empirical evidence and sound reasoning. Science also requires that writers define termsespecially when terms are new or may be misunderstood. However, Goodman's version of science-at least in his article-appears not to require any empirical evidence or effort at clear definition. He offers no data whatever to support his assertions that, for example,

- 1. Reading does not result from "precise perception and identification of all the elements."
- Readers "select" "productive cues," and then guess at what words say and mean.

3. "Readers utilize not one, but three kinds of information simultaneous-ly" (p. 131).

Nor does he explicate the meaning of "cue," "guess," "thought," "language," or even "reading."

The absence of evidence and clear definition weakens Goodman's claim that he offers a viable scientific alternative conception of reading. Still, Goodman managed to help fashion a new definition of science—a science with neither data nor reasoning nor defined concepts, a science indistinguishable from speculation and wishful thinking. However,

However, Goodman's version of science—at least in his article—appears not to require any empirical evidence or effort at clear definition.

this revisionist science well served later whole language teachers, writers, researchers, and advocates who (guided by Goodman) no longer felt obliged to abide by—or even accept the legitimacy of—traditional scientific rules about external verification of claims via tests available to other persons (Moats, 2000). In the absence of empirical evidence, we can only assess the adequacy of Goodman's new guessing game conception of reading by examining the logical adequacy of his propositions, as shown below.

Goodman's conception of reading commits the fallacy of hasty generalization, or converse accident. Goodman's paper implies that his new conception embraces all of reading. He does not say that only certain elements of reading, at some times, for some readers are part of a guessing game. Rather, "(R)eading is a psycholinguistic guessing game." It is for all readers a process of selecting cues, and then guessing, confirming, rejecting, or refining tentative decisions about what sounds letters make, what a word says and means, what a period and comma imply, how words are spelled. However, such guessing, cue selecting, and decision making arguably apply only to (a) beginning readers; (b) older readers who have not been taught to read and understand text based on solid knowledge (and the automatic application) of sound/symbol correspondence, punctuation, spelling, subject/predicate, cause/effect, and so forth; or (c) skilled readers who have run into a new and difficult word. Consider propositions 13–21. Is it reasonable to assert that these activities apply to all readers? Is there any evidence that skilled readers guess at every word-as if reading (fluent reading) were a series of tentative choices?

Another example of hasty generalization is Goodman's use of reading errors-called "miscues"-as the only evidence that all reading is guessing. Goodman's paper does not provide samples of fluent reading to substantiate his propositions about selecting and guessing. This may be because fluent reading provides no evidence of guessing. In summary, it is likely that Goodman's guessing game conception of reading applies only to poor readers, beginning readers, or good readers who are decoding unfamiliar words. In other words, all that is new in Goodman's new conception is the unwarranted generalization that all readers guess all the time.

The massive irony, here, is that Goodman's followers created a method of reading instruction—whole language—that reversed the polarity of guessing. Rather than something to be overcome because it signified lack of skill, guessing was now considered a natural and good thing, and therefore was to be encouraged. Systematic instruction on phonemic awareness, sound/symbol relationships (m says mmm), word attack, and spelling was now unnatural—a bad thing to be discouraged. Whole language teachers therefore explicitly and systematically taught new readers the guessing strategy used by poor readers for making errors, and called it fine.

Goodman's conception of reading as a guessing game commits the fallacy of reification, or hypostatization. In other words, Goodman treats abstract terms ("reconcile the anamolous [sic] situation," assimilation, accommodation) and metaphoric fictions ("searches his memory for... cues," "he checks the recalled perceptual input") as if they were concrete objects or events (Thompson, 1995). Recall that Goodman's new formulation hinges on rejection of the "common sense" notions that (a) reading involves an almost instantaneous recognition of whole words, or (b) reading involves an almost automatic "perception and identification of letters, words...." Note that whole word and phonic processes are ordinary, readily observable, mundane actions. The reader sees and properly or improperly identifies letters and words. Most observable identification errors have straightforward, ordinary, mundane implications for instruction; e.g., at sounding out words. But Goodman will offer nothing attractive to potential followers unless he conjures a radical shift of reading from the mundane to the esoteric. Something as commonsensical as mere

skill instruction will not do. Henceforth, reading processes and reading instruction will no longer be easily seeable and teachable. Instead, reading processes will be located in the mind: reading will involve "an interaction between thought and language." Goodman now invents a mental apparatus to account for reading skill and error—the psycholinguistic guessing game—and it consists of selecting, deciding, guessing, confirming, rejecting, and refining. There are two logical problems with Goodman's reified mental guessing game apparatus. First, in contrast to what we ordinarily expect of a viable scientific account, there is no way to test whether Goodman's hypothesized mental apparatus exists at all—i.e., whether readers in fact perform the elaborate guessing routine—or whether the hypothesized apparatus operates just as Goodman proposes. After all, many models of thought processes can be generated to account for the same reading behavior—just as demonic possession once

Goodman now invents a mental apparatus to account for reading skill and error—the psycholinguistic guessing game—and it consists of selecting, deciding, guessing, confirming, rejecting, and refining.

provided a coherent account of psychiatric symptoms.

Second, Goodman transforms similes and metaphors (as-if) into objects-thought processes. However, all anyone (with a scientific orientation) can reasonably say about a fluent reader's performance is, "Her eyes scan the words and she speaks them as written." And all anyone can say about a struggling reader's halting, error-filled performance is, "It is as if she is guessing." Yet, Goodman's "scientific" formulation would have us believe that readers (skilled and unskilled) actually see words, select cues, make a guess, check the guess, reject the guess, make another guess, confirm the guess, and then say the word correctly or incorrectly. If the guessing game is not a convenient fiction enabling Goodman to make sense of reading,

but is considered a reality—something really happening—then a reader enacting the psycholinguistic guessing algorithm (propositions 5–20 above) would be carrying on an internal dialogue, as follows.

"James said... Hmmm, that t h looks like it might be there. Okay, I'll say there... There lion... Wait... That doesn't work. Okay, I'll try them... Them lion... Nope... Maybe it's this... This lion... Yeah, that sounds right. This lion..."

But we rarely see anything like this guessing process. Even when readers make a high rate of errors, reading is so fast it is hard to imagine that somewhere in their subvocal thinking they perform the mental guesswork. The only thing available to the observer of the above reading sample is the reader saying, "James said, (three-second pause) This lion." Which is the more reasonable account of the three-second gap between "said" and "This" (and every other error or pause in a passage)? (a) The reader naturally (with no instruction) repeatedly enacts multistep guessing routines in milliseconds, or (b) The reader simply needs someone to tell him, "That word is this... Spell this... this... What word?... this. Good. Start the line again... James said, This lion is big."

In other words, Goodman's psycholinguistic apparatus (which, for science, would be considered reified fictions, or hypothetical constructs) is either: (a) incapable of any sort of test; and/or (b) simply impossible as an actual activity in real time. *At best, his psycholinguistic* guessing game can only be treated as a metaphor—in which case one asks if a metaphor is the right foundation for actual reading assessment and instruction.

### Whole language and upward mobility

Goodman's hypothetical multistep mental guessing apparatus had and continues to have strong appeal. As mentioned, Goodman helped to move reading and reading instruction out of the mundane world of common, observable skills and into the world of esoterica. Even simple decoding of text was now a complex mental activity involving higher order thought processes such as selecting, testing, confirming, and revising. Reading instruction would now require special skills giving teachers access to the realm of thought where the hypothesized higher order guessing game was played. Special courses, textbooks, conferences, and education professors would be needed.

In other words, Goodman was not merely offering an alternative to the phonic centered and word centered approaches. He was creating an invidious status distinction. He was offering prestige. This may have been appealing to education professors long known to occupy positions of low status and prestige in the university community, and to school teachers whose long hours, lack of appreciation, and low salary also connoted low status and prestige. By making reading and reading instruction esoteric processes, Goodman's paper helped foster the idea that traditional reading instruction was only for commonsense-minded technicians interested in observable skill. Whole language teachers and professors would be much more than this; they would be theoreticians-certainly a higher class of people. This clarifies the facile denigration of systematic instruction, planned practice, teaching formats, field tested materials, scripted lesson plans, mastery tests, and in general accountability by whole language teachers and education professors. Reading instruction was to be an art; and the reading teacher an artiste.

## Miscue analysis and the quasi-therapeutic

As noted earlier, the only empirical evidence that Goodman presents in support of (as examples of) his guessing-game model are reading errors made by children. Goodman calls these errors "miscues in order to avoid value implications" (p. 127). For example, the story text reads,

"So, education was good! I opened the dictionary and picked out a word that sounded good. 'Philosophical'. I yelled.

As mentioned, Goodman helped to move reading and reading instruction out of the mundane world of common, observable skills and into the world of esoterica.

Might as well study word meanings first. 'Philosophical: showing calmness and courage in the face of ill fortune."

What the child read was,

"So, education was good! I *hoped* a dictionary and picked out a word that sounds good. *PH He* yelled. Might as well study *what it means*. *Phizo Phiso/soophical*: showing calmness and courage in his face of ill *fort future futshion*."

Goodman states, "*His expected* [i.e., correct. MK] *responses mask the process of their attainment* [That is, how he read correctly. MK], *but his unexpected responses* [i.e., errors, or miscues. MK] *have been achieved through the same process, albeit less successfully applied*" (p. 127). This is a very interesting statement. Goodman is saying that when readers are fluent, we do not see how they do it; i.e., we do not see any guessing game. It is only when they err that we can make a case for guessing. And then, with no

rationale at all, Goodman states that reading well and making errors are done via the same process. How could he possibly know that?

But as to incorrect reading itself, Goodman still has no direct, empirical evidence of guessing or any other activity in the elaborate guessing game apparatus. He does not ask readers to, for example, say outloud what they are doing as they try to read. All he has are interpretations of alleged covert guessing processes. Goodman's interpretations (miscue analysis) reveal that he is willing to avoid the most obvious interpretation of errors in favor of the guessing hypothesis. For example, Goodman says, "The substitution of *hoped* for *opened* could again be regarded as careless or imprecise identification of letters. But if we dig beyond [italics added] this common sense explanation, we find (a) both are verbs (b) the words have key graphic similarities. Further, there may be evidence of the reader's bilingual French-Canadian background here, as there is in subsequent miscues (harms for arms, shuckled for chuckled, shoose for choose, shair for chair)" (p. 128).

It is clear that despite what Goodman makes of them, these errors are by definition examples of the "imprecise identification of letters"-and this imprecision rests very much on the child's lack of sufficient instruction on how to sound out familiar and unfamiliar words based on knowledge of sound/symbol correspondence. It seems that Goodman goes out of his way to avoid the obvious account of reading errors-the child has not been taught word attack skills-so that Goodman can "dig beyond" the obvious and provide a more interesting guessing game interpretation for which there is not a shred of direct evidence-not when persons read well and not even when they make errors.

In summary, Goodman uses miscues as a resource for making interpreta-

tions about thought processes in a way that suits his guessing game model. There is nothing in the miscues themselves that suggests anything about thought processes. But there is everything in the miscues that points directly at poor instruction. Ironically, if Goodman's approach were in fact scientific, he would provide a panel of impartial observers with a set of miscue examples and ask the panel to make sense of each error or miscue, and then compare his interpretation with theirs. In this way he could determine the reliability of his interpretations.

Goodman's entire guessing game model commits the fallacy of affirming the consequent. Goodman began his paper with the claim that his model would be an example of science—not mere common sense. However, his argument commits perhaps the most fundamental error that the scientific method is devised to avoid; namely, the fallacy of affirming the consequent. This fallacy can be depicted as follows.

If P, then Q Q (Affirming the consequent)

#### Therefore P

For example,

If there is frustration, then there will be aggression.

There is aggression.

Therefore, there is frustration.

The logical problem is that aggression may be the result of many things besides frustration. That is why scientific researchers try to identify alternative explanations (e.g., models of aggressive behavior, reinforcement for aggressive behavior, a history of physical abuse) and see if these alternatives can be disproved—leaving the original proposition (If frustration, then aggression) intact for the time being.

Goodman's argument can be summarized as follows.

If reading is a psycholinguistic guessing game, then readers will make certain kinds of errors miscues.

Readers do make these kinds of errors—miscues.

The prediction is that students who are taught to guess (and who do not know when a guess is correct) will make many more errors.

Therefore, reading is a psycholinguistic guessing game.

I have pointed out that miscues themselves are not direct evidence of any mental guessing game activity. Goodman has simply interpreted them that way. And there is no way to "dig" into anyone's thought processes to determine whether Goodman is right or wrong. Even so, there are other explanations for these miscues besides an hypothesized mental guessing game. The strongest candidate alternative is poor instruction. At least that is a plausible rival explanation (Hempenstall, 1999). A student makes half a dozen errors trying to sound out "philosophical" because he was not taught exactly how to sound it out. He is not firm on each letter/sound combination; he is not firm on sounding out a letter or blend, holding the sound and scanning the word for the next letter or blend. He says "hoped" instead of "opened" because, again, he is not firm on the sounding out strategy, and because he

has not had a teacher who systematically juxtaposed similar looking words—hoped/opened—and demonstrated again and again that they are sounded out differently.

In summary, *it may be that many reading* errors are NOT the result of guessing—as some sort of natural process—but are *taught*. A student reads a passage and says "fort" rather than "fortune." The teacher or tutor simply (and improperly) tells the student, "fortune." The student repeats "fortune" and goes on with the passage-never really learning to sound out the difficult word. Predictably, when the student sees "fortune" again, she says "fort"because that is what she has "practiced" so many times before. Or, when the student says "fort" rather than "fortune," the whole language teacher tells the student to think of a word that might go there-in other words, the teacher encourages guessing. The student casts about and tries "future" and "futshion." Predictably, when the student runs into "philosophical," the student will not sound out the word, but will do as she was taught—she will cast about for likely possibilities-"phizzo," "physical," "physicacol." In other words, the student's errors do not reflect a natural guessing game apparatus. They are direct effects of explicit (mal)instruction on guessing and failure to receive proper instruction on how to sound out words.

The scientific test of the above rival hypothesis-errors represent how students are mistaught; they do not represent an innate guessing game-is relatively easy to perform. Identify the sorts of errors made by students taught with whole language vs. the sorts of errors made by students taught with more focused instruction in each reading skill, in which errors are not corrected by having students guess but by firming up the sound-it-out strategy. The prediction is that students who are taught to guess (and who do not know when a guess is correct) will make many more errors.

### Summary

Kenneth Goodman's 1967 article helped to foster the whole language movement, which for several decades was the predominant approach to reading instruction in many schools of education, school districts, and states. However, recent experimental research has shown that many of the defining (and allegedly revolutionary) design features of whole language (e.g., attempting to teach elemental reading skills—such as phonemic awareness, sound/symbol correspondence, word identification, and spelling—in the context of complex reading and writing activities that require these very skills) are at odds with what is known about effective instruction. In addition, evaluation research shows that whole language is often less effective than its advocates claim, and is specifically less effective than field-tested curricula that provide systematic, explicit, comprehensive, precisely planned and logically progressive instruction on all of the elemental and complex skills in reading.

This paper examined the "viable" and "scientific" model of reading proposed by Kenneth Goodman—a model that has guided both the **methods** used in whole language (e.g., implicit, as-needed instruction; miscue analysis) and the ways whole language advocates **legitimize and valorize** their actions. The examination of Goodman's "psycholinguistic guessing game" model revealed that Goodman:

- Provides no data that adequately support his presumption that there is any such guessing game apparatus. This may be because the guessing game is in fact a metaphor.
- Uses a small and selective sample of reading behavior (errors, or "miscues") as evidence that readers use the psycholinguistic guessing game.
- 3. Interprets these errors in a way that supports the guessing game model, but fails to consider plausible alternative interpretations and offers no

evidence of interobserver reliability of his interpretations. (See Hempenstall [1999] for a reasoned and extensive critique of miscue analysis.)

- 4. Commits the fallacy of hasty generalization by asserting that his interpretations of some readers' guessing errors imply that all readers use the guessing apparatus.
- 5. Commits the fallacy of affirming the consequent when he reasons that errors signify the existence of a psycholinguistic guessing apparatus, when (and more reasonably) errors signify poor instruction.

In summary, it appears that the whole language movement-with all of its publications, assessment instruments and devices, conferences and organizations, college courses, classroom methods, and consequences for young readers-rests on a mere metaphor (the psycholinguistic guessing game) supported by assorted logical fallacies. An interesting sociological question is, what cultural circumstances disposed so many education students, administrators, college professors, boards of education, and veteran teachers to so easily and so thoroughly accept Goodman's psycholinguistic guessing game as a premise for their reading curricula? ADI-

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## *The Three-Cueing System: Help or Hindrance?*

The three-cueing system is an established element in most preservice and inservice teacher training courses. It offers an explanation of how skilled readers comprehend written language, and a direction for the role of teachers in literacy education. It is one of those belief systems the origin of which is difficult to establish, and the widescale and uncritical acceptance of which is surprising to those anticipating an empirical foundation. Perhaps the system is popular among teachers because it appears to reconcile the conflict between a phonics-emphasis curriculum and a literature-based curriculum. There has long been a tension between the two approaches, and the apparent reasonableness of the three-cueing conception of skilled reading may reduce such tension-a spirit of compromise prevailing over a determination to establish the reality. When there are two apparently polar alternatives, seek the comfort of the middle ground.

Wouldn't it be convenient if there were numerous equally effective means of making sense of print? That there weren't essential elements that every reader must master? Many teachers express the view that differences among the learning styles of children make any single approach to literacy instruction problematic. They observe that for some children the early stages of reading have already been mastered prior to school entry, for others development is rapid and stress free, requiring only minimal assistance.

Whilst this observation actually concerns variations in the degree of literacy preparedness of students, a frequent conclusion is that students therefore require different instructional emphases rather than simply different instructional entry points. A further assumption may be that there are many qualitatively different ways of skillfully extracting (or constructing) meaning from print. Perhaps, they reason, one student may benefit most by focusing on the meaning of print rather than its structure, and so benefit most when exhorted to employ contextual cues. A student may have a strong visual memory for words, whilst another appears more sensitive to the sounds in words, and yet another seems to respond to a focus on the tactile or kinaesthetic senses.

The belief such observations may engender is that attention to phonemic awareness and/or phonics for all students is a forlorn attempt to shoehorn different learners into only one of numerous possible reading methods indeed one that may not suit their personal (neurological?) style or preference. Perhaps this perception explains the ready acceptance of many different methods, including the three-cueing system which offers the apparent unification of diverse approaches.

Ultimately, however, what constitutes the effective teaching of reading is an empirical question, and the decision about instructional focus should depend not on belief, but upon knowledge of the processes underlying skilled reading, and the means by which skilled reading is most effectively pursued. In the USA, the recent national and state education bills informed by the results of the National Reading Panel (2000) have highlighted a momentum shift from reading viewed as a natural process unique to each child to reading as a difficult skill that is developed more

effectively under some educational conditions than others.

The ready acceptance of the three-cueing model should not be treated lightly because beliefs about the reading process determine what should and should not occur in the beginning reading classroom. The implications form the very core of literacy instruction, and if the conception of reading development is mistaken then the activities of teachers employing its recommendations may subvert the reading progress of students, and in particular, of those students who do not readily progress without appropriate assistance.

In fact, the three-cueing system is a seriously flawed conception of the processes involved in skilled reading, and the practices flowing from its misconception may have contributed to the problems experienced by an unacceptably large number of students. Not only are the practices flowing from the system ineffective for promoting beginning reading, they actually deflect students away from the path to reading facility. Sadly, many parents do not discover until about Grade 4 that their children have been taught moribund reading strategies, and to their dismay, that recovery is unlikely (Chall, Jacobs, & Baldwin, 1990; Lewis & Paik, 2001; Spear-Swerling & Sternberg, 1994).

In developing an understanding of the rise to popularity of the three-cueing system it is necessary to consider the context in which it occurred. During the past two decades, an approach to education with strong philosophical underpinnings, whole language, became the major model for educational practice in many countries.

The whole language movement itself is refractory to detailed examination, so is best examined through its underpinnings, its philosophical assumptions and its visible manifestations, that is, its instructional features. The whole language approach had its instructional roots in the meaning-emphasis, wholeword model of teaching reading. This emphasis on whole words was a comparatively recent shift; the phonic technique of teaching component skills, and then combining those skills had been the norm until the mid-Nineteenth Century (Adams, 1990). It followed a sequence of teaching upper-case and lower-case letter names, two-letter and three-letter combinations, monosyllabic words, multisyllabic words, phrases, sentences, and finally, stories. Phonics is an approach to teaching reading that aims to sensitize children to the relationships of the spelling patterns of a written language to the sound patterns of its corresponding oral language. It is not a single pathway, however, as decisions need to be made regarding the timing of its introduction, the method of delivery, whether explicitly or implicitly taught, whether correspondences are presented in isolation, or solely in the context of literature, how many correspondences, and which (if any) rules are appropriate.

In 1828 Samuel Worcester produced a primer that borrowed a European idea of teaching children to recognize whole words without sounding them out.

It is not very important, perhaps, that a child should know the letters before it [*sic*] begins to read. It may learn first to read words by seeing them, hearing them pronounced, and having their meanings illustrated; and afterward it may learn to analyse them or name the letters of which they are composed. (Crowder & Wagner, 1991, p. 204).

Support for this view came from James Cattell in 1885 in his assertion that whole word reading was more economical (Davis, 1988); and later, from the Gestaltists who considered that the overall shape of the word (rather than the summation of the sound-parts) should provide the preeminent clue for young readers. An assumption behind this approach was that beginning readers should be taught to read in the way skilled readers were thought to do. Given the belief that skilled readers associated meaning directly onto the whole-word image, it followed that showing beginners how this was achieved would save time. The alternative view was that reading should be viewed as a developmental process in which the early stages of developing the alphabetic principle are necessary for later skilled-reading, even though those early skills may be rarely needed at the later stages. This alternative perspec-

Phonics is an approach to teaching reading that aims to sensitize children to the relationships of the spelling patterns of a written language to the sound patterns of its corresponding oral language.

tive fell from favor until its recent resurrection through the interest in phonological processing.

A further assumption of what became known as the whole-word approach was that the knowledge of letter-sounds would naturally follow once whole-word recognition was established (Smith, 1978). It was not until some time later that doubt began to be expressed about the effects on some children of this whole-word initial emphasis. Unfortunately for many at-risk children, the consequence of the primacy of the whole-word method is an inability to decode unfamiliar words (Tunmer & Hoover, 1993), a problem that becomes more pronounced as the student meets a dramatically accelerating number of new words during the late primary and into the secondary grades.

The whole-word model involved introducing words through their meaning as the words are presented in stories. Words are to be recognized by sight, using the cue of their shape and length. A secondary strategy relies on deducing meaning from other contextual clues, such as accompanying pictures or through guesses based upon the meaning derived from surrounding words (Chall, 1967). In a whole-word approach, phonic strategies are considered potentially harmful, and to be employed as a last resort. Even then, they are intended to provide only partial cues, such as obtained by attention to a word's first or last letters. Systematic teaching of phonic strategies was antithetical to the holistic nature of such meaningoriented approaches. Because teaching should not take as the unit of instruction anything other than meaningful text, any phonic skills developed by students is likely to be selfinduced and idiosyncratic.

Goodman (1986) described whole language as an overarching philosophy rather than as a series of prescribed activities, and one not to be simply equated with an instructionally-based strategy such as the whole-word approach. In his view, the teacher aims to provide a properly supportive, rather than directive, environment that encourages children to allow the natural development of literacy at their own developmentally appropriate pace.

There is a strong emphasis on principles, such as, the benefits of a natural learning environment (Goodman, 1986) and of exposure to a literate environment (Sykes, 1991). The proponents of the approach also insist that reading and writing are natural parts of the same language process that enable the development of speech. In this view, learning to read and write would be equally effortless and universal if only the reading task were made as natural and meaningful as was learning to talk. Goodman (1986) argued that it is the breaking down of what is naturally a holistic process into subskills, to be learned and synthesized, that creates a disparity in some children's ease of acquisition of speaking and of reading.

Whilst whole language offers solely a philosophical rationale rather than the instructional underpinnings offered by the whole-word method, the negative responses of each model to the emphasis on the alphabetic principle in phonics instruction are very similar.

Whole language advocates have conceptualized reading development as the gradual integration of three-cueing mechanisms (semantic, syntactic, and graphophonic). The term *integration* is important because it is made clear that the three strategies are not intended to be employed in isolation, but so quickly that they appear simultaneous. In this view, skilled readers make continuous use of the cues as required. They are engaged in a continuous process of prediction and confirmation as they construct meaning from the text.

## Semantic, syntactic and graphophonic cues.

Semantic cues involve enlisting the meaning of what has just been read to assist with decoding words about to be read, that is, the next (unknown) word should make sense in the context of the reader's ongoing interpretation of the text meaning. For example, in the sentence The rodeo rider leaped onto the back of his , the reader's integrated three-cueing system enables him to produce a word that maintains the sense of the sentence. "I don't recognize this word, but what would make sense to me? In the context of the sentence and my experience with the world, it would make sense if it were horse."

*Syntactic* cues arise because of the logic of our system of sentence construction—words and their position in a sentence are constrained by the rules of grammar. Word order, endings, tense, intonation, and phrasing are

each elements of syntax. Thus, the word chosen in the previous example must be a noun, it couldn't be a participle such as *horsing*. "So, the word I chose (*horse*) is appropriate in that it is syntactically acceptable." In order to show students how to make use of this cue, teachers are likely to encourage students to skip the word, and read on until a clue becomes available, derived from the structure of the rest of the sentence. This is usually called the read-ahead strategy.

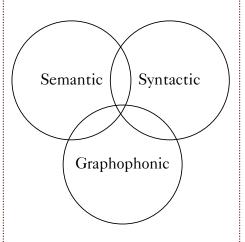
Syntactic and semantic cues are broadly described as context cues, as they may

It is also likely that they will be discouraged from employing sounding out as an initial strategy for determining the pronunciation of an unknown word.

be used to name a word without recourse to visual inspection. When students self-correct their reading errors based upon such cues, teachers are likely to be pleased, as it indicates to them the operation of contextual cues.

*Graphophonic* cues refer to the correspondence between graphemes (the symbols in print) and phonemes (the speech sounds they represent). In the three-cueing system, the graphophonic cues are employed as a backup element, to help confirm the choice of words. "Yes, the word I chose (*horse*) begins with an *h* so it meets the demands of graphophonic suitability."

According to the advocates of this interpretation of skilled reading, the process outlined occurs so rapidly as to be virtually instantaneous. That it is the integration of the three processes that produces meaning is indicated by the familiar overlapping circles of the diagram below. Comprehension is indicated by the area shared by the three intersecting circles.



This representation is similar to that shown in Pearson (1976).

The instructional implication of this assertion about skilled reading is that beginning readers and those struggling with the reading process should consciously master the self-questioning in order to become adept at reading in this three-cueing manner. For example, teachers may cover up key words in sentences, prompting students to practice making use of contextual clues to predict the hidden words, and they may encourage students to seek meaning from an accompanying picture and produce an appropriate word. Students may have the three-cueing sequence modelled to them whenever they request teacher assistance with an unknown word. It is also likely that they will be discouraged from employing sounding out as an initial strategy for determining the pronunciation of an unknown word. Apart from those teacher decisions, there is little else in the way of clearly delineated advice to teachers to ensure such a seemingly complex set of orchestrated processes does occur.

In the three-cueing approach, the three systems are not considered to be equally useful; the graphophonic system labelled the least helpful—even potentially disruptive when relied upon by readers (Weaver, 1988). Reading should entail as little emphasis as possible on each word's letter construction. Rather, skilled reading is perceived as a process of continuous prediction of target-words, this prediction based primarily upon semantic and syntactic cues, followed by confirmation that the chosen word is consistent with the context (and possibly the target word's initial letters).

"In turn (the reader's) sense of syntactic structure and meaning makes it possible to predict the graphic input so he is largely selective, sampling the print to confirm his prediction" (Goodman, 1973, p. 9).

However, if a struggling reader can't pronounce most of the words on a page, there is no useful context to interpret. Yet, the so-called "integrated" use of the system actually involves employing them sequentially (even if rapidly), with the graphophonic cues to be the last in the sequence. What advice should a teacher give to a student when word identification problems arise prior to any context being established? Even if the graphophonic system is recommended as a last resort, how will the students know how to use it productively? Further, will they be motivated to do so, if taught that it is largely unhelpful?

Students are disadvantaged because proponents of whole language have invariably been uncomfortable with instructional attention being devoted to within-word structure. The responses of whole language protagonists have taken several forms.

One approach has been outright rejection of word structure:

"Focus on the subsystems of language results in useless, timewasting and confusing instruction" (King & Goodman, 1990).

"The rules of phonics are too complex,... and too unreliable... to be useful" (Smith, 1992).

#### Submerge phonics

"Phonic information... is most powerfully learned through the process of writing" (Badger, 1984, p.19)

Argue that phonics knowledge requires no instruction.

"Children can develop and use an intuitive knowledge of letter-sound correspondences [without] any phonics instruction [or] without deliberate instruction from adults" (Weaver, 1980, p. 86).

Students are disadvantaged because proponents of whole language have invariably been uncomfortable with instructional attention being devoted to withinword structure.

"Children must develop reading strategies by and for themselves" (Weaver, 1988, p. 178).

Routman takes this position further in arguing that only by learning to read does phonics information become useful. In other words, reading facility precedes the capacity to learn phonic strategies (Routman & Butler, 1988).

Argue that phonics approaches emphasize accuracy to the detriment of meaning.

"Accuracy, correctly naming or identifying each word or word part in a graphic sequence, is not necessary for effective reading since the reader can get the meaning without accurate word identification.... Furthermore, readers who strive for accuracy are likely to be inefficient" (Goodman, 1974, p. 826). Goodman (1976) argued that phonic skills should only develop within the context of three-cueing systems used to extract meaning from print. In this view, the graphophonic system is considered a fallback position to be used when semantic and syntactic systems fail (Weaver, 1988).

"The first alternative and preference is—to skip over the puzzling word. The second alternative is to guess what the unknown word might be. And the final and least preferred alternative is to sound the word out. Phonics, in other words, comes last" (Smith, 1999).

A decidedly unconventional approach, intended to ensure that phonics instruction does not become widely accepted, involves *ad hominem* attacks—accusing those supportive of phonics instruction of ulterior motives:

"Ultraconservatives advocate phonics teaching because it is authoritarian," Weaver says, and serves to socialize "nonmainstream students, especially those in so-called lower ability groups or tracks... into subordinate roles" (Weaver, 1994).

"At a meeting of the International Reading Association 4 years ago Ken Goodman attacked Marylin Adams [a phonics advocate] as a 'vampire' who threatened the literacy of America's youth" (Levine, 1994, p. 42).

In contrast to recent consensus among empirical researchers about the importance of teaching phonics explicitly (Lyon, 1999; National Literacy Strategy, 1998; National Reading Panel, 2000), some whole language advocates have argued that phonics is relevant but can only be explored implicitly in the context of authentic literature. The concern about the implicit model relates to the risk it creates for students unable to benefit from occasional exposure to important intraword features.

### What is the evidence supportive of the view of skilled reading inherent in the threecueing system?

Goodman (1976) described skilled reading as a "psycholinguistic guessing game" (p. 259). He sees reading as a sophisticated guessing game driven largely by the reader's linguistic knowledge, and as little as possible by the print. Smith (1975) expressed this view succinctly. "The art of becoming a fluent reader lies in learning to rely less and less on information from the eyes" (p. 50).

The rationale for asserting that contextual cues should have primacy in skilled reading was based on a flawed study by Goodman (1965). Goodman found a 60-80% improvement in reading accuracy when children read words in the context of a story rather than in a list format. He argued on the basis of this study that the contextual cues provided marked assistance in word identification. There has always been acceptance that context aids readers' comprehension, but despite contention in the literature over Goodman's finding concerning contextual facilitation of word recognition, his study is still regularly cited as grounds for emphasizing contextual strategies in the three-cueing system.

The study was flawed in two ways. The design was not counterbalanced to preclude practice effects. That is, a list of words taken from a story was read, and then the story itself was read. Secondly, the study ignored individual differences in reading ability, so it was not possible in the Goodman study to determine whether good, or poor, readers (or both categories) derived benefit from context. Replication studies by a number of researchers including Nicholson (1985, 1991), Nicholson, Lillas, and Rzoska (1988), Nicholson, Bailey, and McArthur (1991) have discredited Goodman's argument, and found that good readers are less reliant on context clues than poor readers. A more recent study by Alexander (1998) produced similar outcomes. Results consistent with those above were reported in studies by Goldsmith-Phillips (1989); Leu, Degroff, and Simons (1986); and Yoon and Goetz (1994), cited in Alexander (1998).

Poor readers attempt to use context only because they lack the decoding skills of the good readers.

Poor readers attempt to use context only because they lack the decoding skills of the good readers. As a consequence of these studies, Nicholson (1991) argued that encouraging reliance on contextual cues only confuses children, directing their attention away from the most salient focus (word structure), and helping entrench an unproductive approach to decoding unknown words.

A further problem involves the accuracy of contextual guesses. In a study by Gough, Alford, and Holley-Wilcox (1981), well educated, skilled readers, when given adequate time, could guess correctly only one word in four through contextual cues. Gough (1993) pointed out that even this low figure was reached only when the prose was loaded with fairly predictable words. Interestingly, although good readers are more sensitive to context cues to elicit the meaning of unfamiliar words, they do not need to use context to decode unknown words (Tunmer & Hoover, 1993). They soon learn that word structure more reliably supplies the word's pronunciation than does context; unfortunately, it is poor readers who are more likely to invest attention on such context guesswork (Nicholson, 1991). The error made by whole language theorists is to confuse the desired outcome of reading instruction—a capacity to grasp the meaning of a text—with the means of achieving that end. In order to comprehend meaning, the student must first learn to understand the code (Foorman, 1995).

An additional problem was highlighted by Schatz and Baldwin (1986). They pointed out that low frequency words and information-loaded words are relatively unpredictable in prose. That is, the words least likely to be recognized are those that contain most of the information available in the sentence. As students progress through the school years, texts provide less and less redundancy from which to derive contextual cues, and the strategy becomes even more moribund.

It had also been argued (Cambourne, 1979) that the speed of skilled reading could not be accounted for if the reader looks at every word. In his view, the continuous flow of meaning should be faster than word-by-word decoding. Cambourne also asserted that good readers used contextual cues to predict words initially, and then confirm the word's identity using as few visual features as possible.

These are empirical questions that have been answered through the use of eye movement studies. It has been demonstrated that the fluent reader recognizes most words in a few tenths of a second (Stanovich, 1980), far faster than complex syntactic and semantic analyses can be performed. Eye movement studies have not supported the skipping/skimming hypothesis.

These studies (see reviews in Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2001, 2002; Rayner & Pollatsek, 1989; Stanovich, 1986) using sophisticated video cameras and computers indicate that skilled readers do process all the print—they do not skip words, nor do they seek only some features of words.

Thus, the techniques of contextual prediction that are emphasized in whole language classrooms, are based upon an unsustained hypothesis about the techniques representative of skilled reading. It is unsurprising that Rayner and Pollatsek (1989), perhaps the most notable of the researchers using eye movement techniques, consider that the major failing of whole language is its lack of recognition that graphophonic cues are "more central or important to the process of learning to read than are the others" (p. 351).

More recently Pressley (1998) summarized,

"The scientific evidence is simply overwhelming that letter-sound cues are more important in recognizing words than either semantic or syntactic cues" (p. 16).

Bruck (1988) reviewed research indicating that rapid, context-free automatic decoding characterizes skilled reading. She too had noted that the word recognition of skilled readers provided them with the text meaning even before contextual information could be accessed. It is prediction rather than scanning words that is too slow and error-filled to account for skillful reading. As Wren (2001) notes, it is only under conditions of insufficient graphophonic information that contextual strategies are employed for word identification.

Rayner and Pollatsek (1989) observed that it is only beginning and poor readers who use partial visual cues and predict words. This view was echoed by Stanovich (1986) and by Solman and Stanovich (1992) providing a strong list of supportive studies. This is also the position recently endorsed in Great Britain in the National Literacy Strategy (National Literacy Strategy, 1998), in the National Reading Panel (2000) findings, and in the extensive, large scale, longitudinal research emanating from the National Institute of Child Health & Human Development.

NICHD and substantial non-NICHD research does not support the claim that the use of context is a proxy for applying decoding strategies to unknown or unfamiliar words.... The strategy of choice among well developing good readers is to decode letters to sound in an increasingly complete and accurate man-

Thus, the techniques of contextual prediction that are emphasized in whole language classrooms, are based upon an unsustained hypothesis about the techniques representative of skilled reading.

ner, which is dependent upon robust development of phonemic and phonics skills (Lyon, 1999).

Finally, psychometric studies have indicated that measures of alphabetic coding ability rather than of semantic and syntactic ability are the strong predictors of word identification and comprehension facility (Vellutino, 1991). Whole language theorists had assumed the converse to be true. The finding regarding comprehension is particularly damning to the argument for psycholinguistic guessing, with its unfailing focus on meaning.

Two inescapable conclusions emerge: (a) Mastering the alphabetic principle (that written symbols are associated with phonemes) is essential to becoming proficient in the skill of reading, and (b) methods that teach this principle are more effective than those that do not (especially for children who are at risk in some way for having difficulty learning to read) (Rayner et al., 2001).

Thus the presumption that skilled readers employ contextual cues as the major strategy in *decoding* is not supported by evidence. There is, however, no dispute about the value of contextual cues in assisting readers gain meaning from text (Stanovich, 1980). The comprehension of a phrase, clause, sentence or passage is dependent on attention to its construction (syntax) and also to the meaning of the text surrounding it (semantics). The critical issue here is the erroneous assertion that the use of contextual strategies is beneficial in the *identification* of words, and that skilled readers make use of these strategies routinely.

## Does it matter how the process is conceptualized?

Yes, it is crucial. For one reason, a test developed expressly to assess students' usage of the three-cueing system is frequently employed to ensure students are in fact using this flawed system. The significance of any reading errors is thus superimposed on the reading behavior through the adoption of the three-cueing system conception of reading. "... the model of reading makes the understanding of miscues possible" (Brown, Goodman, & Marek, 1996, p. vii).

Miscue analysis is a very popular approach to assessing reading progress by attempting to uncover the strategies that children use in their reading. Goodman and his colleagues in the 1960s were interested in the processes occurring during reading, and believed that miscues (any departure from the text by the reader) could provide a picture of the underlying cognitive processes (Goodman, 1969). He used the term miscue, rather than error, reflecting the view that a departure from the text is not necessarily erroneous (Goodman, 1979). Readers' miscues include substitutions of the written word with another, additions, omissions, and alterations to the word sequence.

Consistent with this view of skilled reading, the Reading Miscue Inventory (RMI) and its update are concerned largely with errors that cause a loss of meaning—the number of errors being less important than their immediate impact on comprehension (Weaver, 1988). There are differences in the acceptability of various miscues. Good miscues maintain meaning and are viewed as an indication that the student is using meaning to drive the reading process, and hence, is on the "correct" path. Bad miscues are those that alter meaning. Whether the word the student reads corresponds to the written word may not be important in this conception (Goodman, 1974).

A teacher using the RMI will examine the nature of the errors the student has made in chosen passages. Consider this text *The man rode his horse to town*, and a reader's response, substituting *pony* for *horse*:

Child # 1: The man rode his pony to town.

Asking the specified nine questions reveals that the miscue (compared with the target word) has grammatical similarity, syntactic acceptability, semantic acceptability, does not change meaning, and the miscue does not involve dialect variation, an intonation shift, graphic similarity, sound similarity, or self-correction. Such an error is considered an acceptable miscue. Reading pony for horse is indicative of the student using contextual cues appropriately and a signal for satisfaction about reading progress. The teacher would be content with this error, as meaning has been more or less preserved.

"Often substitutions of words like *a* for *the*, *by* for *at*, *in* for *into*, do not cause a change in meaning... substitutions like *daddy* for *father*, *James* for *Jimmy*... are generally produced by proficient readers and are not reading problems" (Goodman & Burke, 1972, pp. 101–102).

According to the whole language conception of skilled reading, students must make many miscues during the progressive integration of the threecueing systems in order for reading to develop. It is argued that these errors are not necessarily a cause for interven-

According to the whole language conception of skilled reading, students must make many miscues during the progressive integration of the threecueing systems in order for reading to develop.

tion but a positive sign of a reader prepared to take risks. Teachers should expect and even be pleased with meaning-preserving errors. Additionally, they are exhorted to avoid corrective feedback regarding errors as it is risky, likely to jeopardize the student's willingness for risk-taking.

"... if these resulting miscues preserve the essential meaning of the text, or if they fail to fit with the following context but are subsequently corrected by the reader, then the teacher has little or no reason for concern" (Weaver, 1988, p. 325).

Suppose another student reads *house* for *horse*:

Child #2: The man rode his house to town.

Asking the same nine questions reveals that the miscue (compared with the target word) has graphic similarity, some degree of sound similarity, grammatical similarity, syntactic acceptability, and the miscue does not involve dialect variation, an intonation shift. Further, it does not include self-correction, is not a semantically acceptable change, and the miscue creates meaning change. This response is considered an unacceptable miscue because it changes the meaning.

"Proficient readers resort to an intensive graphophonic analysis of a word only when the use of the syntactic and semantic systems does not yield enough information to support selective use of the graphophonic system" (Goodman, Watson, & Burke, 1987, p. 26).

Despite the closer graphemic similarity of the response *house* to the target word, children who make errors based on graphemic similarity, such as *house* for *horse*, are considered problematic and over-reliant on phonic cues. Whole language theorists argue that good readers' miscues display less graphophonemic similarity to target words than do those of poor readers (Weaver, 1988), and readers-in-training should do likewise.

Thus, the remedy the teacher chooses for Child #2 is to encourage increased reliance on context and less attention to letter patterns. However, according to the research-based consensus, this directive is more likely to result in poorer reading than in better reading. Adams (1991) argued that to improve this child's reading, the teacher should provide instruction that evokes close inspection of the letters and their position in the word, the opposite of that recommended in the RMI. Importantly, Adams found that good readers' miscues displayed more graphophonemic similarity to target words than did those of struggling readers.

In fact, most nascent readers' miscues shift over time, from early errors based upon contextual similarity to those based upon graphemic similarity; and this shift is now recognized as functional and a characteristic of progress. The student's dawning understanding of the preeminence of a word's graphemic structure encourages close visual inspection of words, a strategy that accelerates the progressive internalization of unfamiliar spelling patterns, that is, it leads ultimately to whole-word recognition. That some teachers may unwittingly subvert this process, with well-meaning but unhelpful advice to beginning or struggling readers, is an unfortunate outcome.

"Scaffolding errors—when an error shares some or most of the sounds of the target word (e.g., 'bark' misread as 'bank') is a strong predictor of reading success. Errors that retain meaning but not initial and final phonemes ('people' for 'crowd') were not correlated with accurate word reading ability" (Savage, Stuart, & Hill, 2001).

Thus, according to current knowledge, the *house* response is a preferable error to the pony substitution. It may be a sign that the student is in the process of acquiring the alphabetic principle; however, corrective feedback should be provided, as *house* is an erroneous response. Through the error correction, the student's attention is directed toward the letters in the written word and the sound usually made by the *lorl* combination. The response recommended to teachers through the RMI, that of directing the student's attention away from the letters in the word towards context cues, provides an alarmingly unstable and counterproductive rule for students.

Child #1 is arguably in greater need of instruction that directs his attention to the letters in the words. Child #1 might equally have substituted *bicycle* for *horse*. The substitution makes sense but is far from that which the author intended. The child whose primary decoding strategy is driven by semantic and syntactic similarity may be unaware that *bicycle* bears no graphemic similarity to horse. The instructional message to the student is that, despite the student's errors being directly attributable to the inappropriate method of guessing, the strategy is nevertheless the correct one. The student is thereby encouraged to continue using a strategy that is unhelpful, and is dissuaded from attending to the major cue that would improve his reading-the word's structure. According to current evi-

According to current evidence, regardless of the type of miscue, students who make errors need to focus on the letters in the word to improve their decoding.

dence, regardless of the type of miscue, students who make errors need to focus on the letters in the word to improve their decoding.

# The RMI also encourages other counterproductive instructional strategies.

Within the RMI, a student's self-corrections of errors are considered significant, and they are recorded for analysis. Self-corrections are errors that are corrected without another's intervention, usually because the word uttered does not fit in the context of the sentence. Within the whole language framework, self-corrections are a clear and pleasing sign that meaning and syntactic cues are being integrated into the reader's strategies. Clay (1969) asserted that good readers selfcorrected errors at a higher rate than did poor readers. She considered high rates were indicative of good text-cue integration, which in turn was a measure of reading progress.

This view of the significance of selfcorrection was questioned by Share (1990), and Thompson (1981, cited in Share, 1990). They found that self-correction rates had been confounded with text difficulty. When text difficulty was controlled in reading levelmatched designs, the rates of self-correction became similar among good and poor readers. That is, when text is made difficult for any readers, they are more likely to make errors and thereby increase their rate of self-correction. So, an increased rate of self-correction is better interpreted as an indicator of excessive text difficulty rather than as reflective of reading progress. This interpretation based on difficulty levels also raises concerns about unreliability in the assessment of self-correction rates. The conclusion that there is no direct support for self-correction as a marker or determinant of reading progress makes the activity of recording such ratings for students of questionable value.

The RMI was designed to provide a "window on the reading process" (Goodman, 1973, p. 5). However, the analogy with a window is a misleading one as it implies a direct and transparent medium. The picture of reading obtained through the RMI involves an interpretation of that which is viewed through this window. What is actually displayed by a student is overt behavior (spoken or written words)-the subsequent analysis of miscues involves making inferences about unobservable processes based upon assumptions about the reading process. With this instrument, the picture is colored by a discredited conception of reading. Additionally, the instrument has other weaknesses described by Hempenstall (1999).

The RMI has had considerable influence in instructional texts and in classrooms (Allington, 1984), and remains influential among whole language theorists and teachers (Weaver, 1988). A revised version—RMI: Alternative Procedures (Goodman, Watson, & Burke, 1987) offers four analysis options of varying complexity for classroom use. The rationale is unchanged "... it is best to avoid the common sense notion that what the reader was supposed to have read was printed in the text" (Goodman et al., 1987, p. 60), and the Alternative Procedures are subject to the same criticisms as earlier versions. Although the RMI has been a very popular test, many teachers (for example, in Reading Recovery) have been trained to use an informal procedure of maintaining "running records" (Clay, 1985) with their students, a procedure that provides similar information on types of errors and self-correction rates, and that is based on a similarly flawed conception of reading.

The three-cueing system and its associated assessment tool, the RMI, are not beneficial to the understanding of the important elements in reading development, and for teachers, provide unsound directions to guide instruction. The approach is responsible for many children being stranded, without adequate tools to meet the literacy demands inescapably and increasingly inherent in education, the workplace, and the wider community. ADJ-

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#### MARK C. SCHUG, University of Wisconsin, Milwaukee

## Statement to the MPS School Board

#### May 20, 2002

I'd like to express my views regarding the Balanced Literacy program proposed for the Milwaukee Public Schools. My main point will be to encourage the MPS Board of School Directors to reject the Balanced Literacy approach and substitute a results-oriented, incentives-based reading initiative.

Several schools within the MPS have had success in improving reading scores. These include Clarke Street, Dover, Elm, Honey Creek, Morgandale, Riley, Siefert, Westside Academy II, and several others. There are other schools, often nearby these successful schools, that are not successful. What could explain these different results? We know from several national studies that some approaches to reading instruction are more successful than others. Research spanning several decades (see for example, Chall, Learning to Read: The Great Debate, 1967 and Ehri, Nunes, Stahl, and Willows, *Review of Educational Research*, 2001) shows that systematic phonics instruction helps children learn to read better than all other forms of instruction. Moreover, we know from dozens of studies, some including very large sample sizes and others using "effect size" analysis, that students who participate in a program called Direct Instruction, an approach associated with the work of Professor Siegfried Engelmann at the University of Oregon, learn to read better than students in other reading programs. Yet the success of Direct Instruction is ignored or aggressively

excluded from consideration at the highest policy levels in Wisconsin, within the MPS, and at the University of Wisconsin, Milwaukee. Why such groups actively resist a reading program that is marked by school-based success stories, has strong supporting research, and is unusually effective with disadvantaged students, is a mystery.

#### **Forecasting Failure**

Here are six danger signs you should consider as you decide on approving the Balanced Literacy program:

Resist implementing a reading program when it is **difficult to define**. Balanced Literacy is a collection of appealing words (e.g., deep thinking and collaborative reading) that, when combined mean very little. The best one can say is that this collection of vague terms reflects a philosophy of teaching reading. This philosophy is closely associated with the whole language approach that has already failed Available: http://www.psychologicalscience.org/newsresearch/publications/ journals/pspi2 2.html

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large numbers of young people throughout Wisconsin and in other states, most notably California.

Resist implementing a reading program that has **no body of research**. Balanced Literacy is a term that is nearly absent from the research literature regarding the teaching of reading. Common sense suggests that we ought to resist implementing any reading program until a body of credible literature (e.g., 25 to 50 empirical studies) exists. We should resist experimenting with MPS students who are often in danger of failing.

Resist implementing a reading program when it is nearly impossible to train average teachers to use it. Because Balanced Literacy is a muddled concept, teachers cannot be well trained in how to use it. Balanced Literacy is not a curriculum, it is an ideology. Teachers cannot be trained to use an ideology. Teachers can be trained to use a curriculum. But, literacy coaches and classroom teachers are not curriculum developers. They must work with students everyday. Curriculum development needs to be done by others. Balanced Literacy should not be considered by MPS until a complete program has been produced, successfully implemented, and evaluated elsewhere before it is tried here.

Resist implementing a reading program where **parents have not been heavily involved**. The proposed Balanced Literacy program is primarily the result of MPS curriculum leadership and the Milwaukee Partnership Academy. Parents were not involved in the process until relatively late. Balanced Literacy is not something advocated by large numbers of parents, teachers, or principals. Most of them seem puzzled by what Balanced Literacy is. It seems clear that the Balanced Literacy program is a "top down" initiative. Resist implementing a reading program that has no chance of reducing costs. The number of students being classified as Learning Disabled is growing rapidly. Exceptional education programs as well as other remedial programs are expensive to operate. They drain resources from regular education. MPS could reduce its costs if children learned how to read the first time reading was taught. The failure to get it right the first time results in a growing number of students being classified as Learning Disabled or being referred to expensive remedial programs.

Balanced Literacy is not a curriculum, it is an ideology. Teachers cannot be trained to use an ideology. Teachers can be trained to use a curriculum.

Resist implementing a reading program where the advocates are not accountable for the results. Groups such as the University of Wisconsin, Milwaukee, the Metropolitan Milwaukee Association of Commerce, the Department of Public Instruction, and the Private Industry Council may be great community partners but these organizations are not the ones that Milwaukee parents, the mayor, the legislature, the governor, or the U.S. Department of Education will hold accountable for failure. While it is true that the organizations advocating Balanced Literacy have good intentions, they will not be the ones who are punished when Balanced Literacy fails.

#### Another Way to Take Action

Is there another way? I think there is. I propose that the funds about to be used to hire 150 Literacy Coaches be used differently. Here are some steps to consider: Define MPS schools that have successful reading programs in terms of specific results. So, for example, schools where 75% of the students are proficient or above at Grade 4 might be classified as successful.

Reward now the schools that have established a track record of success. Offer them increased funds to train more teachers and expand their programs to serve more students.

Define MPS schools that have failed reading programs in terms of specific results. So, for example, schools where less than 75% of the students are proficient or above at Grade 4 might be classified as failing.

Offer strong financial incentives to assist failing schools that are willing to make changes. Principals and teachers in these schools should be invited to study the programs at successful MPS schools to see what these schools are doing right. The failing schools should be provided with the resources to allow them to implement the programs that have a track record of local success. If these schools become successful, then they too should be eligible for additional funding to expand their programs. If they fail after some specified period of time (e.g., 2 years?), they should be closed.

#### Conclusion

We know a great deal about the teaching of reading. We know that some programs—such as Direct Instruction—are more successful than others. Hiring 150 Literacy Coaches is not likely to produce success. Balanced Literacy is an ideology that is appealing to many progressive educators. It is not a curriculum to be implemented. Instead, the MPS should implement a clearly targeted, results-oriented, incentives-based reading initiative that focuses on how to multiply the successes already achieved by several local school principals and teachers. *ADF*. The following letters first appeared in Education Week, February 27, 2002. Responses to Kenneth Goodman's Self-Comparison to Galileo

#### To the Editor:

Ken Goodman's letter on education research (Feb. 13, 2002) is based on the same faulty premises and flawed logic responsible for the demise of whole language reading instruction, which he apparently laments.

Instead of providing a definition of what sound research might be, and then showing that whole language research satisfies that definition, Mr. Goodman attacks a nationwide effort (from the federal government down to local schools) to ensure that children are not taught by methods that have been less adequately tested than hairspray and bubble gum.

Advocates of whole language (not necessarily Mr. Goodman) would like the definition of sound research to be so broad that virtually any set of unreliable anecdotes is enough to validate whole language—and business can continue as usual.

"Nothing less than an inquisition is being waged by federal law against teachers and school administrators to limit their practice," Mr. Goodman concludes. But in fact, whole language advocates have spent 20 years waging an "inquisition" against people and curricula that advocate systematic, explicit, field-tested instruction on "phonics," comprehension, spelling, and writing. They are not now the subject of an inquisition. The failure of whole language has merely been revealed.

Lisa Leppin The Classical Tutor Mukwonago, WI

### Whole Language and the Black Arts

To the Editor:

Ken Goodman's recent letter in which he compares himself to Galileo ("An 'Inquisition' for School Research?," Feb. 13, 2002), unfortunately presents things backwards.

In the time of Galileo, the authorities were steeped in misguided superstition, subscribing to scientifically unsupported doctrine. In fact, their cosmology was unsupported even by the Scriptures they claimed as its justification.

Today, it is the authorities who are looking to science, and Mr. Goodman and his colleagues who seem to be looking to the black arts for guidance in the subject of reading instruction. As much as I share Mr. Goodman's distaste for authorities telling us citizens what to do, there does come a time when people who use taxpayers' funds to inflict truly outrageous and destructive practices on the population must be reined in.

This is not about freedom of speech, as Mr. Goodman and friends would have us believe. He and his colleagues are free to speak their theories all they wish. However, they should certainly be denied the freedom to implement decidedly unpopular policy at taxpayer expense.

David Ziffer Director I Can Read! Batavia, IL