

# Direct Instruction

## NEWS

ADI Effective School Practices

SARA G. TARVER, Editor, University of Wisconsin, Madison

## *A Formula for Success: A No-Excuses-For-Failure Attitude, Competent Curriculum Development, and Technical Proficiency*

This issue of *DI News* is packed with stories of success when using DI. Amy Griffin's report of the 2003 ADI awards contains several stories, each of which provides valuable insights into the ingredients of the successes. Gary Hanneman, recipient of the Excellence in Education Award, refused to accept failure as an option for students in his special education classroom. The teachers and administrators at Evergreen Elementary in Spokane, Washington, and Abraham Lincoln Middle School in Gainesville, Florida—the two schools that received Excellent School Awards—showed strong commitment to DI and untiring efforts to deliver DI with integrity and help others to learn to deliver DI with integrity. Richard Russell, a fifth-grade teacher who received the Susie Wayne Scholarship, tells how the Direct Instruction Model (including the DI programs published by SRA/McGraw-Hill) provided the tools that helped his students achieve excellence.

Two additional success stories are reported for Eastside Charter School in Wilmington, Delaware, and Victory Charter School near Atlanta. According to a staff reporter for *The News Journal*, Eastside "has outdone every school in the state this year, maybe in the history of standardized testing in Delaware." In a report of Victory Charter School's academic gains in reading, Curtis

Jasper highlights the importance of an administrator who assumes the important role of instructional leader.

Perhaps the most phenomenal DI success story is that of City Springs Elementary in Baltimore. For the past 5 years, we have been amazed by the academic gains at City Springs as a result of a DI implementation by NIFDI. The 6th-year (2003) test scores are even more amazing (see the article contributed by Kurt Engelmann in this issue). Percentile ranks of **99 in BOTH Reading and Math** for first grade! I'd find this unbelievable if I were not fully aware of the power of DI. And the fifth-grade percentile ranks of 87 in reading and 79 in math ain't bad either. Once again, hats off to Bernice Whelchel, Principal, and the entire teaching staff at City Springs.

How are such phenomenal successes achieved? By magic? No. By wishful thinking? No. By technical proficiency and competent curriculum development says Martin Kozloff in his article in this issue. To communicate clearly the differences between competent curriculum development and incompetent curriculum development, he juxtaposes negative and positive examples of technically proficient curriculum development. Obviously, Martin knows that juxtaposing negative and positive examples helps students

to grasp complex concepts, and he makes use of that knowledge to help us understand some of the complexities of curriculum development.

In his troubleshooting article in this issue, Don Crawford details eight things that teachers should check when their first-grade students are ready for *Reading Mastery III* yet seem to have trouble "comprehending." Knowing what to do, he says, is the

*continued on page 3*

FALL 2003, Volume 3, Number 2

### In this issue

- 3 2003 Excellence in Education Awards
- 8 Susie Wayne Scholarship
- 9 Eastside Sets the Standard
- 10 An Administrator Who Really Is an Instructional Leader
- 12 City Springs Sets the Standard...Again
- 16 Martin's Musings
- 22 When Students in *Reading Mastery III* Have Comprehension Problems
- 24 Response to *Time Magazine*
- 26 A View From Askance
- 29 The Failures of a Teacher Education Program
- 32 Why I Attended "Mastery—Why and How"

*Formula for Success...*  
*continued from page 1*

key to avoiding the age-old excuses that the children are “too young” or “not developmentally ready.”

Zig Engelmann, in his response to a *Time* article of 7/28/03, dispels the myth that “dyslexia” is a valid excuse for reading failure. He explains clearly the flaws in **interpretations** of MRI brain research that attribute reading failure (or “dyslexia”) to brain activity patterns that are “different.” Bob Dixon, in his “View From Askance,”

expands on this issue to explain clearly that so-called “causes” of poor reading are irrelevant to the real solutions to such problems. I really wish that the scientists who are studying “dyslexia” would read this article and “get it.”

As we DI die-hards know, the most likely cause of reading failure is “dys-teachia” (sometimes called “dyspedagogia”). And, unfortunately, most of the teacher-training programs in our universities actually contribute to the rampant dysteachia that we are seeing in our schools. Tina Errthum, in this

issue, describes vividly the disillusionment and disappointment that she experienced as a student in a teacher-training program at a university in the Midwest. She is taking steps to inform administrators of that university that her teacher-training program failed to teach her **what** and **how** to teach. Tina’s article reminds us of something that we all know—our system of training teachers must be reformed if we are to achieve true educational reform.

Happy reading and a happy 2003–2004 school year! **ADI**

AMY GRIFFIN, Association for Direct Instruction

## 2003 Excellence in Education Awards

Each year the Association for Direct Instruction issues a call for nominations in the categories of Excellence in Education, The Wesley Becker Excellent School Award, The Wesley Becker Research Award, and the Wayne Carnine Student Improvement Award. Members of the Board of Directors of ADI select the recipients. During the National Direct Instruction Conference held each summer in Eugene, Oregon an awards dinner takes place during which the awards recipients are presented with their award and given an opportunity to comment on the factors which led to their success, as well as thank other contributors to their success.

ADI is proud to recognize the 2003 recipients for the efforts they have made in utilizing Direct Instruction to improve student learning and performance. Unfortunately, we did not receive any nominations this year for the Wayne Carnine Student Improvement award. Sadly, an opportunity was missed to recognize the achievement of a student—the nature of the award is to recognize a student for academic

achievement and that recognition is so important to students, especially students who had grown accustomed to failure and then find that through an effective program and teaching, failure need not be their course, they can make gains, move to grade level, pass the standardized tests, and obtain the confidence that all students deserve. The awards nomination forms will be sent to our membership in February; please take the time to acknowledge the achievement of not only the students, but your peers who are not just following fads, but are utilizing effective tools to ensure that the classroom serves its purpose: teaching students not just how to read, but truly giving them a skill that should be considered standard procedure in school, but all too often is not.

### *Excellence in Education*

#### **Gary Hanneman, Teaching**

Gary Hanneman is a self-contained special education teacher at Backman Elementary in Salt Lake City, Utah. The Direct Instruction programs that Gary currently uses include *Corrective*

*Reading Decoding, Reading Mastery, Connecting Math Concepts, Spelling Mastery, Corrective Spelling Through Morphographs, Reasoning and Writing, Expressive Writing, and Cursive Writing.* The repertoire of DI programs that he has utilized throughout his career is also quite extensive.



Gary Hanneman

Gary teaches Grades 4 through 6. The principal at Backman, Fern Wilkerson, described Gary’s students and their performance level as such, “Generally, the students that Gary receives are nonreaders. Due to hard work and his unwavering belief that all students can learn and learn well if the conditions are right, Gary has a very high success rate. He teaches nonreaders to read fluently. Gary creates those conditions of success: a warm, caring environment, a place where all students are treated with respect and dignity, and instructional skills second to none. At the core of Gary’s instructional strategies is his strong commitment to Direct Instruction. He is a master of his trade, and student success is the proof of his abilities. In Gary’s classroom, failure is not an option.”

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A colleague of Gary's, Shelley McMurrin, shared how she came to know Gary and Direct Instruction. "I met Gary 23 years ago when I graduated from college. He was the other resource teacher where I had been hired at Stansbury Elementary School in West Valley City, Utah. I knew nothing about Direct Instruction until I met Gary. I walked into his classroom and the students would be answering in unison after Gary said something. He snapped his fingers and was always saying 'get ready.' It was all pretty amazing and quite foreign to me. I thought he was crazy at first, the way he carried on that DI was the best and only way to teach. He was passionate about DI and eventually convinced me that it works."

Shelley continues with, "Students in Gary's classroom are highly engaged and have no time to misbehave. Academic growth is made by all students in all areas. It is not unusual for a student to make more than a year's growth in reading. Students make academic gains as well as social gains in his classroom...He believes all students can learn and has been an advocate for DI. He converted me to DI when I was a young teacher which I am very grateful for. We used to joke about 'dysteachia.' It wasn't the students' fault they weren't learning. It was because their teachers suffered from 'dysteachia.' They didn't teach effectively, but we did because we used Direct Instruction."

Included in the nomination packet for Gary was a copy of a Writing Assessment of one of Gary's former students, Joshua Hall. The title of the assessment is "Lifes Experiences." It is a three-page essay describing Joshua's academic career and experiences in school. At one point he describes the beginning of his academic trouble in elementary school.

"As the weeks went on there were several things we learned to do, painting,

singing, reading and such. The only problem was that I was failing, all my class work. I was so behind that my parents were starting to worry.

"They called in specialists in speech and comprehension. The specialist said that I was born with Dyslexia, meaning that words and numbers switch around in my head without me knowing it. This problem would hold me back for a long time.

"It got so bad that I was scared to speak to anybody at school. Mean

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teachers and frustrated parents did not help the situation. I became socially isolated and my self-esteem dropped.

"Then in 1996 my family moved to Salt Lake to be closer to work and family. That would turn out to be the best move I've ever made.

"I attended Backman Elementary and my life turned around thanks to Gary Hadamen. He and his wife were my help to success, always pushing me with love and care: they ran me through the basics and helped me socialize. I learned how to play basketball, read, and understand.

"After that, my life turned around and in 1998 I received the Academic

Routley award. Only one is given out in Utah every year.

"Now I'm in West High and have a 3.1 GPA. I'll never know/and, I'll never forget those people who helped me to achieve this success.

In conclusion life is a challenge, and if you never give up and always seek help no challenge is too big or too small to handle."

Gary Hanneman exemplifies what is meant by the term Excellence in Education. Congratulations, Gary, and thank you for your contribution to student success and improvement.

## *Wesley Becker Excellent School Award*

This year two schools have been recognized as Excellent Schools. Each of the schools received a \$500 cash award.

### **Evergreen Elementary, Spokane, Washington**

One hundred percent of students at Evergreen use Direct Instruction programs, and *Reading Mastery* has been utilized in Grades K-3 for 4 years. Evergreen currently uses *Spelling Mastery, Reading Mastery, Language for Learning, Connecting Math Concepts, Reasoning and Writing, and Corrective Reading Decoding and Comprehension*. Awards, Citations, and Recognition given to the school include: listed in Washington State's Top 100 Schools, two teachers awarded ADI Direct Instruction Teachers of the Year, one teacher awarded Washington State ASCD Statewide Recognition Award, and one teacher awarded Eastern Washington University/Q 6 Television Station Teacher of the Month.

In her rationale describing why Evergreen Elementary should be recognized as an Excellent School, Dr. Nancy Marchand-Martella from Eastern Washington University wrote,

“Evergreen Elementary serves as the Direct Instruction hub for the inland Northwest. Three universities—Eastern Washington University, Gonzaga University, and Whitworth College—all place students at Evergreen when they want their students to experience the best in Direct Instruction. The teachers at Evergreen are tireless in their pursuit of excellence. They provide guest talks at local universities, teach college courses and supervise student teachers and practicum students, allow classroom observations at any time, and serve as a model-demonstration school for those interested in seeing what Direct Instruction is all about. Evergreen Elementary supports research endeavors and has received numerous accolades for its teachers and for how students perform.”

In a success story shared by SRA, it was reported that, “Evergreen Elementary students consistently score above the state standard on the reading portion of the Washington Assessment of Student Learning (WASL). In fact, after Grade 3 students experienced 1 year of *Reading Mastery*, 83% of them met/exceeded the WASL reading state standard as Grade 4 students in 1999. By 2002, the high percentage continued—82% of Grade 4 students met or exceeded the state standard. Of those Grade 4 students who studied *Reading Mastery* for 3 or more years, 90.2% of them met or exceeded the state standard.”

Dr. Betty Fry Williams from Whitworth College contributed that, “Evergreen Elementary provides an outstanding model of effective teaching strategies through their use of Direct Instruction curricula. As an education faculty member at nearby Whitworth College, I am especially grateful for Evergreen’s presence in our neighborhood and for their constant support and training of our teacher education and special education students in Direct Instruction methods.

“I would especially salute Linda McGlocklin and Susan Hornor who initiated the use of Direct Instruction in their first-grade classrooms. Their success in teaching students at all achievement levels provided momentum for other grade levels to adopt the Direct Instruction curricula as well. Their principal, Becky Cooke, recognized the power of this approach and encouraged its use in general education, in special education, and in the school’s reading tutorial program. I have heard many Evergreen parents credit Direct Instruction for the con-

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siderable academic growth their children made. The programs are enthusiastically endorsed by the community the school serves.

“In addition, numerous teacher preparation students intern in Evergreen’s classrooms, work as tutors, or carry out interventions with children in special education. Future teachers develop skills and attitudes that respect the Direct Instruction approach as effective and valuable for children. The classroom teachers have also made presentations within our courses and even encouraged the organization of a local Direct Instruction chapter. All of this has helped to disseminate information about Direct Instruction in a number of other school districts in our area.”

Dr. Randy Williams from Gonzaga University has been teaching undergraduate and graduate courses in Direct

Instruction for over 20 years. He stated that, “Because of their adoption and extensive utilization of Direct Instruction curricula, coupled with highly trained teachers who can train and coach their colleagues, I view Evergreen Elementary School as the most effective elementary school in this region.” Dr. Williams adds that, “The last 3 years show an outstanding increasing trend (58%, 66%, and 70%) in the percent of students meeting or exceeding the national average on the Iowa Test of Basic Skills (ITBS). This is truly remarkable since the ITBS has traditionally not been sensitive to a phonetic/decoding approach to teaching reading.”

Evergreen Elementary is exceptional in that the school is not only raising the achievement levels of its own students, but is also introducing future teachers to the effectiveness of Direct Instruction. What a positive force not only for the current and future students at Evergreen, but for the many lives that will be affected in the future because teachers in practice are given the opportunity to experience an effective school first hand and carry that information to other schools in which they will work upon graduation.

### **Abraham Lincoln Middle School, Gainesville, Florida**

The following write-up was composed by Claudia McKnight, Senior Coach/Trainer from the Center for Applied Research in Education (C.A.R.E.), Eugene, Oregon.

Abraham Lincoln Middle School in Gainesville, Florida serves a high poverty neighborhood in their major program. Of the major-program students, approximately 90% are African American, and 85% receive free or reduced lunch. All of the major-program and special education students in Grades 6–8 are in Direct Instruction programs. For the past 3 years Lincoln Middle School has received “A” scores

from the state of Florida for student performance. How was this achieved?

Lincoln's rating was a "C" during the 1998–1999 school year. At that time it was decided to bring in *Corrective Reading* using the Goals 2000 Middle School reading grant. It was one of the options offered to schools in Florida with high levels of low achievement. The only reason Lincoln was not rated lower than a "C" was due to its magnet program for academically talented students, the Lyceum. Then came the challenge of raising the academic performance of the major-program and special education students who also attended Lincoln.

Two teams consisting of a teacher and an administrator went to visit schools in neighboring counties that were using *Corrective Reading*. Based on their observations and discussions, *Corrective Reading* was implemented during the 1999–2000 school year. The following summer, based on our students' performance on the FCAT, Lincoln was rated an "A" school. That 1st year of implementation, Lincoln used both *Decoding* and *Comprehension*. They have continued to use those programs with great success.

During the 2000–2001 school year two math teachers piloted *Connecting Math Concepts*. In the spring of 2001, Dr. Bonnie Grossen from the University of Oregon and the Center for Applied Research in Education (C.A.R.E.) provided a grant to Lincoln that allowed the school to expand the Direct Instruction program into language arts, math, and social studies. In addition, the grant supported a full-time, on-site, Direct Instruction coach and additional training for the staff.

The 2001–2002 school year saw the expansion of DI into sixth- through eighth-grade math in both the major program and special education and the implementation in the eighth grade of the *Understanding U.S. History* text. In addition, *Comprehension C* was used for

all sixth- and seventh-grade language arts classes.

With C.A.R.E.'s ongoing technical and financial support, this year (2002–2003) we are a full scale implementation. All the sixth- through eighth-grade language arts classes began the year with instruction in *Expressive Writing II*, then transitioned into *Reasoning and Writing*. Sixth graders are being instructed in level D, seventh graders in E, and eighth graders in F. We just received our FCAT writing scores; they are the highest in Alachua County! Of the 124 major-program

*We just received our FCAT writing scores; they are the highest in Alachua County! Of the 124 major-program students in the eighth grade who took the test, 97.6% passed.*

students in the eighth grade who took the test, 97.6% passed. (The Lyceum students are not included in this total.) Of the 61 eighth-grade ESE students who took the test, 57% received a passing score or higher. Note that several of the special education classes had to begin with *Expressive Writing I* and then went on to *II*. They had not begun *Reasoning and Writing* before the FCAT writing test was given.

The struggling readers are double served—one class of *Decoding* and one of *Comprehension* daily. The plans for next year reflect this commitment to continue to move those students struggling in reading and/or math quickly to grade level by offering two periods in each subject per day. It has been and will continue to be the goal of the Lincoln staff to have all eighth

graders on grade level in each academic area. They are getting close! That is the level of commitment at Lincoln, and look at the payoff in student performance.

Here are some highlights from the 2002 FCAT results:

- 63% of the lowest quartile made above normal gains in FCAT reading,
- 67% of all students made above normal gains in FCAT reading, and
- 96% of all students passed the FCAT writing assessment.

Of the staff, 35% of the regular program teachers teach one or more DI classes; 90% of the ESE teachers are teaching one or more DI classes. The total staff teaching one or more DI class is 41%.

With Dr. Grossen's guidance, progress monitoring and in-class coaching were put in place. The daily progress monitoring and monthly summaries are invaluable when assuring that each student is progressing. The first major impact of the progress monitoring was showing the staff how often instruction was interrupted. Immediately a new field trip policy was put in place, and a shortened day did not mean a noninstruction day. Now every decision is weighed by asking how it will impact instruction.

The key issues of attendance and behavior have been taken up by the student support committee which meets weekly. These are noninstructional support staff: administrators, counselors, deans, and the nurse. They receive a report monthly on the DI students' progress and any students there are concerns about. The group then explores ways to aid the student. As a school they have dealt with the two main reasons students are not at mastery—attendance and discipline. The discipline referrals to the Dean's office are infrequent during the DI classes. However, the students who receive in-school suspensions for

behavior during another class are excluded from their DI classes that day also. The faculty and support teams are working on a policy of allowing the student to attend her/his DI classes and then return to detention.

The on-site coordinator ensures that the students are placed properly, provides in-class coaching, has a position on the student support committee, and chairs the monthly DI teachers meeting. All incoming students, from 18 feeder schools, are tested in reading and math each spring so there is enough lead time for scheduling and ordering materials. New enrollees are given placement tests in both reading and math prior to any scheduling of their classes. They are placed with a “Bulldog Buddy” for the day and receive their schedule at the end of the day. Their student buddy ensures the new student will be familiar with the physical layout of Lincoln and the rules and procedures of the school. The delay of 1 day offers the DI site coordinator and the counselor to both correctly place the student in reading and math, and to also make sure no classes become too large, especially the ones at the lowest levels.

C.A.R.E. has sponsored a series of Open Houses at Lincoln over the past year and a half. The purpose of these gatherings is twofold. First, to provide general research-based knowledge regarding the things that work to raise scores for low performers, including students with disabilities. Secondly, to see first hand, through classroom visitations, what children from low-income neighborhoods are capable of, even if they start middle school well below the norm. We have had hundreds of visitors from North Carolina, Georgia, and throughout Florida. The following is a sample of comments from visitor evaluations:

“The classrooms were amazing. All the students were engaged and seemed pleased to show us what they could do.

The teachers kept the pace and did a wonderful job.”

“I was impressed to see so many students working hard and being successful.”

“Everyone was excellent!”

C.A.R.E. has collaborated with Lincoln in conducting DI trainings. Using Dr. Grossen’s training model, which intersperses training sessions with classroom practicums, the Lincoln students have both welcomed and shown unlimited patience with trainees as they try

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out their very newly acquired skills teaching that day’s lesson.

The Lincoln Middle School staff must be commended for accepting their students at their instructional level and then working with a curriculum that rapidly moves them toward the state standards. They have taken on the challenge with patience, eagerness, and heart. Staff morale at Lincoln is at an all time high! The staff collaboration, regardless of position, is a tribute to Lincoln’s focus on the students; they truly are “all our kids.”

### *Wesley Becker Research Award*

ADI is proud to promote and publish research articles about Direct Instruc-

tion, adding to the existing body of research literature. Two awards were given this year for the research award. Each of the lead authors received a \$500 cash award. Each of the articles will appear in Volume 4, Number 1 of the *Journal of Direct*



Angela M. Przychodzin-Havis

*Instruction* to be published in January of 2004. The cowinners are lead authors Michelle A. McKenzie and Angela M. Przychodzin-Havis both of Eastern Washington University.

The coauthors with Michelle A. McKenzie were Nancy E. Marchand-Martella, Marion E. Tso, and Ronald C. Martella, all from Eastern Washington University. The title of the article is, “Teaching Basic Math Skills to Preschoolers Using *Connecting Math Concepts Level K*.” The article investigates the effects of teaching basic math skills to 16 children in an integrated university preschool using *Connecting Math Concepts Level K*.

The coauthors with Angela M. Przychodzin-Havis were Nancy E. Marchand-Martella, Ronald C. Martella, and Diane Azim, from Eastern Washington University. The title of the article is, “Direct Instruction Mathematics Programs: An Overview and Research Summary.” The study provides an overview and research summary of Direct Instruction mathematics programs, specifically *DISTAR Arithmetic I and II*, *Corrective Mathematics*, and *Connecting Math Concepts*.

ADI thanks the people who nominated this year’s awards recipients, and we congratulate the winners. Again, we would like to encourage you to continue to support the awards program by nominating and recognizing the schools, teachers, administrators, students, and others who are realizing effective educational practices through the use of Direct Instruction. *ADI*

## How to Achieve Excellence?

### *The Susie Wayne Scholarship*

Our national reform goal is to achieve superlative standards. The initial word that best describes the impact Direct Instruction has on an effective education is excellence. What word? Excellence! According to the Association for Direct Instruction (ADI), Siegfried Engelmann developed a theory of instruction, the Direct Instruction model, at the University of Illinois in 1968. Susie Wayne demonstrated a certain passion for Direct Instruction as a teacher in Seattle, Washington, and ADI celebrates her life with the Susie Wayne Scholarship. As described by ADI, the main goal of the Direct Instruction model is to improve academic performance considerably over current performance levels. Because the goal of Direct Instruction is to move students to mastery as swiftly as possible, a portion of tutorial time is spent on rapid paced teacher-directed instruction, interjected by unmitigated rhythmic responses and individual student responses. Therefore, academic excellence can be achieved by using a Direct Instruction model.

As maintained by ADI, the Direct Instruction model integrated professional development and organizational components intended to make best use of reading, language arts, and mathematics programs. Through significant training and in-class coaching, teachers learn to identify tasks clearly, teach concepts and skills, work toward more complex concepts, impart extremely interactive lessons to large and small groups, obtain frequent oral responses, guarantee teacher praise for responses at a high rate, monitor and correct errors immediately, and periodically review skills and concepts. Mastery tests, given every few lessons, help teachers directly track student performance. Students are placed in appropriate instructional groups based on performance. Grouping may take place across the curriculum vertically and horizontally. Students who progress faster or slower than expected are re-grouped accordingly. Those with special needs are included in regular classrooms except in the most extreme cases. B. F. Skinner's influence is exceptionally apparent in methods that can be classified under direct instruction or explicit teaching. One of the most acknowledged principles to be

applied in the remedial treatment of children with learning disabilities is direct instruction. Haring and Bateman (1977) make the argument that children with learning disabilities do not learn by osmosis, as other children seem to. Rather, they need direct, intensive, and systematic input from, and interaction with, the teacher.



Richard Russell

Academic excellence can be defined by reading, writing, and arithmetic. Although these are fundamental to an excellent education, as a fifth-grade teacher, the task to achieve academic excellence is arduous. It requires the student to work harder than they ever thought they could and to achieve more than they ever thought they would. It sets objectives and high standards of achievement and measures each individual's work against those standards. It does not show partiality, but requires the same assignments of everyone allowing each student's effort and ability to determine his/her individual status.

As a fifth-grade teacher, the Direct Instruction model has proven to be a credible instructional tool, and it has accelerated the learning of the at-risk students in my classroom. At present, Center Academy, Flint, Michigan, has implemented Direct Instruction as a supplement to standard instruction. By using the SRA/McGraw-Hill *Decoding Strategies* series, the curriculum materials and instructional sequences have stimulated most of my students that operated below grade level to grade-level mastery in a short period of time. From my readings, Direct Instruction programs are generally successful with low-income and at-risk children. The Direct Instruction model integrates teacher development through extensive training and in-class coaching. Joyce Chivari, DI Consultant, Chicago, IL, observes my classroom once a

### **The Susie Wayne Scholarship**

Susie Wayne was a friend to many in the Direct Instruction community, and to many students in the greater Seattle area. She was an outstanding researcher, supervisor, and teacher. Her tireless spirit and great sense of humor were all the more remarkable because of critically serious medical problems that resulted in her death in 1996. In memory of her dedication to effective education for all students, the Association for Direct Instruction's Board of Directors established the Susie Wayne Scholarship. The annual award of \$500 cash goes to a graduate-level student majoring in education.

The basis for the award is an essay competition. Qualified candidates must write a 1,000 word essay titled, "How to Achieve Excellence," and it must be related to Direct Instruction. The winner for 2003 is Richard Russell of Flint, Michigan, who is a student at Marygrove College in Detroit.



month. Mrs. Chivari monitors the classroom and is available to assist with any problems, and she occasionally takes over a part of the lesson to model pedagogical procedures.

A certain procedure for the Direct Instruction model is situated on internal program quality of student performance such as the number of lessons completed and mastery of materials learned. Also, *Decoding Strategies* prepare students for standardized tests and other measures of accounta-

bility. Besides, ADI provides materials that prepare students to take major standardized tests. As well, SRA/McGraw-Hill has aligned the curriculum between the Direct Instruction programs and the State of Michigan Standards and Benchmarks.

Furthermore, academic excellence teaches children to be responsible. Through graded daily homework assignments and dated research assignments, students learn that they are accountable for completing the work

assigned to them. They develop study habits and learn to prioritize and manage their time to ensure the completion of assigned tasks. They learn to be dependable and responsible individuals that can achieve academic excellence as a result of the Direct Instruction model. *ADI*

## References

- Haring, N. G., & Bateman, B. D. (1977). *Teaching the learning disabled child*. Englewood Cliffs, NJ: Prentice-Hall.

MICHELE FUETSCH, Staff Reporter, *The News Journal*

## *Eastside Sets the Standard*

*Despite obstacles, every third grader at small school passed math, reading tests*

It sits on some of the poorest soil in Delaware, a hard, dusty loop of land where the flowers and vegetables in the small garden plots outside struggle to produce.

Inside the small school, the desks don't match. The hallways are narrow. The principal has to share his cramped office with another staff member.

But in an appearances-are-deceiving triumph, Eastside Charter School in Wilmington has outdone every school in the state this year, maybe in the history of standardized testing in Delaware.

Every third grader at Eastside—88% of whom come from low-income families—passed the state's standardized performance tests in both math and reading, according to scores announced in mid-July.

"It's definitely a success story," said Nancy Wilson, who heads the curriculum and instructional improvement

branch of the state Department of Education.

"It's like the little engine that could," said Audrey Helfman, a professor at the University of Delaware and a board member at the school.

Third-grade teacher Christine Chaney recalled how the staff crowded around the computer the morning the Department of Education posted student scores on its Web site.

"When we saw them, I was, like, screaming," said Chaney, who moved from the Baltimore public school system to teach at Eastside.

Except for small parties that Chaney and a group of school volunteers from The Monday Club gave the third graders, there has been little public fanfare to mark the success at the Thatcher Avenue school.

And the two students, Jameere Tyler and Eric Comeger, both 9, who scored 5s on the state tests aren't particularly impressed with themselves. They received blue certificates from state Secretary of Education Valerie Woodruff, sent to all students who score in that distinguished category.

When asked if he knew what the secretary did, Eric, after a moment of thought, said that she probably made sure everybody had the right supplies.

After he and Jameere were told that the education secretary is in charge of all public and charter schools in Delaware, Jameere said, "I guess we're kind of lucky to get a certificate signed by her herself."

Eastside has only 16 third graders and 126 students altogether in its pre-school-through-fifth-grade classes. But that's the point.

"We are supposed to be a lab," Principal Will Robinson said.

Charter schools, as envisioned by the legislators that created them in Delaware, are supposed to be models from which public school systems can draw lessons and innovations.

"You can't just crowd a lot of people in the same place with a lot of the same problems," Robinson said of Eastside's commitment to disadvantaged children. "The problems perpetuate themselves."

Reprinted with permission from *The News Journal*, July 31, 2003.

month. Mrs. Chivari monitors the classroom and is available to assist with any problems, and she occasionally takes over a part of the lesson to model pedagogical procedures.

A certain procedure for the Direct Instruction model is situated on internal program quality of student performance such as the number of lessons completed and mastery of materials learned. Also, *Decoding Strategies* prepare students for standardized tests and other measures of accounta-

bility. Besides, ADI provides materials that prepare students to take major standardized tests. As well, SRA/McGraw-Hill has aligned the curriculum between the Direct Instruction programs and the State of Michigan Standards and Benchmarks.

Furthermore, academic excellence teaches children to be responsible. Through graded daily homework assignments and dated research assignments, students learn that they are accountable for completing the work

assigned to them. They develop study habits and learn to prioritize and manage their time to ensure the completion of assigned tasks. They learn to be dependable and responsible individuals that can achieve academic excellence as a result of the Direct Instruction model. *ADI*

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There are three charter schools on Thatcher, an asphalt strip running through the Eastlake section of Wilmington. It was here in “the bucket,” named after the shape of the most notorious housing project among several there, that crack cocaine reigned for years.

Eastside was opened in 1997 in the same three undistinguished brick buildings it still leases from the Wilmington Housing Authority, which after years of trying to redeem the neighborhood, leveled it.

The two nearby charter schools, Marion T. Academy and The Edison School, posted some of the lowest third-grade scores in the state, as did some public schools where the majority of students are black and Hispanic youngsters from disadvantaged backgrounds.

This is the second time, though, that 100% of Chaney’s third graders have met the state standard in math. The first time was in 2000. An analysis of past test data by *The News Journal* turned up only one other case of all students in a class meeting state standards in two subjects: a gifted class last year in the Brandywine School District.

Small classes and a small school overall are the keys to Eastside’s success, according to its staff and others familiar with the school.

“When it’s a small school like this, you become a family,” said Eric Ford, a fifth-grade teacher. “It’s almost like a small church. You can’t hide like you can in a big cathedral.”

The close ties are obvious. Robinson said he has been inside the home of each student at least once. Moving through the crowded hallways one morning this week, he suddenly stopped, lifting a pint-sized first grader up by his shoulders until their faces were even.

“Isaiah, where were you yesterday?” Robinson asked, wanting to know why the little boy was absent.

Peter Wenigmann, director of the lower school at Wilmington Friends School, one of the city’s most prestigious educational institutions, serves on the board at Eastside.

“The faculty’s so clearly dedicated to knowing the kids as individuals and demonstrating that they really care for them,” Wenigmann said. “I think that supports...their growth and development.”

At Eastside, youngsters stay in school 11 months of the year, another of the critical factors in its success, many believe. Their last day of school is today. In the fall, Eastside will have a sixth grade for the first time but does-

n’t have plans to expand beyond that or beyond its classroom size of 16.

Helfman, who teaches leadership at UD, said Eastside doesn’t want to make the same mistakes other charters and many businesses make by expanding too fast.

Robinson said he believes much of the school’s success can be laid to its curriculum, a direct instruction method that relies heavily on phonics and tightly scripted lessons that he and others working throughout the country with low-income children say is especially successful with such students, who often have little in the way of early literacy training.

The school has had full-day kindergarten from the beginning and, this year, began full-day preschool for 4-year-olds.

The staff, though, may explain much of Eastside’s success.

Teachers are expected to make extraordinary commitments that have them working well beyond 3 p.m. each day, tutoring children who often stay until 6 p.m., when the school finally closes its doors. For test preparation, the teachers ran Saturday classes.

“I let them know upfront,” Robinson said of his prospective teachers, “this is not a normal school day, where you can just expect to come in at 8:40 a.m. and leave at 3 p.m. **ADI**

CURTIS D. JASPER, Director of Curriculum and Instruction, Victory Charter School

## *An Administrator Who Really Is an Instructional Leader*

In less than 3 short years, Victory Charter School has endured the growing pains of start-up, relocation to a new building, and changes in leadership to develop an effective coaching model for Direct Instruc-

tion. With a student population of close to 450 students and half of those qualifying for free and reduced meals, inner-city Fulton County, Georgia’s first charter school has

made significant academic gains with Direct Instruction in reading.

On last year’s statewide assessment (Criterion Reference Competency Test), the school showed a gain of 17% in the percentage of fourth graders that reached the *meets the standard* or *exceeded the standard* proficiency levels in reading. At sixth grade, these proficiency levels were met by 81% of the students. Our goal for sixth

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graders this year (2003–2004) is 90%. For the 2nd year in a row, 100% of kindergartners scored at a level of achievement that requires no assistance moving into first grade on the Georgia Kindergarten Assessment Program Test. Eighty-four percent of all teachers agree that the educational program offered to our students at Victory Charter School is of high quality, as rated by the National Study of School Evaluation.

How has Victory Charter School achieved these results? They chose a Direct Instruction curriculum and adopted a model of leadership that effectively monitors and enhances the curriculum. Curtis D. Jasper, Director of Curriculum and Instruction, has worked as head administrator and instructional leader of Victory Charter School since the middle of the school's 1st year. He designed and implemented an organizational structure that utilizes what he refers to as the 5 *Classic Treasures*: Expect, Value, Monitor, Train, and Celebrate. The Victory Charter School academic leadership team consists of a dean of students, two instructional coordinators, and five lead teachers. Together, they implement Jasper's classic treasures.

### **Expect**

Expectations must be presented frequently, and must be unchanged, in order to lead the institution to high standards and student achievement. The school administrator must assume the role of instructional leader and be responsible for communicating the high expectations. Teacher, student, colleague, and parent expectations will rise or fall based on the administrator's ability to communicate the school's expectations clearly.

The head administrator's number one priority must be the instructional program. Everyone is expected to adhere to the chosen DI curriculum. All teachers are expected to teach to mastery at least a lesson per day. Students are

expected to achieve a high level of mastery and demonstrate their achievement on any and all standardized assessments. Parents are expected to deliver their children on time every day. Instructional coordinators and the dean of students are expected to observe, coach, mentor, and support at least 10–15 teachers every single week. Lead teachers are expected to hold peer coaching sessions every week during their after school planning times. The head administrator is expected to support the entire curriculum and instructional program at all costs.

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### **Value**

The instructional leader must demonstrate values-driven behavior. Students, teachers, and parents will not value the school's reading program if the instructional leader does not. He or she must model appropriate values, lead teachers and parents to those values, and test himself and teachers to ensure that they are living up to those values.

The instructional leader's values must be uncompromisable, undebatable truths that drive and direct the behavior of all teachers and all students. The values must be motivational—they must provide reasons for what we do. The values must also be restrictive—they must place boundaries around behavior. Administrators must become the kinds of leaders that people will follow voluntarily, even if they had no title or position.

### **Monitor**

At Victory Charter School, our director of curriculum and instruction and our two instructional coordinators monitor the instructional program on a daily basis. All three team members are in and out of all classrooms every single day. We are challenging our teachers to maximize the time on task by adhering to strict schedules across all grade levels. All voices at Victory Charter School come on at 8:15 a.m. Sharp! No announcements, assemblies, visitors, or parents are allowed to interrupt the reading block from 8:15–9:30. The instructional coordinators are charged with supporting and monitoring the curriculum by observing and coaching teachers, collecting lesson plans and lesson gain charts, and analyzing the results of all mastery tests, checkouts, and pacing charts. A dean of students is charged with supporting all programs by working with teachers on behavior management.

Our two instructional coordinators were chosen because they were considered by all stakeholders to be the absolute best Direct Instruction teachers. Because of their expertise and success at producing high student achievement 2 consecutive years while they were in the classroom, they were appointed as in-house coaches who could “bring out the best” in their colleagues.

The director provides training for the instructional coordinators and the dean of students and gives them the autonomy to coach without interference. The director also monitors their performance by shadowing them during classroom observations and requiring monthly reports and copies of all observation forms. At Victory Charter School, the instructional coordinators and the dean of students form a “winning team” that is motivated to meet high expectations long before the instructional leader comes around to do his monthly observations. By the time Mr. Jasper comes around to con-

duct his formal observations, it is “show-off time.”

Many of our new teachers, although they had taught at other schools, were not accustomed to our coaching model that requires unannounced classroom observations by others. However, the model requires that administrators monitor the teachers’ performance in the same way the teachers monitor their students’ performance. All teachers are now accustomed to this model and our staff functions like one big DI classroom!

### **Train**

No train, no gain! Victory Charter School has a highly trained staff, due largely to the coaching model and Mr. Curtis Jasper’s expertise and experience with schoolwide implementations of DI programs. Mr. Jasper is a former DI consultant and trainer. He came to Victory Charter School after he and his wife moved from Chicago to Atlanta in the winter of 2000. Prior to moving, Mr. Jasper had worked as a consultant with over 25 schools around the country. He is a former DI teacher and now a school administrator. He has been committed to DI since 1994.

Mr. Jasper is committed to training his teachers at every opportunity. Staff/faculty meetings are not social gatherings. Nor are they devoted to lectures. They are occasions for training one another in all of our DI programs, discussing challenges, and celebrating teacher success and student achievement.

The school’s budget is prioritized to accommodate professional development and the purchase of curriculum materials. We understand the benefits of supplementing our own training by sending teachers out of the building to be trained by other experts in other areas. All teachers are required to perform a professional development training in front of their peers and to go out of the building to be trained at least once. All new teacher candidates are asked to demonstrate a task from one of the DI programs during their final interview.

### **Celebrate**

Student achievement is celebrated within Victory Charter School throughout the entire school year. Any classrooms or groups that pass a mastery test or checkout or any other assessment with at least 90% mastery are

recognized during the morning announcements. In addition, student achievement is recognized and celebrated within a number of reading incentive programs that support our DI mainframe.

Although Victory Charter School has achieved significant success in a short period of time, we have a long way to go. Currently, the school goes up to the seventh grade, but the plans are to add a grade each year until 12th grade. *ADI*

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## *City Springs Sets the Standard...Again*

Take a school in a high-poverty area of a large U.S. city—a school that has experienced years of utter failure—and implement the full-immersion model of Direct Instruction faithfully for more than 6 years, and what are the results? Possibly the most dramatic turn-around of a school from failure to success in the history of the United States.

### **From the Bottom to the Top**

Until Baltimore’s City Springs Elementary started implementing the full-immersion model of Direct Instruction in 1996, the school was considered to be the epitome of failure. Ninety-five percent of the students were (and still are) eligible for free or reduced lunch. Academic per-

formance was at subbasement levels. City Springs was one of the very lowest performing schools in the city of Baltimore out of nearly 120 schools. At one point, no students in the school’s third or fifth grades passed the Maryland State test, the MSPAP, in either mathematics or writing. School climate was just as poor as academic performance. Students ran the halls, and teachers locked classroom doors in order to control their students...and keep others out.<sup>1</sup>

<sup>1</sup> Principal Bernice Whelchel described the chaotic nature of the school before implementation of Direct Instruction in her keynote address at the 27th annual National Direct Instruction Conference in Eugene in 2001 (available on video from ADI), and the 2000 PBS documentary, “The Battle of City Springs,” captured the difficulty of transforming the school during the 2nd year of DI implementation, 1997–1998.

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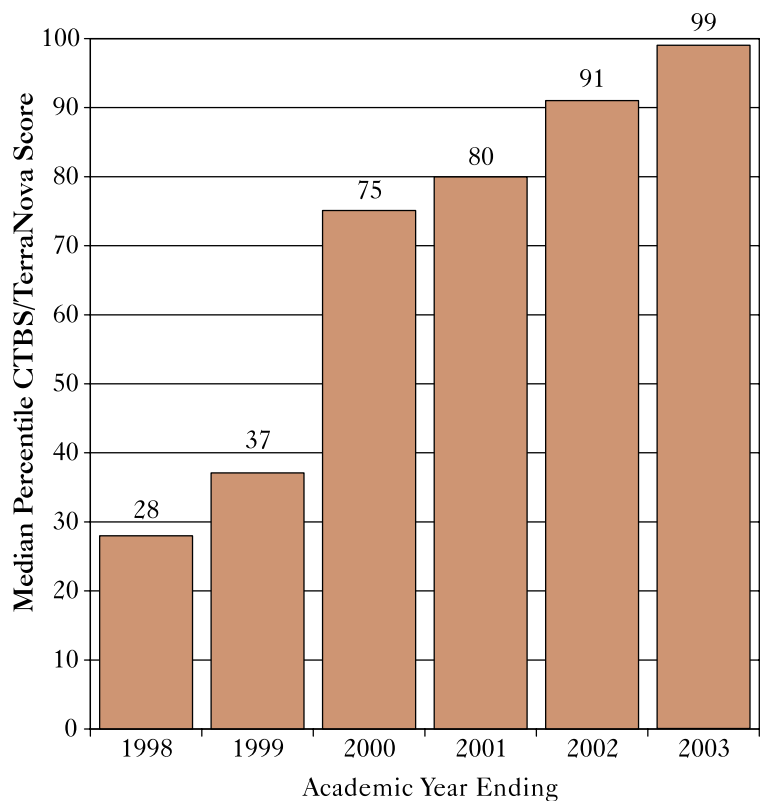
Fast forward to 2003 and the school is the epitome of excellence. The halls are clean and orderly. Students are well behaved. Most important, student performance has “shot through the roof!” The school scored highest in the city in first-grade reading, first-grade math, and fifth-grade reading on the 2003 TerraNova test. The median score for first-grade reading and first-grade math was at the 99th percentile—the highest possible score. Fifth-grade scores were also very impressive—the 87th percentile in reading and the 79th percentile in math—up from the 14th and 9th percentiles, respectively, in 1998.

Many of the dozen or so other high-poverty schools in Baltimore implementing Direct Instruction have also experienced strong achievement gains, though not as large as those of City Springs. Four of the top five first-grade reading scores in Baltimore in 2003 were from DI schools. These schools’ scores ranged from the 92nd percentile (Roland Park) to the 99th percentile (Langston Hughes). Three of the top first-grade math scores were also from DI schools (Roland Park—the 94th percentile, and Langston Hughes—the 93rd percentile, in addition to City Springs). But, with the exception of Roland Park, which is from a higher income area, City Springs outperformed the other DI schools in the upper grades by a considerable margin. For example, the median fifth-grade math score for Roland Park matched the score for City Springs (the 79th percentile), while the next highest score by a DI school was at the 62nd percentile (Langston Hughes), which is still very respectable.

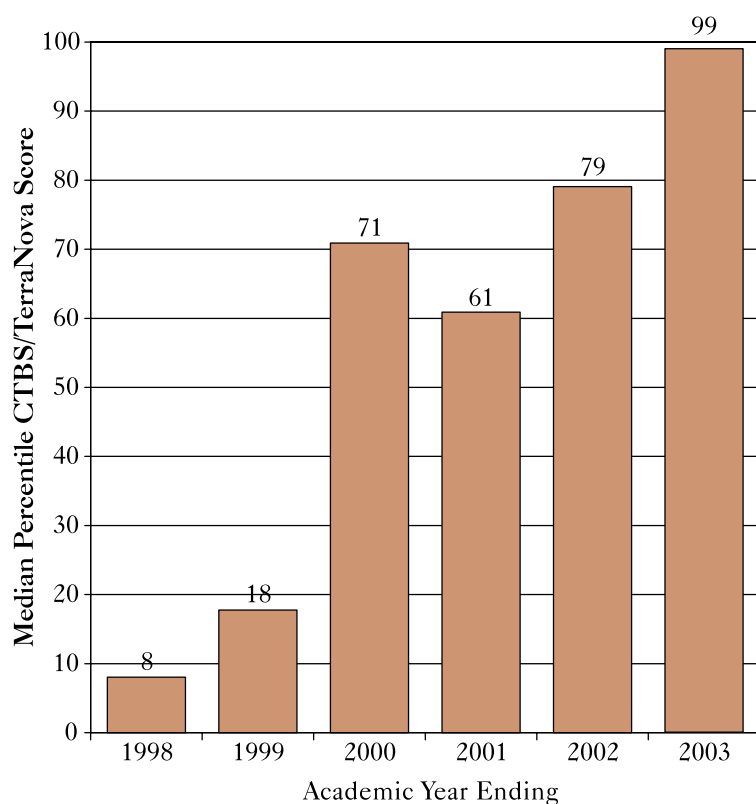
### Why City Springs Is the Leader

What accounts for City Springs’ unparalleled upsurge in student performance? Simply put, City Springs is the first low-income urban school in the U.S. to fully implement the Direct Instruction full-immersion model long enough to realize its full effects in the upper

*City Springs First-Grade Reading Scores 1998–2003*

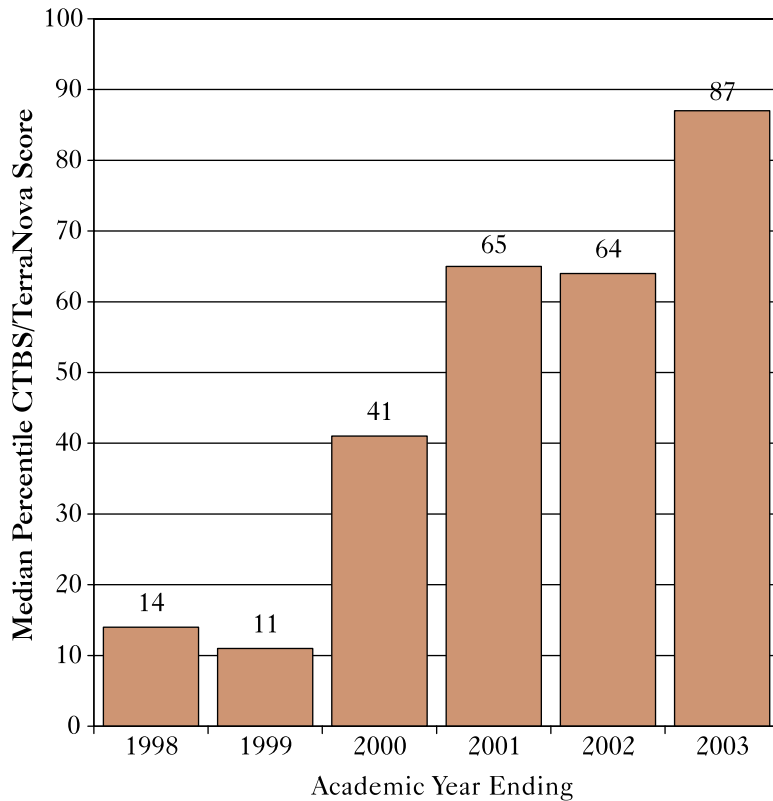


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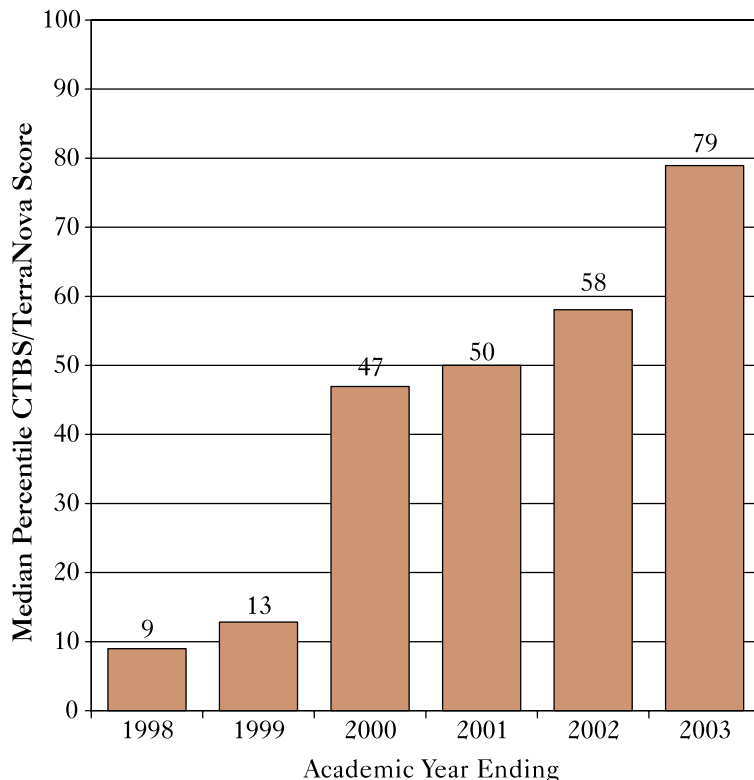




*City Springs Fifth-Grade Reading Scores 1998–2003*



*City Springs Fifth-Grade Math Scores 1998–2003*



grades. City Springs has consistently followed the Developer’s Guidelines, a comprehensive set of implementation parameters outlined by DI creator and founder of the National Institute for Direct Instruction (NIFDI), Siegfried “Zig” Engelmann.<sup>2</sup>

Dr. Muriel Berkeley, President of the Baltimore Curriculum Project, noted in her 2002 article in *The Journal of Education for Students Placed At Risk (JESPAR)* that City Springs implemented the full model with more fidelity than other Baltimore schools.<sup>3</sup>

The full-immersion model includes the following components

- Adequate time to accelerate children’s performance. Morning and afternoon reading periods are scheduled and implemented for all students in kindergarten, first, and second grades, and extra reading instruction is provided to students who are behind in Grades 3 and above.
- The full DI curriculum—the reading, language, writing, spelling, and math programs. No competing programs are allowed that teach a different strategy that might confuse children.
- Teaching to mastery. Staff members strive to bring all students to mastery on all tasks in every lesson.
- Appropriate placement. Students are placed appropriately in the instructional sequence at the start of the year. Groups are re-grouped and re-placed formally at least three times a year and informally throughout the year based on student performance.

<sup>2</sup> The Developer’s Guidelines are available via the *Data and Issues* section of the NIFDI web page, [www.nifdi.org](http://www.nifdi.org).

<sup>3</sup> Her article also appeared in the Fall 2002 issue of the *DI News*.

- Classroom support. In addition to in-class coaching from the external support provider (NIFDI), teachers receive support from school-based peer coaches who go through a three-level advanced training series.
- Frequent assessment. Teachers record lesson progress and mastery test data, which the external support provider and the school’s management team (the principal, assistant principal, building coordinator, and peer coaches) analyze weekly.
- Problem solving. The school management team participates in weekly problem-solving sessions with the external support provider to review progress and problems and determine the tasks for the coming week.

A crucial component of the model is to have a principal who is an effective instructional leader, and Principal Bernice Whelchel of City Springs fulfills this role to a T. Principal Whelchel consistently attends teacher and coaches trainings. She knows the DI programs very well, and she frequently takes over instructional groups in order to assess student mastery and enable teachers to visit other classrooms. She is in classrooms much of the day observing students and teachers. She sets down clear expectations for students and teachers, and she follows up to make sure that her expectations are met. When students work hard and achieve Principal Whelchel let’s them know they’ve done a good job. She is the leader in celebrating student success.

The full-immersion model places great emphasis on accelerating students through the primary levels of reading and math in kindergarten and first grade. At City Springs, nearly all children who enter the school in kindergarten complete *Reading Mastery II* during first grade, and a significant proportion of first graders move well

into *Reading Mastery III* by the end of the year. Kindergarten and first-grade students also complete the first levels of the language track (*Language for Learning and Reasoning & Writing*). This acceleration continues through the middle grades so that about half of the children who entered in kindergarten complete level VI of *Reading Mastery* by the end of fourth grade.

The strong DI implementation in the primary grades at City Springs has made it possible for the school to implement the upper levels of the DI programs in fourth and fifth grades.

*DI is highly effective at the upper elementary grade levels, which dispels the myth that DI is only effective with lower-grade learners.*

These upper-level programs teach sophisticated reasoning, writing, comprehension, and vocabulary. Most children in City Springs are placed in a Direct Instruction U.S. History textbook in fifth grade.<sup>4</sup>

In this program, students learn a great deal of sophisticated vocabulary (e.g., words such as “accommodate,” “capacity,” “resources,” “dominate,” “economic”), learn a great deal of important general knowledge on social studies and geography, and do a wide variety of writing tasks (e.g., comparing the War of 1812 and the Revolutionary War).

### **Implications of the City Springs Experience**

The extraordinarily high student performance at City Springs has several implications for transforming failed

schools. The school’s experience implies that

1. DI is highly effective at the upper elementary grade levels, which dispels the myth that DI is only effective with lower-grade learners. Much of the research on DI from Project Follow Through, a K–3rd-grade project, and other sources focuses on the effects of DI on primary-grade children or remedial learners. The preponderance of research in these areas has led many to conclude that DI is *only* effective with younger populations “developmentally,” or older students “remedially,” but not with older students “developmentally.” The high performance of City Springs’ upper-grade students dispels these myths.
2. The “fourth-grade slump,” which asserts that at-risk students inevitably fall behind their more privileged peers in the upper elementary grades, is also a myth. Highly at-risk students can continue to excel and outperform their more privileged peers in the upper elementary grades if the full-immersion DI model is applied rigorously for 5 years or more. The performance of at-risk students does not need to “slump” dramatically in the upper grades.
3. All of the components of the full-immersion model are necessary for maximizing student achievement. City Springs has implemented the full-immersion model with the most fidelity and has achieved the greatest gains. The degree to which other schools in Baltimore have been able to accelerate student performance reflects the degree to which they have followed the Developer’s Guidelines. This relationship between fidelity of implementation and performance holds true for the other schools NIFDI has worked

<sup>4</sup> *Understanding U.S. History* by Douglas Carnine, et al., is available via the University of Oregon Bookstore, 800.352.1733.

with across the United States. So to maximize student performance, schools need to receive **comprehensive support**—including substantial on-site coaching, off-site data analysis, and frequent problem-solving sessions—and the school staff needs to fulfill **specific roles**—including a principal who is the instructional leader of the school.<sup>5</sup>

### Will Policy-Makers Use City Springs as a Model?

If policy-makers at the district and state levels are serious about improving student performance, they should examine the experience of City Springs and determine how to replicate the school's experience at other schools. Ironically, City Springs serves more as a national model than as a local model. Principal Whelchel and City Springs have received accolades at the federal level, including recognition by the U.S. House of Representa-

tives Committee on Education and the Workforce, U.S. Secretary of Education Rod Paige, and President and Mrs. Bush at the anniversary of the signing of the No Child Left Behind Act.<sup>6</sup>

Baltimore officials, on the other hand, have largely ignored the success of City Springs and other Baltimore DI schools. Mike Bowler describes this lack of attention in his column in *The Baltimore Sun* ("An Urban Oasis Of Flowing Hope," June 15, 2003):

It's getting to be a broken record, but City Springs Elementary, one of Baltimore's poorest, led the city again in this year's TerraNova testing, results of which were announced last week. The east-side school's scores have been surging for 5 straight years in both math and reading, surely proving that Direct Instruction, the scripted

curriculum used at the school, is a success. Four of the top five city schools in first-grade scoring use Direct Instruction. Yet the curriculum is seldom credited by the school system's leaders. One wonders why.

City Springs should indeed serve as a local AND national model of how to achieve academic success with at-risk students, and the school could serve as a training center for other schools implementing Direct Instruction. To ignore the experience of City Springs, to dismiss its success as an anomaly, or to attribute its success to a single factor (e.g., the relatively small size of the school) is to obscure information needed by others who are trying earnestly to learn how to improve the academic performance of at-risk students and thereby improve the lives of children greatly. **ADI**

5 A session that is part of the annual National Direct Instruction conference in Eugene, *A Full-Immersion Model for Implementing DI*, describes the components needed to maximize student performance.

6 The school also received the Excellent School Award from the Association for Direct Instruction in 2001.

MARTIN A. KOZLOFF, University of North Carolina, Wilmington

## MARTIN'S MUSINGS

### *Technical Proficiency, Direct Instruction, and Educational Excellence*

How many excellent teachers, courses, or lessons have you had in your life? Or—beside yourself—how many excellent teachers have your students had in their lives? I mean, how often could you describe instruction as follows?

1. Students were carried along by the teacher's brisk presentations and by

class discussions. Students wanted to grasp (get) everything the teacher was trying to teach. They were so engaged they had little urge to pester their neighbors or look out the window.

2. The subject matter (things to learn) was presented in a **logical sequence**. The teacher taught the

tools needed (e.g., vocabulary words, basic strategies) **on time**, before students needed them. What students learned every lesson was built on and used in the next lessons.

3. The teacher's demonstrations (**models**), explanations, and examples were clear and on target (focused on the objective at hand) so that students grasped new material (e.g., a definition, or how to conjugate a new verb) quickly and without a lot of struggle, confusion, and errors. Even when material was hard, students made steady progress.

4. Not only did students get new material, they were able to apply it skillfully (accurately and quickly)

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4. Not only did students get new material, they were able to apply it skillfully (accurately and quickly)

to new tasks and examples, and they retained skill despite the passage of time.

No doubt you and your students have had **very few** teachers, courses, or lessons as described above. It doesn't have to be that way. But what makes the difference between ordinary instruction (boring, plodding, confusing, not much is learned and still less is retained) and the rare instruction (common to Direct Instruction) described above?

### *It's All About Technical Proficiency*

Many golfers club the ground more often than the ball. Few are experts, who regularly hit the ball a mile down the fairway. What's the difference that makes the difference in **outcome**? **Not motivation**—good AND poor golfers want to do well. **Not intelligence**—good and poor golfers are equally bright. **Not effort**—duffers try just as hard to hit the ball well. *The difference that makes the difference in outcome is...technical proficiency, or know-how.*

Some nurses take three or four tries to get the needle in your vein. Other nurses effortlessly hit the vein the first time. What's the difference that makes the difference in **outcome**? **Technical proficiency.**

The same applies to cooking, dancing, carpentry, archery, poetry, and any other activity you can think of. The difference that **makes** the difference in **outcomes** (*performances*) that are (a) clumsy, inadequate, and full of errors, versus (b) smooth and effective is...**technical proficiency.**

Technical proficiency in education is required on at least two levels: (a) schoolwide or districtwide curriculum development (e.g., pre-K–6 reading, math, and science), and (b) instructional design. The principles and

methods of Direct Instruction make significant contributions to technical proficiency at both levels. Let's look at each one in turn.

### *Schoolwide or Districtwide Curriculum Development*

Following are negative and positive examples of technically proficient curriculum development. Unfortunately, the negative example (under the aegis of progressive, child-centered, constructivist education) has been dominant for a long time.

### *A Model of Incompetent Curriculum Development*

I. Planners (e.g., school or district administrators) begin with vague but emotionally appealing phrases

as guiding principles—phrases such as developmentally appropriate practices, best practices, the whole child, multiple intelligences, learning styles, learning community, diversity, students construct knowledge. Their presumption is that curricula inspired by these phrases (whose lack of sense is unnoticed) will be effective. In other words, value orientations and magical incantations are more important than design principles based on experimental research.

II. Planners select commercial curricula (or find curriculum ideas and activities in textbooks, journal articles, and conference workshops) that are consistent with their vague guiding phrases. Planners don't determine if there is a body of experimental research that confirms the long-term effectiveness and efficiency of the chosen curricula and activities. In other words, they ignore their

**Table 1**

#### *Steps in the Frame-Model-Lead-Test/Check-Verification Format*

**Frame.** The teacher states the learning task at hand.

**Model.** The teacher provides information (e.g., reveals the logical structure of a verbal association, concept, rule relationship, or cognitive strategy, or shows how to apply this knowledge) verbally or through demonstration. If needed, the teacher repeats the model to make sure all students heard or saw it.

**Lead.** The teacher and students say the information or perform the routine together—several times if needed to ensure that all students do it correctly; that is, are firm.

**Test/Check.** Students perform the task independently, several times if needed to do it correctly. This is a test or check of whether the students have gotten it. It tells the teacher whether she communicated clearly, whether the students' preskills were firm before this task, and whether the students were properly attending and trying.

**Verification.** The teacher provides specific praise—stating what the students learned.

moral responsibility not to risk harming children.

- III. Planners don't determine exactly what each curriculum or activity teaches—in the form of “**students do...**” statements. Nor do planners create instructional objectives in the form of “students do...” statements. Instead, instruction is planned around fuzzy phrases such as, “Students will become attentive to environmental print.” “Students will appreciate different literary genres.” “Students will be able to identify the different sounds in words.” Yet, this fuzziness is **functional**; it provides for a wide range of student behavior that will satisfy the vague definitions of attentiveness, appreciation, and sounds identification. **This way, almost any program or method can be made to look effective.**
- IV. Planners don't ask whether the curricula and activities are consistent with what is known about effective instruction—issues taken for granted in Direct Instruction—such as (a) big ideas

as organizers; (b) strands; (c) logical progression of tasks; (d) strategic integration; (e) a little massed practice, or repetition, at first and distributed practice later; (f) careful attention to fostering acquisition/accuracy, fluency, assembling elements into wholes, generalization/discrimination, retention, and independence; (g) error correction; (h) group and individual responding; (i) precorrections; (j) using positive and negative examples to teach sameness and difference; (k) immediate and delayed testing; (l) quick pace; (m) precise wording; (n) review; (o) reteaching if needed; (p) movement from more to less teacher directed.

- V. Planners don't assess students' repertoires (skill sets) as a way to determine who will benefit from core, supplemental, and intervention programs—for example, in reading and math. Instead, they use trial and error—tacking on and later dropping “innovations” such as longer class periods, extra teaching assistants, computer-based instruction, and coopera-

tive learning. This makes it impossible to evaluate any one part of a curriculum but it does enable administrators to claim that they are always improving the curriculum.

- VI. Planners use unvalidated assessment methods and instruments, generally qualitative (teacher notes and portfolios of students' “products”), to make a case that the curriculum is working well enough with enough students. Administrators explain student failure as an example of the effects of poverty or lack of family involvement or insufficient funds for materials.

Fortunately for many children, the curricular guidelines, scientific tenets, and moral positions advanced by No Child Left Behind, Reading First, and current consumer and scholarly critiques of teacher training, public school curricula (e.g., whole language and fuzzy math), and low student achievement are fostering a more rational approach to curriculum development, as outlined below.

## *A Model of Competent Curriculum Development*

- I. Planners begin with an assessment of students' needs, as determined by (a) screening assessments, (b) what research says about the background knowledge and learning needs of different populations, and (c) pretests for different subjects.

Planners add to this their knowledge of what students will be working on later in school (from state and district curriculum guides and from general knowledge about effective sequences of instruction). For example, if students will be expected to comprehend grade-level text and to read

**Table 2**

*How the Frame-Model-Lead-Test/Check-Verification Format Provides Scaffolding*

1. It provides information in small, learnable amounts.
2. It moves from more teacher directed (the model plus prompts, such as pointing and exaggerating gestures and voice) to less teacher directed (students respond independently).
3. It quickly moves from getting knowledge to using knowledge.
4. It provides sufficient practice on a physical routine, verbal association, concept, rule relationship, or cognitive strategy (one or more steps) to ensure that students are “firm” before the teacher adds more material.
5. It moves at a brisk pace, which captures and sustains attention and facilitates recall.
6. Students' familiarity with this format orients and guides their behavior—attention, cognitive rehearsal before acting, persistence until they all get it.

at 90 WCPM in Grade 2, then (in Grade 1) planners know they must ensure that students have mastered phonemic awareness, sound–symbol relationships, and

decoding/sounding out; are fluent at grade level text to about 60 WCPM; have a Grade 1 vocabulary; and can answer beginning reading comprehension questions.

II. As much as possible, planners translate information from step I into instructional objectives in the form of do-statements. That is, if a state course of study identifies

**Table 3**

*Additional Features of the Frame-Model-Lead-Test/Check-Verification Format*

1. The teacher makes sure all students are **paying attention before** she provides the model. “Everyone, look.” Or, “I have to see everyone looking up here at the board... Thank you.” The teacher uses a variety of **prompts** to ensure students are attending to and getting precisely the right information throughout the interaction. For example, the teacher moves her finger beneath each letter she is sounding out to make sure students look at each letter the moment the teacher says its sound.
2. The teacher **prepares** students to hear, see, and act by **stating the type of knowledge task** they are working on. “Here’s a new sound,” or “The next thinking operation is statement inference.”
3. Wording is clear, precise, and to the point—to ensure understanding. For example, **all important concepts are pre-taught**: Before defining democracy as a political association involving rule by the people, the teacher would teach the concepts of political association, rule, and people. There is no unnecessary verbiage. The same wording is used when teaching the same sort of task. “First word (points to word on a word list). What word? *Malleable*. Next word. What word? *Convince*. Next word. What word? *Disculge*.”
4. The teacher **repeats any of the frame-model-lead-test/check steps if needed** so that all students have attended and responded firmly—that is, they seem to have gotten the communication—before she goes on.
5. The teacher uses a **gesture to signal students to respond** when it is their turn. If students are looking at the teacher (e.g., the teacher is at the board), the “do it” signal could be a “hand drop”; that is, the teacher’s hand is raised when she says, “Your turn to read these words the fast way. Get ready...” Then she drops her hand and students start reading.

However, if students are **not** looking at the teacher (e.g., they are reading passages from a book), the teacher could tap on her book to give the “do it” signal. For example,

Teacher: Everyone, what’s the name of the figure of speech in the line, “And what rough beast, its hour come round at last, Slouches towards Bethlehem to be born”? Think about it... Get ready... (Taps her book to signal “do it.”)

Students: Metaphor.

Teacher: Yes, metaphor. (Verification.) How do you know? (Asks for the definition previously taught.) (Think... Get ready... Taps her book.)

Students: A metaphor is a word or phrase that usually has one meaning and is used to talk about another thing, but the comparison is not directly stated.

Teacher: Yes, the comparison is **not** directly stated. Excellent definition of metaphor.

6. These signals help students respond quickly to (i.e., act on) new information (which aids getting it) and help students respond as a group, as discussed next.
7. The teacher **first** calls on the whole group to respond as one. “Your turn to state the rule about pressure and temperature. Get ready.” **Choral responding** enables the teacher to determine that **each** student has gotten the communication. If she called on students individually, she could not tell if a student were merely copying the students who came before. Choral responding also makes instruction move quicker (imagine how long it would take to check each student), so that more is covered. Finally, choral responding gives students the sense of both individual and group mastery, which fosters an obligation to try to do well and not disrupt the group’s learning.
8. After group turns, the teacher calls on individual students—especially students who made errors during the choral responding.

**Table 4**

*Teaching a Simple Fact With the Frame-Model-Lead-Test/Check-Verification Format*

**Frame:**

Yesterday we studied the Battle at Marathon. Everyone. Who fought in the Battle at Marathon?

Get ready? (Signal)

*The Greeks and Persians.*

Yes, the Greeks and Persians.

What was the date of the Battle at Marathon?

Julian.

*490 BC.*

Excellent. 490 BC.

Who won? Amelia.

*The Greeks.*

Correct again. The Greeks. This class is so smart. Now we will study another great battle in the Persian Wars. The Battle at Thermopylae.

**Model:**

Everyone, listen. (Pause) Here's a new fact. The Battle at Thermopylae was fought in 480 BC.

**Lead:**

Say that fact with me. Get ready. (Signal)

*The Battle at Thermopylae was fought in 480 BC.*

**Test/Check:**

When was the Battle at Thermopylae? Get ready. (Signal)

*480 BC.*

**Verification:**

Yes, the Battle at Thermopylae was fought in 480 BC.

(Later, students would learn about the size and composition of each army, battle strategy, the immediate outcomes, and the role of the battle in the larger historical context.)

Note that this format simply and quickly taught the logical structure of a fact; it firmly taught the **association** between a date and an event. However, the teacher must provide opportunities for students to **apply** this knowledge; for example, when comparing and explaining the outcomes of the Battle at Marathon (which the Greeks won), the later Battle at Thermopylae (where the Greeks were overrun), and the later Battle at Plataea (which the Greeks again won).

Here is another example.

*Teaching a Concept (Granite) With the Frame-Model-Lead-Test/Check-Verification Format*

Granite is a higher-order concept (it is embedded in larger concepts, such as things that consist of minerals, rocks, and igneous rocks). Therefore, we have to teach it using both **verbal definitions** and **examples** that enable students to see the defining features. (I freely admit that there may be—undoubtedly are—many shortcomings in the design below. So, consider it to be an opportunity to sharpen your own skills.)

**Exercise 1**

**Framing:**

We have been studying igneous rocks. Here's our definition. **Igneous rocks form from the crystallization of minerals in magma.** Everyone, say that definition of igneous rocks.

*Igneous rocks form from the crystallization of minerals in magma.* (Note, the students are advanced enough that the teacher leaves out the lead step. Also, the concepts mineral, magma, and crystallization have already been taught.)

Yes, igneous rocks form from the crystallization of minerals in magma. Today we will examine an igneous rock called **granite**. Everybody, if granite is an igneous rock, **what else do you know about it?** Think...(Signal.)

*It forms from the crystallization of minerals in magma.* (Teacher asks students to make a deduction about granite given the definition of igneous rocks.) Excellent deduction!

**Model:**

Here's the definition of granite. **Granite is an igneous rock consisting of the minerals quartz, feldspar, and mica.** Again, granite is an igneous rock consisting of the minerals quartz, feldspar, and mica.

**Lead:**

Say it with me. Get ready. (Pause...then signal.) *Granite is an igneous rock consisting of the minerals quartz, feldspar, and mica.* (The teacher probably could have left out the lead.)

**Test/Check:**

By yourselves. (Signal.)

*Granite is an igneous rock consisting of the minerals quartz, feldspar, and mica.*

**Verification:**

Excellent saying that definition with so much enthusiasm.



phonemic awareness as an early objective, planners state this objective in the form of student performance. For example,

1. "When the teacher models onset rhyme with mat, hat, and cat, students create new examples that rhyme with at."
2. "When the teacher models the first sound in rim, ram, sit, fit, and man, students say the first, middle, and last sound in these words."

III. Planners are guided by research on sound curriculum design and effective instruction—issues taken for granted in Direct Instruction—such as (a) big ideas as organizers; (b) strands; (c) logical progression of tasks; (d) strategic integration; (e) a little massed practice, or repetition, at

first and distributed practice later; (f) careful attention to fostering acquisition/accuracy, fluency, assembling elements into wholes, generalization/discrimination, retention, and independence; (g) error correction; (h) group and individual responding; (i) precorrections; (j) using positive and negative examples to teach sameness and difference; (k) immediate and delayed testing; (l) quick pace; (m) precise wording; (n) review; (o) reteaching if needed; (p) movement from more to less teacher directed.

IV. Planners examine experimental research on design features (e.g., the effects of different instructional sequences) and evaluative field tests (of whole programs) to select programs and methods for teaching the objectives.

- V. Planners select valid and reliable instruments for screening, diagnostic, ongoing, and summative assessment.
- VI. Administrators routinely collect **quantitative** assessment information about teacher proficiency, student engagement, progress, and summative achievement. Data are used to decide what to change and what to sustain in the curriculum.

### *Instructional Design*

Some features of effective instructional design include the items listed in III above. This section describes one more feature—a format for clear, precise, and effective communication; namely, the *frame-model-lead-test/check-verification format*. This general format—found in many Direct Instruction curricula—may be used in

**Table 4 continued**

*Teaching a Simple Fact With the Frame-Model-Lead-Test/Check-Verification Format*

**Exercise 2**

**Framing:**

Now, we have already learned the minerals quartz, mica, and feldspar. (Teacher reviews the verbal definitions for each one, shows examples of each one, and has students discriminate among examples of these minerals and other minerals. She uses the format, "Is this quartz?...How do you know?...Is this quartz?...How do you know?...Is this feldspar?...How do you know?")

Now I'll show you examples of granite.

**Model:**

(Teacher holds up or shows slides of granite and labels each one as granite.)  
 This is granite...Notice the mica, feldspar, and quartz...  
 This is granite...Notice the mica, feldspar, and quartz...(The examples differ in size, shape, and color of minerals; e.g., pink and gray quartz. But they share the essential and defining features—quartz, mica, and feldspar. Next the teacher juxtaposes examples of granite and **nongranite** and labels them.)

This is granite. Notice the mica, feldspar, and quartz...

This is **not** granite. Notice that it has **no** quartz...

This **is** granite...

**Test/Check:**

(Now the teacher presents examples of granite and nongranite and asks students to discriminate and identify them.)

Everyone. Is this granite?

*Yes.*

How do you know?

*There is mica, feldspar, and quartz.*

Excellent! Is this granite?

*No.* How do you know?

*It has no quartz.*

Correct!

**Verification:**

(After each example, above, the teacher verifies and praises accurate answers.)  
 (Throughout, she calls on the whole group and then on individual students.)

any subject and for teaching any form of knowledge: (a) physical routines (handwriting), (b) verbal associations (the names of the 13 original colonies in America), (c) concepts (/m/ says *mmm*, democracy), (d) rule relationships (“First multiply the numbers in the ones column.” “No democracy with uneducated citizens can long endure.”), and (e) cognitive strategies (multiplication, sounding out words, writing papers). It is highly **focused** on the knowledge task at hand. It moves at a **brisk** pace. It provides sufficient learning **opportunities** for students to get the knowledge being taught. Later, during expanded instruction, it is used to help students apply knowledge. Finally, this format

fosters high **engagement**—because it focuses attention, moves quickly, and ends with firm knowledge.

Steps in the frame-model-lead-test/check-verification format are shown in Table 1.

Table 2 shows how the frame-model-lead-test/check-verification format provides effective scaffolding.

Table 3 describes additional features of the frame-model-lead-test/check-verification format.

Table 4 gives an example of the frame-model-lead-test/check-verification format.

The recent creation of important programs such as No Child Left Behind, Reading First, Early Reading First, and others, is an historic opportunity to place education on the sound footing of data and logic, leading to sounder curricula and wiser decisions. However, I don’t think that federal and state mandates, position papers, and grant funding requirements alone will change the culture of education, which has for a long time supported nonlogical curricula and program selection based not on data but on the emotional appeal of education jargon. The culture of education will change only to the extent that we conspicuously and consistently demonstrate logical thinking and technical proficiency. *ADI*

DON CRAWFORD, Otter Creek Institute

## *What To Do When Students in Reading Mastery III Have Comprehension Problems*

When we start *Reading Mastery Fast Cycle* in kindergarten, many of us have students who are ready for *Reading Mastery III* in first grade. Yet some of those students appear to have trouble “comprehending.” It seems as though the workbook tasks are a bit much for them. Is it possible that these first graders are too young and should not be expected to do so much work?

In Direct Instruction we learn that kids can learn what we teach them clearly, regardless of their age, if they have been taught the prerequisite skills. DI folks tend to avoid the “too young” rule generally, as it smacks of the notion of “developmental readiness” which can lead to lowered expectations. When children encounter difficulties, unenlightened educators fall back on the notion that the chil-

dren are “too young” or they are not developmentally ready. Instead, enlightened educators know to look for missing prerequisite skills that we need to teach. If children test into *RM III* and are experiencing difficulty doing the workbook, here are eight things that I’d want to check first to see what might be the problem.

1. Children can test into *Reading Mastery III* by reading a 136-word passage in 1.5 min for a minimum rate of 90 words per minute. If decoding is not at least 90 words per minute or better, then the effort of decoding might still be interfering with comprehension and may need to be improved as a first priority. And I’d personally say that although 90 is a minimum, if their rate is below 110 per minute, then some work on

improving decoding skill would help their comprehension significantly.

2. The simple printing skills may be the culprit. First graders generally print from 15–20 letters per minute, while average third graders write between 45 and 50 letters per minute (Graham, 1999). So with no better than average skills we can anticipate that the workbook will take three times as long for first graders to complete than third graders.

We also know that if printing manuscript skills are not fluent and are slow and laborious, then the effort of writing the letters will interfere with thinking about the answers students are composing (Berninger et al., 1997). How slow is too slow? Fewer than 15 letters per minute for sure, and if a student’s writing is above 40 per minute it may not be a problem. My clinical sense is that if the students print much below 30 letters per minute this will make the workbook an onerous chore for them. Manuscript printing skills would need to be a focus of instruction until they are improved.

any subject and for teaching any form of knowledge: (a) physical routines (handwriting), (b) verbal associations (the names of the 13 original colonies in America), (c) concepts (/m/ says *mmm*, democracy), (d) rule relationships (“First multiply the numbers in the ones column.” “No democracy with uneducated citizens can long endure.”), and (e) cognitive strategies (multiplication, sounding out words, writing papers). It is highly **focused** on the knowledge task at hand. It moves at a **brisk** pace. It provides sufficient learning **opportunities** for students to get the knowledge being taught. Later, during expanded instruction, it is used to help students apply knowledge. Finally, this format

fosters high **engagement**—because it focuses attention, moves quickly, and ends with firm knowledge.

Steps in the frame-model-lead-test/check-verification format are shown in Table 1.

Table 2 shows how the frame-model-lead-test/check-verification format provides effective scaffolding.

Table 3 describes additional features of the frame-model-lead-test/check-verification format.

Table 4 gives an example of the frame-model-lead-test/check-verification format.

The recent creation of important programs such as No Child Left Behind, Reading First, Early Reading First, and others, is an historic opportunity to place education on the sound footing of data and logic, leading to sounder curricula and wiser decisions. However, I don’t think that federal and state mandates, position papers, and grant funding requirements alone will change the culture of education, which has for a long time supported nonlogical curricula and program selection based not on data but on the emotional appeal of education jargon. The culture of education will change only to the extent that we conspicuously and consistently demonstrate logical thinking and technical proficiency. *ADP*

DON CRAWFORD, Otter Creek Institute

## *What To Do When Students in Reading Mastery III Have Comprehension Problems*

When we start *Reading Mastery Fast Cycle* in kindergarten, many of us have students who are ready for *Reading Mastery III* in first grade. Yet some of those students appear to have trouble “comprehending.” It seems as though the workbook tasks are a bit much for them. Is it possible that these first graders are too young and should not be expected to do so much work?

In Direct Instruction we learn that kids can learn what we teach them clearly, regardless of their age, if they have been taught the prerequisite skills. DI folks tend to avoid the “too young” rule generally, as it smacks of the notion of “developmental readiness” which can lead to lowered expectations. When children encounter difficulties, unenlightened educators fall back on the notion that the chil-

dren are “too young” or they are not developmentally ready. Instead, enlightened educators know to look for missing prerequisite skills that we need to teach. If children test into *RM III* and are experiencing difficulty doing the workbook, here are eight things that I’d want to check first to see what might be the problem.

1. Children can test into *Reading Mastery III* by reading a 136-word passage in 1.5 min for a minimum rate of 90 words per minute. If decoding is not at least 90 words per minute or better, then the effort of decoding might still be interfering with comprehension and may need to be improved as a first priority. And I’d personally say that although 90 is a minimum, if their rate is below 110 per minute, then some work on

improving decoding skill would help their comprehension significantly.

2. The simple printing skills may be the culprit. First graders generally print from 15–20 letters per minute, while average third graders write between 45 and 50 letters per minute (Graham, 1999). So with no better than average skills we can anticipate that the workbook will take three times as long for first graders to complete than third graders.

We also know that if printing manuscript skills are not fluent and are slow and laborious, then the effort of writing the letters will interfere with thinking about the answers students are composing (Berninger et al., 1997). How slow is too slow? Fewer than 15 letters per minute for sure, and if a student’s writing is above 40 per minute it may not be a problem. My clinical sense is that if the students print much below 30 letters per minute this will make the workbook an onerous chore for them. Manuscript printing skills would need to be a focus of instruction until they are improved.

3. The end of *RM II* and *Fast Cycle* have those great stories about “The Land of Peevish Pets”—and all those rules to learn, etc. Those are demanding and were designed as great preparation for rule based comprehension, which is a focus of *RM III*. If those stories and rules were skipped, it might be a good idea to go back and do those stories.

4. How well does the teacher follow the script? I often find teachers who, to save time, skip some of the comprehension questions during story reading. But many of those questions are designed to prepare students for the workbook. The students are to “get” the answers in the midst of reading the story while the information is fresh. Another way to say this is that the teacher is “activating” children’s knowledge of the key information in the story. Later, the exact same questions are asked in the workbook, and the kids are just supposed to be remembering the answers they had previously discussed (activated). It is ironic to hear a teacher, who’s skipped the opportunity for the children to learn the information, claim that it’s the children’s fault when they can’t answer the workbook questions that weren’t covered.

5. Is the teacher doing the second reading, where they go back and reread the story and ask more questions? A lot of teachers hate to do this, because they feel it is redundant. However, a second reading helps comprehension tremendously. We know clearly, from tons of research, that at this level of decoding skill, children fail to comprehend fully because decoding still requires the bulk of their mental attention. So reading a passage a second time makes the decoding easier for the kids, thus allowing more attention to focus on comprehending the passage.

And if this weren’t enough, it turns out that there are new and different

comprehension questions to ask during the second reading. Duh! So if a teacher skips the second reading they miss the opportunity to activate some of the information needed for the workbook.

6. If the teacher is asking all the questions as they are interspersed, is she or he “part-firming” all the missed questions? That is, does the teacher go back and repeat questions that the students had trouble with—to make sure everyone remembers the answer now? If teachers don’t part-firm the questions as they go

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along—is it any wonder the kids don’t know the answers to the questions later in writing?

7. Does the teacher know how to correct a missed comprehension question? A teacher shouldn’t just tell the kids the answer—because the point is for them to learn how the answers came out of what they just read. The procedure is to have the students do each of these steps to see if, after doing the step, they can now answer the original question.

1. Ask the child to read the question (sometimes they don’t!) or reread it. *Then if he or she still can’t answer, go on to the next step.*

2. Ask the child to paraphrase the question—and if they can’t, ask them to reread the question until they can paraphrase it.

Sometimes the comprehension failure occurs on the question rather than the story. Once the child understands the question you may get the “Oh!” look and they’ll suddenly know the answer. *But if he or she still can’t answer the original question, go on to the next step.*

3. Don’t expect children at this age to skim back to find the answer—they can’t yet, they’re still reading word by word. Instead, show the child the sentence where the answer is and have him or her read it aloud. (After a while you can point out the sentence before the sentence where the answer is—so the child has to read two sentences to get the answer.) If you don’t get the “Oh!” look at this point, the kid’s forgotten the question. *So if he or she still can’t answer the original question, go on to the next step.*

4. Ask the child to reread the question—and then you read the answer-containing sentence aloud to them. *(Then if he or she still can’t answer after that, you’ve got a real problem! I’ve never had it get that far, unless they were missing some essential prior “world” knowledge or English vocabulary—and a perceptive teacher will know from the nature of the question what might be confusing to the child.)*

8. Did the teacher do all the workbook questions orally with the students, as the script says to—for many lessons, before asking the kids to write answers? There are at least 10 to 20 lessons of that kind of teaching where the kids practice answering all the workbook questions orally and then go back and do all the same questions in writing at the start of *RM III*. This teaches the kids how to get the answers to the questions before having to do the questions on their own, and first graders who’ve never done

workbooks before really need this step. This is essential instruction—which is often skipped by teachers—to save time—and then later they're disappointed when kids don't know how to answer questions on their own.

So first check and/or fix all of these eight things. If the children were still unsuccessful at the workbooks,

although you couldn't say they were "too young," you could say they lacked the needed prerequisite skills to do *RM III*. Of course, as you can imagine, this is about as likely as Ken Goodman endorsing DI, but, hey, it could happen. *ADI*

## References

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ZIG ENGELMANN

## Response to Time Magazine's Report on Dyslexia

There are lots of problems with the quasi-scientific analysis of dyslexia reported in *Time*, titled, "The New Science of Dyslexia." Basically what they discovered using MRIs was that the problem was not "visual," but associated with language. From this information, they launched into a daisy chain of inferences, none of which are very sensible because they still believe in dyslexia. Here's the major problem with the analysis: If it's true that students in places like the worst slums in Baltimore and rural Mississippi taught with DI have 100% of the children reading—not guessing or memorizing—by the end of kindergarten, something is seriously wrong with the portrait of dyslexia. After all, these students exhibit all of the "warning signs" referred to in the analysis. When they come into kindergarten, they can't rhyme, they can't alliterate, they can't blend orally presented words, and they have lots of problems figuring out unique sound patterns (such as repeating something like 4, 4, 4, 4 and yet are able to repeat four or more random digits). So they should all be dyslexic, and indeed historical performance records show that virtually all of them had been greatly retarded in reading, with the average fifth grader stumbling

about on a weak second-grade level. Some of the schools that currently have no nonreaders coming out of K historically had end-of-first-graders scoring at the 6–9th percentile on standardized achievement tests. Yet, the new science tells us that we can expect 1/5 of the population to have dyslexia. That's a 20% failure rate to teach reading in a fat-cat suburb where parents care about and influence the schools, and where they are lavishly funded with aides, material, and whatever.

The second major problem has to do with their data on early intervention and what works. Shaywitz asserts, "The data we have don't show any one program that is head and shoulders above the rest." Obviously, Shaywitz needs more accurate and extensive data, like that from City Springs where the average/median first grader in 2003 scored at the 99th percentile on achievement tests. And fifth graders reach the 87th, making City Springs the number one school in reading in Baltimore in both the first and fifth grades. It certainly couldn't be because City Springs has 99% blacks and over 90% free lunch, or because 6 years ago it was the 117th school in a district of 117 schools, or that the kids scored

below the 10th percentile in reading and math in all grades, or because not one student in Grade 3 or Grade 5 passed the Maryland state reading test. What then caused this amazing change—the water, a prayer campaign, or some form of multi-vitamin diet?

More to the point, because this kind of improvement has only been achieved by Direct Instruction, and because it has been done in more than one school, and in fact, in any school that implements according to the numbers, there does seem to be one program that is head and shoulders above the others.

Stated differently, I'll bet the authors of the new science of dyslexia, and Shaywitz \$100,000 that they can't produce one 5-year-old child who is prejudged to be in the normal IQ range that can't be taught to read in a timely manner. They can submit as many as 100 virgins (kids who have not been screwed by learning that Obuh is for baby). These folks can use whatever screening methods they seem to think predicts "dyslexia." I'm dead serious about this bet.

Third, and perhaps most relevant, the neurological evidence sucks. Shaywitz—the same Shaywitz that asserts there is no "superior" program—also asserts, "The good news is we really understand the steps of how you become a...skilled reader." That's

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Third, and perhaps most relevant, the neurological evidence sucks. Shaywitz—the same Shaywitz that asserts there is no "superior" program—also asserts, "The good news is we really understand the steps of how you become a...skilled reader." That's

impossible. Unless you understand the task facing the naive learner, you couldn't possibly understand the various functions that would have to be in place. The MRI evidence does not reveal the task. It just generates the correlations, which in turn generate fragmented and often stupid interpretations. In other words, the "scientists" play this game: We know that these kids are "dyslexic" and those other guys are normal. Let's find some correlations based on our MRI data and from those data infer what it all means." That last part is where some form of miracle must occur. The activity in different parts of the brain has nothing to do with the content that is processed by the brain, only the loci of activity. Nobody's disputing the MRI evidence. It's the interpretation that sucks.

The notion that the kid's mind must hear the sounds of the word *cat* are partly true and partly fabrication. If our language were like Italian, with only a few exceptions, a case could be made for this simplistic idea. In fact, the process must be far more sophisticated given that by the end of the first grade the kid will be expected to decode these words: *of, is, was, who, were, you, have, front, school*, etc. None of these are "regular." The set of more common words used to compose the most elementary sentence are replete with irregulars. Try to make up a simple story in which words are composed exclusively of letters that make the same sound.

*These cats have no spots.* The following letters have more than one sound in this sentence: *t, h, e, o, s*. Note that the *e* makes no sound in two words.

Shaywitz's observation that some poor readers had their phoneme analyzer, word analyzers, and automatic detector more strongly linked to their memory processors than to language centers is interpreted to mean that they spend more time memorizing words than nor-

mals do. The "classic" dyslexic, in contrast, had an overactive phoneme producer and an underactive word analyzer and automatic detector. So what? Is this a cause of dyslexia or an effect of instruction that failed?

Equally important, if the activity pattern is different, there must be some difference in the "content" that the brain is representing. In other words, if the activity is more extensive, what the kid is doing when trying to figure

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out the word involves more steps or considerations than the kid who knows the game of decoding English words. The brain is not goofy. The kid's logic is. The poor little guy may be trying to figure out whether the word is **baby** because some jerk told him that *b* is for baby, and he sees a *b*, right there in the word. Or is it a *d*? If it's a *d*, the word must be **dog**, but it's not shaped like **dog**. Is there a picture somewhere that shows what that word is? What did the teacher say? She talked about this word, or I think it was this word. It was some word and she said something about a bowel sound.

But given that the "scientists" don't understand the nature of the content or how it precisely correlates with brain patterns, they are left with the age-old scientific procedure for filling

in the space between what the correlation shows and what it all means—make it up as you go along.

Here's what they would need to know (in addition to some facts about the extent to which dyslexia can be eliminated) before making the kind of proclamations about nonreaders that they make.

1. The behavior of the brain with normal children **as they are learning specific things associated with beginning reading**. Here's what they'll find. The normal kid initially has the whole brain activated when learning new things. The reason is simple. The kid doesn't know which relationships are the keys to reading, and the brain is doing its thing and trying out a large number of possibilities. There would be no difference between the dyslexic and the normal during this period. Later on, the kid who will later learn to read adequately will not have anywhere near as much activity in learning new material than the dyslexic because this guy has the right information foundation. The steps she uses to analyze the words work. She identifies words correctly. The dyslexic has to keep searching.
2. The behavior of deaf children who learn to read but who are unable to speak. Whatever their behavior is it would tend to thrash some of the assumptions about "phonemes." If the kid doesn't hear or speak but learns to read, the patterns of brain activation would be very revealing about what we're really talking about and what the language centers on the left side of the brain (most of them) are actually analyzing.
3. The changes in the brain of "young dyslexics" (those in possibly Grades 2 or 3 who have the "classic" profile) when they are taught with a **highly** effective program, a la Direct Instruction, which will tend to induce a high percentage of cor-

rect responses from the beginning rather than the kind of behavior you see when teachers are using sloppy phonics programs. This data, correlated with data about specific changes in reading behavior, would yield good information about exactly what misconceptions about reading the kids had and how the changes in the MRI pattern were correlated with specific details in their word-reading behavior.

In summary, the MRI scientists' interpretation of brain-function data is what is logically referred to as a false dilemma or an argument from igno-

rance. The scientists observe a correlation between brain patterns and not learning to read.

The possibilities are:

1. The brain pattern caused the non-learning.
2. The nonlearning caused the brain pattern.
3. The interaction of a third variable caused both the nonreading and the brain pattern.

These scientists apparently don't consider possibilities 2 or 3, but proclaim

that the brain pattern causes the non-learning. There is no question that there are individual differences in reading performance; however, if the kid can find his way into the right classroom and follow simple directions, he can be taught to read in a timely manner.

An interesting footnote about the MRI data is that it is related to sounds and manipulation of sounds. Phonemic awareness is now a big deal—even for these scientists—but DI had it in 1968. That's one, but only one, of the reasons it worked in 1968. *ADI*

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## *Emos Thuogths on Dyslexai*

The medical community has recently brought its high-tech gadgets into the field of reading, with a special emphasis on poor reading. A hot topic of late is "Dyslexia and MRIs." *Time* had a feature on dyslexia (July 28, 2003). Zig Engelmann wrote a pithy response that is printed in this issue.

A friend of mine is an emergency room physician. I was telling him a little about this MRI stuff related to reading. He couldn't picture the value of an MRI for studying reading behavior. I can't either. On the one hand, I don't know squat about what you can and can't do with an MRI. I thought that MRIs revealed physiological anomalies—tumors and the like. What I do know is that relating behavior to neurological behavior is a very tricky business. Finger and Stein, in their book *Brain Damage and Recovery*, forcefully conclude that the *minority* of data support any sort of brain theory revolving around localization of function. Put

another way, the data point toward the notion that many—very, VERY many—parts and different regions of the brain interact in unknown ways, in association with any given behavior. Research on sea slug neurology strongly supports something like a "holographic" model of even the most simple and observable neurological systems.

I'm way out of my league here with MRIs and CAT scans and electroencephalographs and the like. Staying closer to home, I'd like to focus on dyslexia from a purely analytical point of view. As Engelmann and Carnine point out in *Theory of Instruction*, Direct Instruction is a rationalist-empiricist approach to instruction. This is pretty much the same as plain old science. Empiricism alone, although it sounds scientific, is like throwing mud against the wall to see what sticks. First, *things have to make sense*. It's possible (and common, I'd argue) to invest a great deal of time and effort in an interven-

tion study that makes no sense whatsoever to begin with. We often see studies that "show" something can't be true, logically. When we dig a little, we find all sorts of errors and weaknesses in research design.

That's a rather long way of saying that I don't take much research on dyslexia very seriously because it doesn't make any sense.

Dyslexia is defined like this:

Dyslexia is a neurologically based, often familial disorder that interferes with the acquisition of language. Varying in the degrees of severity, it is manifested by difficulties in receptive and expressive language, including phonological processing, in reading, writing, spelling, handwriting, and sometimes arithmetic. Dyslexia is not the result of lack of motivation, sensory impairment, inadequate instructional or environmental opportunities, but may occur together with these conditions. (Orton Dyslexia Society, 1994, now called the International Dyslexia Association.)



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One obvious problem with this definition is the notion of “inadequate instructional or environmental opportunities.” Poor instruction can’t cause dyslexia, according to this definition. Therefore, poor instruction causes tons of reading problems that can’t be categorized as dyslexia (because dyslexia is a neurological impairment). Poverty can’t cause dyslexia. As it happens, poverty is about the only thing that really correlates well with reading failure, but all that failure can’t cause dyslexia. The definition above suggests that a poor child could *also* have dyslexia: apparently, a severe double whammy.

The International Dyslexia Association claims that about 4% of kids have dyslexia. If that were true, then there would be massive numbers of poor readers without dyslexia. Although still shying away from medicine, I’d be curious to see the differences—MRI, CAT, etc.—between the majority of poor readers and those neurologically impaired dyslexic kids. Mostly what I’ve seen is discussions of how MRIs change as a child changes from being a very poor reader to a good reader. Maybe I’m naive, but wouldn’t we pretty much expect the electrochemical behavior of the brain to change in some way as a person goes from struggling hopelessly with a highly complex cognitive activity to mastering it?

If dyslexia is a neurological impairment that causes reading difficulties that differ from those caused by poor instruction or exacerbated by poverty, then what are those differences in difficulties. The Dyslexia folks don’t tell us what the differences are, but they at least list the difficulties that dyslexic kids have:

1. early difficulties in acquiring phonic skills
2. a high proportion of errors in oral reading

3. difficulty in extracting the sense from written material without substantial rereading
4. slow reading speed
5. inaccurate reading, omission of words
6. frequent loss of place when reading
7. an inability to skim through or scan over reading matter
8. a high degree of distractibility when reading

*The International Dyslexia Association claims that about 4% of kids have dyslexia. If that were true, then there would be massive numbers of poor readers without dyslexia.*

9. perceived distortion of text (words may seem to float off the page or run together)
10. a visually irritating glare from white paper or whiteboards.

I’m hazarding a guess that numbers 1–8 are common among many poor readers who don’t have a neurological impairment. There is no way I can think of to differentiate dyslexic kids from other poor readers based on these behaviors. (Numbers 2 and 5 seem a bit redundant to me.) Number 10 is probably not unique to poor readers at all: Under certain circumstances, I suppose anyone could find white paper or whiteboards a bit irritating, visually speaking. I suppose. It sounds fishy.

Number 9 seems to me to be the one potentially differentiating behavior and probably the one that inspired the notion of a neurological impairment to begin with. My earliest recollections of examples of dyslexic behavior didn’t

have much to do with “floating words,” but a lot to do with what I guess we could generally call “reversal.” The examples involved “seeing” letters (or numbers) backward, seeing letters transposed, and seeing words reversed. While normal children look at a capital letter **R** and see **R**, dyslexic kids are purported to see **Я**. Normal children see receive; dyslexic children see recieve. Very little of this screwed up perception would actually manifest itself very directly in reading. If a reader actually sees **Яed**, for instance, that child is most likely to say /rɛd/. If the child “sees” **Я** and thinks it’s **R** that’s not going to cause a decoding problem. If a child sees **Яeb**, that could cause a decoding problem, but most letters, written backward, are just backward letters.

Similarly, if the only problem is that a reader looks at **receive** and “sees” **recieve** that alone isn’t going to cause any reading difficulty. Look at all the people who *write* **recieve** but who think they’ve spelled the word right, and can certainly read what they wrote.

I suspect strongly that the only time a reversal of letters results in a reading error is when both versions are themselves words, such as **angle** and **angel**. If that is due to a neurological impairment, then we’re *all* neurologically impaired, one time or another. (Do neurological impairments come and go sporadically? Not likely.)

That leaves us with reversing words as one potential discriminator of the neurologically impaired dyslexics and just plain, ordinary poor readers. If a child comes across **was**, and truly sees it in reverse, then, granted, the child will say **saw**. Same thing with **no** and **on**, **not** and **ton**, and even **desserts** for **stressed**. It seems, though, too much of a coincidence that the examples given of “seeing words backward” are words that actually spell *something*, backward or forward: **saw** and **was**, and so on.

If a reader literally sees words backward (and I'd call that a neurological problem any day), then wouldn't we see kids trying to decode lots of other words—words that don't spell anything backward—very frequently? I think we would.

Here is a kid who is a very poor reader. Let's say that means, minimally, that for starters, the kid is struggling mightily with just decoding. Under those circumstances, I think we'd all agree that comprehension is likely to be extremely low. If such a child literally sees words backward, then why, during oral reading, doesn't she look at **the** and decode it as /ěth/? She would *have* to do that if she has a neurological perception problem that causes her to see words backwards. Has she just memorized an association: When you see "e-t-h," say **the**? I suppose that's theoretically possible. And she memorized, when you see "e-m-o-s," say **some**. But that would mean that she has done so for nearly every word she encounters. She has an incredible memory, not only because the vast number of words she has memorized, but because there are no alpha-phonemic clues whatsoever to help master the associations. Someone has probably told her time and time again that when she sees—whatever, **Я** or **R**—she should say /rr/. But somehow, when she sees "d-e-r," she says **red**. I'll bet she doesn't ever say **der** when she sees **red**. Not only are these incredible associations without phonemic prompts, they're actually completely loaded with false prompts.

And before she made these fantastic associations, would there not have been a period where she did say **eth** for **the**, **emos** for **some**, and **der** for **red**? In short, if a child sees letters in reverse, that usually doesn't cause reading problems, and if a child sees letters transposed, that doesn't cause any reading problems except in the sense that it causes all of us problems from time to time (e.g., angel and

angle). If a child sees *words* in reverse and reads practically anything at all correctly, that's a notable miracle. In terms of reading, dyslexic kids can't possibly be "seeing" what they are (or have often been) purported to see.

Kids make other reading errors that are difficult to attribute to a neurological impairment. Kids confuse **were** and **where**. All poor readers, predictably, do the same, and so do I, from time to time. It's nonsense to postulate on a neurological impairment that accounts for both "not seeing" something that is there (when a reader says **were** but

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the word is **where**), and moreover, for "seeing" something that isn't there (when a reader says **where** but the word is **were**). The latter would be a cousin of hallucination. (Maybe this is what the dyslexia people mean by "floating words." Random words float onto and off of the page.)

Words that are very similar to one another are easy for anyone to confuse, just as any two things in the universe that are very similar to one another are also easy to confuse: certain dogs and wolves, for instance. If the word is **elephant** and the oral reader says **ship**, then I'm betting on pretty severe but idiosyncratic brain dysfunction. Or a middle-school kid jerking my chain.

The dyslexia people say that dyslexic kids demonstrate "inaccurate reading,

including omission of words." I agree that omitting words is a subcategory of inaccurate reading. "Inaccurate reading" seems like a pretty broad category that could even include *adding words that aren't there*. More hallucination. Literally "not seeing" a word that is actually there is a lot like "not seeing" a letter that is actually there.

Maybe someone is using spelling examples to support the "reversal" hypothesis and then generalizing them to reading. For instance, one might postulate that a kid who writes "receive" as "recieve" sees letters reversed. Sometimes the simplest explanation is the best: The kid can't spell the word, period. Generalizing from spelling to reading is highly questionable in general, as well. Lots of people, including many adults, can read "receive" without any difficulty but struggle with spelling it. I'd say the same is true, only more so, for "mnemonics."

A kid who writes letters backward just hasn't learned to write them forward. Doing so usually isn't a reading problem and it isn't a spelling problem: It's a problem with learning that directionality is a critical discriminating feature for precious few concepts in the universe, including letters and numbers. Well, at least it's a problem of learning the conventional way to write letters and numbers. Reversing letters like i-e and e-i is a challenge for nearly everyone because both are legitimate and common spellings for /ē/. If there is a lot of evidence that dyslexic kids spell **receive** as **erceive** or **recevie**, then I have to give a little thought to the possibility that someone is seeing letters transposed and then transferring that to spelling. I wouldn't give it much thought, though.

In short, if dyslexic kids routinely see letters backward, letters reversed, or words backward, or if words routinely float on and off the page, then it would, in fact, occur *routinely* (and ran-

domly), not predictably, as it does. Why would kids always make errors that can very easily be explained in terms of normal concept learning and almost *never* make errors that can't be?

There is no analytical basis for postulating a neurological impairment for differentiating some poor readers from others, except when a kid verifiably has a brain dysfunction. That being the case, there is no firm theoretical basis upon which one might base empirical studies. I think it is fair to characterize this opinion as one well founded in Direct Instruction theory. I can imagine a lot of well designed experiments that would contradict the notion that a neurological impairment differentiates some poor readers from

all the rest, but why bother? I, personally, like the idea of saving the incredible resources associated with scientific experimentation for helping us answer questions for which we don't know the answers.

Right here, at the very end of this article, I have to confess that not only the *Time* article and all other current interest in dyslexia are much ado about nothing, but that this article is as well! It's not like the question of how to teach nonreaders and poor readers how to read well is a big mystery. Far from it. As a practical matter, the causes themselves of poor reading—real things like poverty or fanciful things like dyslexia—don't matter. Although, personally, I'd like to see poverty elim-

inated, it isn't going to be in my lifetime, and poverty isn't a *direct* cause of poor reading, anyway. While people are sitting around talking about causes—me included, by virtue of this article—some kids are out there this moment benefiting from the *solutions* to reading problems and underlying language deficiencies, and millions more ought to be. **ADI**

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TINA ERRTHUM, Cheyenne Mountain Charter Academy, Colorado Springs, Colorado

## *The Failures of a Teacher Education Program: A Need for Change*

As a recent graduate of Great Midwest University's\* (GMU) teacher education program, I am compelled to express my concerns regarding the education preservice teachers receive at GMU and how (I feel) the program neglects training preservice teachers to be both effective and efficient teachers.

My story starts like that of most preservice teachers. I knew I wanted to be a teacher and chose GMU because of its reputation of having a strong education program. The College of Education at GMU is typically characterized as one of the best in the country and one from which school districts from all over seek graduates. As a 1st-year student, I had confidence in and entrusted my college education to this program. I had the simple and reasonable expectation that if I invested my

time, hard work, and money in this establishment, I would graduate knowing **what** to teach and **how** to teach it. Now that I have completed the course work, finished two very different student teaching experiences (one of which I had to "discover" on my own), and acquired a teaching job, I realize that GMU's teacher education program failed to meet my expectations.

As a recent student and now an educator, I am aware of many of the factors involved in educating a group of learners, and I have heard the many excuses as to why a child may or may not be able to learn (home life, socioeconomic class, a learning disability, etc.). I have come to believe, however, that regardless of the excuse, the bottom line is this: If a child fails to learn, a teacher has failed to teach. It is the teacher's

job to teach the students. Thus, it is the teacher education program's job to teach the preservice teachers how to teach in order to maximize student learning. Just as teachers must be held accountable for students' learning in the classroom, so must the teacher education program be held accountable for preservice teachers' learning in the teacher education program. Until such responsibilities are recognized and teacher trainers are held accountable, excuses for teacher's shortcomings will continue.

I do not regret receiving my education at GMU. I learned a lot both in and outside of the classroom that has made me the person I am today. But I believe that GMU's teacher education program failed to teach me the things I needed to know to teach effectively and efficiently. I cannot help thinking about how much more confident and capable I could have been when going into my first classroom had my course-

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I do not regret receiving my education at GMU. I learned a lot both in and outside of the classroom that has made me the person I am today. But I believe that GMU's teacher education program failed to teach me the things I needed to know to teach effectively and efficiently. I cannot help thinking about how much more confident and capable I could have been when going into my first classroom had my course-

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work actually taught me what I needed to know. I do not feel that I am alone in recognizing the shortcomings of the teacher-training program at GMU. Furthermore, I do not feel that GMU's teacher education program is unique in its shortcomings. Rather, the shortcomings seem to be typical of many teacher education programs around the country.

As I neared the end of my college education program, I (like many others at this point in their teaching careers) realized that the courses I was required to take failed to prepare me for my professional career as a teacher. If GMU is to maintain its "one of the best" reputation, change must occur.

## *Student Teaching Experiences*

As stated earlier, I had two very different student teaching experiences. The first came as a result of my disappointment in the training I was receiving at GMU. I had questions about education that were not being answered in my courses at GMU. Therefore, I sought answers elsewhere and did not stop until I found them. My research led me to seek a student teaching placement other than that arranged through the teacher education program at GMU. That atypical placement is described below as my first student teaching experience. The second student teaching experience (also described below) is a typical student teaching experience arranged through GMU.

My first student teaching experience was in a second-grade classroom at a school in which Direct Instruction is used in combination with Core Knowledge (Core Knowledge Charter School in Verona, Wisconsin). Direct Instruction is a highly structured approach that is grounded in research (Adams & Engelmann, 1996). Skills and content

are carefully sequenced and presented in scripted formats. It entails the use of flexible ability grouping, frequent assessments, and teaching at an accelerated pace to ensure the mastery of basic skills. In this school, Direct Instruction programs were used for reading, spelling, writing, and math. The Core Knowledge curricula were used for social studies, science, and some language arts instruction. The Core Knowledge Sequence (Hirsch, 1995) tells teachers **what** to teach, but it does not tell teachers **how** to teach that content; therefore, teachers applied what they knew about Direct

*By the end of my first student teaching experience, I had witnessed the positive effects of teaching coherent, well-sequenced curricula using research-based methods.*

Instruction methods to teach the Core Knowledge sequence. Both the Direct Instruction programs and the Core Knowledge curricula are sequenced so that new knowledge builds on previous knowledge. In the Core Knowledge social studies curriculum, for example, students are taught to locate the seven continents on the map in kindergarten. In first grade, students are taught to locate the major oceans and the countries of North America. In second grade, they learn the geographic location of all 50 states. As a second-grade teacher, I did not deviate from the second-grade sequence.

Even though this was my first student teaching experience, I was incredibly confident in my teaching because I was given, in specific terms, the content that I was to teach. In no way did I feel this stifled my "creativity," nor did I feel it was an insult to my capabilities

as a teacher. Being an inexperienced teacher, and having had no course at GMU that informed me of what constitutes a quality second-grade curriculum, I needed to be told what second graders are expected to learn. With specific curricula and research-based methods of teaching, I was able to teach effectively and efficiently. The students were motivated to learn because the content was interesting and challenging, and they could relate what they were learning at any given time to what they had learned earlier.

I realized through this first student teaching experience that my job is to teach, not to spend hundreds of hours trying to develop a curriculum appropriate for this particular classroom and ONLY this particular classroom (as I had been taught at GMU). Are actors expected to write their own scripts? Are farmers expected to build their own tractors? Why should a teacher be expected to create his or her own curriculum?

By the end of my first student teaching experience, I had witnessed the positive effects of teaching coherent, well-sequenced curricula using research-based methods. I assumed that every school and classroom would have similar instructional tools. But, as my second student teaching experience began, I quickly realized that my assumption was wrong.

My second student teaching experience took place in a fifth-grade classroom in a "typical" elementary school. It was the type of experience, I feel, that GMU attempts to prepare its pre-service teachers for. In theory, it sounded like it should have been a student teacher's dream come true. My cooperating teacher let me teach what I wanted, how I wanted, and as much as I wanted. I was given complete control of the classroom with minimal guidance because she wanted me to "develop my own style of teaching." I hit the ground running but

received an early and severe shock to the system when I realized what “complete control” and “minimal guidance” really meant. Not only was I responsible for the well being of each child, but I was also expected to teach them—to decide what they needed to learn, to figure out what they already knew, develop units, lesson plans, and tools for assessment. In addition, I was supposed to be developing “my own style of teaching.” But where was I supposed to begin? I had no idea what fifth graders knew, were expected to know, or what I should teach them. I started by asking myself the obvious question, “What concepts and skills do I need to teach?” I remembered from my first student teaching experience that my answer would come in the form of a curriculum. I asked my cooperating teacher, one of the best teachers in the school according to a fellow staff member, for a curriculum guide to “guide” me in developing units and lesson plans. She thought for a moment and replied, “I haven’t seen one of those in years.” She went on to admit that the district curriculum guides are of little value to the classroom teacher because they are so general. She said that a teacher could make *any* lesson match a “guideline” (I do remember learning that at GMU).

All I wanted was some guidance, someone or something to tell me what to teach. How can one school not deviate from a curriculum, while another places little value on having one? My teacher did not like teaching with textbooks, but had no supplemental material for me to use. Once again, she wanted me to “develop my own” curriculum and method of instruction (also known as “reinventing the wheel”). The lack of guidance and consistency in what to teach and how to teach became very exhausting and frustrating. I realized that each teacher in the building taught different, self-created curricula that were not required to be sequential with mine or

with each other’s. Some students had already been exposed to the content I decided to teach, some students had absolutely no prior knowledge about it, while still others may have been taught a great deal about the content such that my self-created curriculum just repeated everything they had already learned. Like any 1st year teacher, I expected to be exhausted by the demands of planning. But the overwhelming feeling of frustration was a direct result of never having confidence in what I was teaching and how I was teaching it. I realized that if instruction is to be effective and effi-

*Once again, she wanted me to “develop my own” curriculum and method of instruction (also known as “reinventing the wheel”).*

cient, it must be sequential. Knowledge builds on knowledge. I realized each day that the lack of consistency in the content being taught and the method of instruction being used at this “typical” school had a direct and detrimental effect on student learning.

As my student teaching experiences ended, I analyzed and reflected on what I learned from them. I realized from the outset that my first experience was going to be different from what I had learned at GMU, but I expected GMU to have done its job in preparing me for the second experience. However, that was not the case. I do not remember ever being taught what or how to teach in my courses at GMU. Instead, I wrote two “reflection” papers, downloaded a lesson plan off the internet, created bulletin boards, played games, and scrapbooked a portfolio. These activities simply did not prepare me to teach. The tools and knowledge that made my second

experience manageable were those I taught myself or learned during my first experience. It was during that first experience at the Direct Instruction/Core Knowledge school that I learned to deliver effective and efficient instruction using content-specific curricula and methods of instruction grounded in research.

As I embark upon my 1st year of “real” teaching at Cheyenne Mountain Charter Academy, I look forward to applying what I learned during my first student teaching experience and learning even more about how and what to teach. Not to use the most effective an efficient instruction approaches known, I feel, would be a disservice to my students, school, community, state, and country.

I am fully aware of the fact that what I have written is my opinion, based on what I experienced in the teacher education program at GMU and my experiences as a student teacher in the two different classrooms. But I also know, being an education major, that I am not alone in the feelings of disappointment and frustration about the failures of the program from which I graduated. But there comes a point when one needs to stop complaining and start taking action. In my case, I am challenging GMU to critically evaluate its current teacher education program, look carefully at what teachers are and are not being taught, and look at the research that documents instructional practices that are effective and efficient. The program has the potential to graduate truly competent and confident educators, but it is not doing so at present. What the program offers now is “pretty good.” Pretty good will never be good enough.

There once was a pretty good student  
Who sat in a pretty good class  
And was taught by a pretty good teacher,  
Who always let pretty good pass.  
He wasn’t terrific at reading,  
He wasn’t a whiz-bang at math.

But for him education was leading  
Straight down a pretty good path.  
He didn't find school too exciting,  
But he wanted to do pretty well,  
And he did have some trouble with  
writing,  
And nobody had taught him to spell.  
When doing arithmetic problems,  
Pretty good was regarded as fine,  
Five plus five needn't always add up to  
be ten,  
A pretty good answer was nine.  
The pretty good class that he sat in  
Was part of a pretty good school  
And the student was not an exception,  
On the contrary, he was the rule.  
The pretty good school that he went to  
Was there in a pretty good town.  
And nobody there seemed to notice  
He could not tell a verb from a noun.

The pretty good student in fact was  
Part of a pretty good mob.  
And the first time he knew what he  
lacked was  
When he looked for a pretty good job.  
It was then, when he sought a position,  
He discovered that life could be tough.  
And soon had a sneaky suspicion  
Pretty good might not be good enough.  
The pretty good town in our story  
Was part of a pretty good state,  
Which had pretty good aspirations,  
And prayed for a pretty good fate.  
There once was a pretty good nation,  
Pretty proud of the greatness it had  
Which learned much too late,  
If you want to be great,  
Pretty good is, in fact, pretty bad.  
—Charles Osgood,  
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DALE FEIK

## “Mastery—Why and How”

**Why I attended Zig Engelmann's 2-day session, “Mastery—Why and How,” at the 29th Annual National Direct Instruction Conference and Institutes in Eugene, Oregon, July, 2003:**

“You can grow physically only about an inch a year, but if you work hard, you can grow enormously during a year.”  
“The more you learn, the greater the number of choices you'll be able to make later in life and the more you'll be able to help others.”

Zig Engelmann emphasized the first statement during his presentation, “Mastery—Why and How,” and wrote the second statement at the end of one of his handouts. After serving low-performing students for over 30 years

as a public school teacher, I can certainly say that I quit growing physically a long time ago, but that my students and I have continued to grow enormously during each year because of Zig Engelmann's capability and desire to help others.

Zig Engelmann has devoted his life to writing programs that work because they are based upon a sound instructional design and a sound analysis of human behavior. I attended his “Mastery—Why and How” presentation 3 separate years, and realized more each year why his programs work. They are based upon the life of a person who has learned how to motivate others to work hard by the role he has played in creating a learning/teaching model with a written curriculum unmatched in the health-care profession.

I just finished rereading the two handouts Zig used as his lecture notes. They are filled with the details necessary to understand how to teach to “Mastery.” If you want to learn why teaching to “Mastery” is the critical element of Direct Instruction programs, and learn from the master, sign up for Zig Engelmann's session at the 30th ADI Conference and Institutes. I hope to see you there. [ADI](#)

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