

Needed in Tennessee: An Early Reading Revolution

How Board and District Leaders Can Improve Student Achievement • November 2011

On February 20, 2001, Tennessee Governor Don Sundquist presented a budget that made early reading a top priority. In his cover letter, he wrote:

Reading is imperative to our children's future and our state's. Despite full funding of the Basic Education Program for several years – and despite the gains this has earned us in K-12 education – our children cannot read as well as they should – and must. This failing reflects itself not only in early-grade reading courses, but in every subject our children study, throughout their school years. If our children do not read well, they do not function well in English, math, science, and social studies. These are things they must master – and they must master them now – if they are to be prepared for the economic future they are anxious to reach.

Since Governor Sundquist wrote those words, state funding for K-12 education in Tennessee has grown from \$2.57 billion in 2000-01 to \$3.65 billion in 2009-10 – a 42% increase – yet 4th grade reading scores have remained virtually unchanged (see chart below).

The Governor was correct about the critical importance of early reading. But our experiences over the past 10 years, echoed across the country, prove that pushing more and more money into the same ineffective approach is not the right strategy. This position paper outlines an alternative that has produced remarkable results elsewhere and lays out the role that district, school board, and community leaders can play in making it happen in Tennessee.

Executive Summary

Raising the percentage of 3rd graders who are *proficient* in reading is the single most cost-effective step that schools can take to raise student achievement across the board - and to improve outcomes for students later in life.

Currently, only 43% of Tennessee 3rd graders meet that standard. Roughly an hour a day of Direct Instruction in preK-3 can raise that number to 90%, but it will take a board-level commitment to reach that goal.

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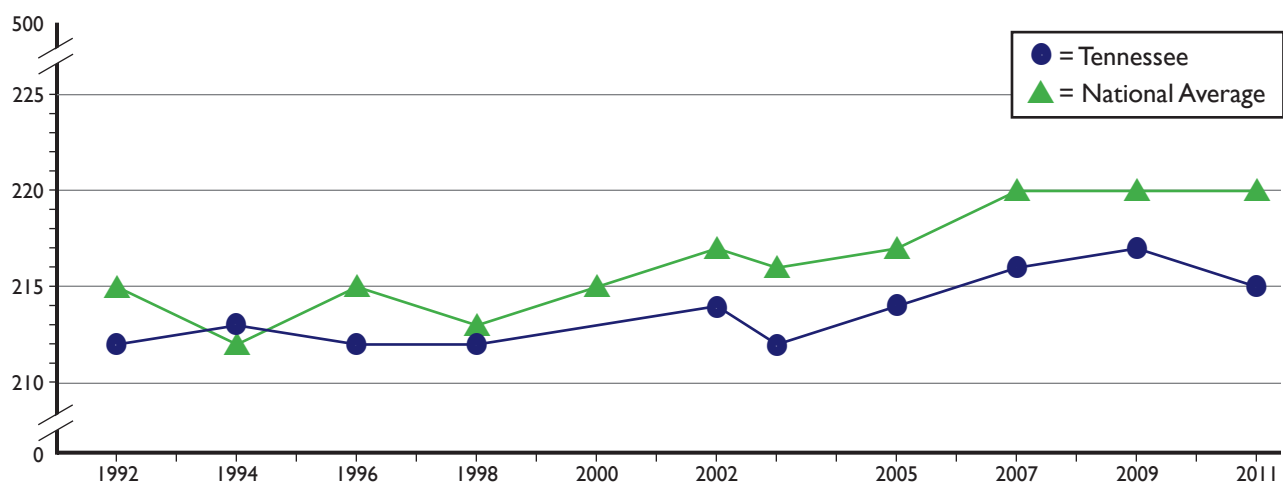
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4th grade reading scores in Tennessee versus the national average

Source: The National Assessment of Educational Progress (NAEP), US Department of Education



Students who are behind in reading at the end of the 3rd grade are largely the same ones who are not prepared for high school and ultimately are not prepared for college or a career when they graduate from high school.

The Fundamental Importance of Literacy in Learning and Life

Reading stands apart as indispensable to the rest of the learning process. If students are not good readers, they simply do not get the full benefit of the rest of their schooling—even with intensive efforts at remediation. They become discouraged learners and progress requires increasingly heroic efforts. Often they become a significant drag on the progress of other students.

Because of poverty and disadvantage, many children start school a grade level or two behind their peers. Unfortunately, they typically remain behind throughout their school careers and into their adult lives.¹

It is the earliest grades—pre-Kindergarten to 3rd grade—that are critical. At 4th grade, schooling essentially shifts from learning to read to reading to learn. Students who are behind in reading at the end of the 3rd grade are largely the same ones who are not prepared for high school and ultimately are not prepared for college or a career when they graduate from high school.

The fallout from poor reading doesn't end with graduation. Students who are below-proficient at the 3rd grade level face increased health risks, higher divorce rates, and significantly lower earning potential later in life—not to mention a higher likelihood of serving time in prison.² By contrast, good readers are the future foundation of a strong economy: According to *The Economist*, a 1% rise in literacy rates yields a 2.5% rise in labor productivity and a 1.5% rise in GDP.³

Reading mastery, especially early mastery, lessens a host of challenges and creates opportunities in and out of school. Thus it merits special attention from board and district leaders.

Tennessee faces a great challenge on this front: Only 43% of Tennessee's 3rd graders are proficient in reading. Said differently, 57% of 3rd graders in Tennessee are promoted to grade 4 without mastery of the reading skills they need to succeed in the coming grades. In some districts, the number is closer to 75%. (*See the enclosed chart for your district and region.*)⁴

These are alarming statistics. A recent report by the Casey Foundation showed that such students not only fail to thrive educationally, they are four times more likely to not graduate.⁵ Too, poor readers are substantially more expensive to educate. A Wisconsin study conservatively estimated that 25-50% of learning disability placements and related costs could be prevented by more effective early reading instruction.⁶

Looking for New Solutions

Schools work hard to teach children to read; but when the effort is not successful, they are much inclined to blame the outcome on disability (e.g., dyslexia) or on social or economic disadvantage, not on ineffective instruction.

An often-cited survey of school psychologists by Professor Galen Alessi illustrates the point. Upon questioning a large group of school psychologists about their diagnostic practices, he found that none of them could recall a diagnosis in which inappropriate curriculum

Reading Instruction and ... Scurvy?

History shows that innovations with obvious benefits are often ignored and resisted for decades or even centuries. Take the case of citrus fruit as a treatment for scurvy.⁷

Prior to 1750, scurvy was a horrific problem on long sea voyages. As author Jonathan Lamb notes, In 1499, Vasco da Gama lost 116 of his crew of 170; in 1520, Magellan lost 208 out of 230. . . all mainly to scurvy.

You would think that any promising treatment would be readily adopted—but it wasn't.

In a 1601 voyage from England to India, British captain James Lancaster gave three teaspoons of lemon juice per day to the sailors on his flagship. The crews of the other three ships under his command received none. Halfway through the voyage, 110 of 278 sailors on the three no-lemon-juice ships had died of scurvy, while those on the flagship stayed healthy.

Incredibly, Lancaster's experiment was ignored for nearly 150 years! It wasn't until a shipboard physician who knew of Lancaster's findings tried a similar experiment in 1747 that citrus was again evaluated as a cure for scurvy. Eventually, limes became a standard provision in British ships—but not until 1795—another 48 years after Lancaster's results had been confirmed!

The saga of Direct Instruction (DI) is remarkably similar to the story of Lancaster's cure for scurvy. DI is among the most thoroughly tested and proven teaching methodologies in the history of education yet it remains little used.



placement, poor teaching, weak administrative practices or any other in-house issues were cited as the cause of the student's learning or behavior problems. Instead, child and family factors were found to be the primary cause of the student's problem in virtually all of an estimated 5000 cases.⁸

Plainly, personal issues, family circumstances, and societal factors play an important role in how children perform in school, but it is equally clear that effective instruction can prevent and overcome many of the most common reading deficits and favorably impact student achievement across the board.

Early systematic reading instruction can both enable disadvantaged children to catch up and reduce the number of average and gifted students who are less than proficient because of faulty instruction.⁹ Others, like the Kennewick, Washington school board (*See sidebar, page 5*), have shown what can be accomplished; Tennessee schools need to do the same.

While a few Tennessee schools are already producing exceptional results, most could be doing much more to ensure early student success just by changing the way in which children are taught in the earliest grades.

Given the fundamental barrier to student achievement posed by poor reading skills, and given the realities of Tennessee's 3rd grade reading proficiencies, we urge school boards, district officials, and community leaders

to set goals and start a conversation about how more intensive, systematic reading instruction can be used to reach them.

Direct Instruction

Kennewick confronted the early reading challenge by setting a goal that all schools should have 90% of their students meet or exceed grade-level expectations in reading by the end of 3rd grade. Over a period of several years, their schools found that they could reach their board's goal by using a structured, systematic approach known generically as direct instruction.¹⁰

Kennewick's discovery is Tennessee's gain. The most thoroughly researched and demonstrably effective form of direct instruction is a proprietary reading program called Direct Instruction (DI), and it was created to address the very kind of literacy problems that are found in most Tennessee schools.¹¹

Unlike most teaching used today, Direct Instruction is a scripted, step-by-step approach in which fundamentals are taught first-things-first and with new knowledge and skills gradually introduced as student mastery progresses. It is fast paced, interactive, and highly engaging. Students love it and teachers are typically amazed at the progress that it produces.

To see how DI works, simply visit the ECF-DI website and click on DI in Action.¹² The enthusiasm, confidence, and progress of the students is obvious.

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DI is old-school. It uses the teaching practices that were scorned by the Progressive Education Movement in the 1920s and swept away by the cultural revolution of the sixties.

Direct Instruction was invented nearly 50 years ago and is among the most thoroughly tested and proven teaching methodologies in the history of education. A bibliography of the research pertaining to Direct Instruction exceeds 100 pages and contains over 1200 entries.¹³ DI has been documented as effective for students in general education, gifted programs, and those with special needs.

DI was tested in what was the largest comparative study ever conducted by the federal government—the Follow Through Project—and it was found to be head and shoulders above the other tested methodologies. (See *Project Follow Through chart on page 6.*) A substantial body of research has affirmed and reaffirmed that result.¹⁴

If DI is so Great, Why Isn't It Widely Used?

Over the years, DI has been used with “at risk” and other students who require intensive instruction, but almost never as the core reading curriculum in the early grades. So why hasn't it been more widely used? Critics—most of them outside the classroom—have a litany of concerns, but virtually all of them stem from one overriding issue: DI contradicts much of what educators are taught to believe about good teaching.

DI is old-school. It uses the teaching practices that were scorned by the Progressive Education Movement in the 1920s and swept away by the cultural revolution of the sixties. These include teacher-led exercises, skill grouping, choral responding, and repetition. DI also requires teachers to follow a carefully designed and tested script, not just a content outline or improvised lesson plan.

Essentially, DI teaches academic lessons the same way great trainers and coaches teach the fundamentals in sports. It identifies key skills, teaches them first, and then gradually builds from that foundation. It promotes mastery through practice and intervenes early to prevent bad habits. Unlike virtually any other approach to instruction, its creators worked from the premise that the

program is responsible for the results. If the student did not learn, they assumed that the program needed improvement, not that there was something wrong with the student.

While these features are what make DI so extraordinarily effective, they are profoundly at odds with the beliefs about good teaching that have come to dominate education. DI is maligned not because it doesn't work—it does—but because its obvious effectiveness is a standing challenge to the conventional wisdom.

For decades and especially since the sixties, teachers have been taught to be “a guide on the side, not a sage on the stage.” This ideal regards Direct Instruction and similar approaches as the antithesis of good teaching. Thus, education professors and theorists deride DI's teacher-led practice as “drill and kill,” its high expectations for learners as “developmentally inappropriate,” and its emphasis on practice and mastery as “rote-learning.”

Beyond its challenge to orthodoxy, critics complain that DI interferes with teacher autonomy and student creativity, and is otherwise at odds with “best practices.” It is true that DI confines teachers to a specific sequence of learning interactions, but it does so because DI's developers found that they could not produce consistently superior results without having teachers follow a carefully tested script. Clearly, most parents would find this requirement a small price to pay for assurance that their child will be able to read.

As studies have repeatedly shown, DI's step-by-step approach is more effective than either the individualized interventions created by teachers or the improvised programs and practices favored by DI's critics.¹⁵ Indeed DI programs are so carefully constructed that some subjects can be taught by a computer. For example in a Georgia study, high school students using a computer-based version of DI called *Funnix* were more successful in teaching Head Start children to read than were the regular teaching staff.¹⁶

The progressive ideal of the teacher as a facilitator of student-led learning has hindered the adoption not just of DI but of virtually all teaching practices that are designed to attain specific curricular objectives. In this regard, the training typically received by teachers is not merely flawed, it is detrimental to the aims of standards-based educational reform.¹⁷ Rather than preparing teachers to be directors and managers of classroom learning, most teacher preparation programs instill a reluctance to use result-oriented methodologies of any kind.

Plainly, there are occasions when teachers should serve as guides and facilitators, but these tend to be in the latter, not the beginning, stages of learning. Beginners progress most quickly and easily when they have clear direction, close monitoring, and encouragement.

School districts can overcome the guide-on-the-side orthodoxy by training teachers to be effective classroom leaders, but doing so is often an uphill battle. To maintain a staff that is capable of carrying out a program like DI, a district must have leaders, trainers, and supervisors who are capable of making progress against a headwind of collegial skepticism. For that reason, DI programs often sprout but later wither if the leader who nurtured the program moves on in his or her career.

America's Needs and the Promise of DI

Fortunately, the last 15 years have seen a gradual shift away from theory-driven reading instruction and toward empirically validated methodologies such as DI. Extensive assessments of reading instruction by the National Research Council and the National Reading Panel have vindicated Direct Instruction's key components while finding many of the widely used alternatives to be unproven or ineffective.¹⁸

Direct Instruction is not a silver bullet that can overcome all of America's student achievement challenges, but it can dramatically improve achievement outcomes in key areas like reading and math. Improvement is desperately

needed. Not only are two thirds of fourth graders below proficient in reading but 60% are below proficient in math. These are deficiencies that handicap children for the rest of their educational careers, and indeed, the rest of their lives.

More resources on DI are available at the ECF-DI website. These include references to video and other online resources as well as contact information for experts, trainers, and speakers who can provide online or onsite introductions to DI.

We ask educators to set aside their theories and preconceptions about learning and to consider both the available research and the testimonials of formerly skeptical educators who have witnessed DI's effectiveness firsthand.¹⁹ DI confronts what may be America's greatest educational challenge: the enormous numbers of children who are promoted from grade to grade with woefully deficient basic skills.

Public schools and teachers should be free to use teaching practices that are

The Role of the School Board in Education Reform

In 2009, a doctoral student studied the minutes of school board meetings in Tennessee and found that they spend just 6% of their time focused on student achievement.²⁰

It isn't surprising. Despite achievement being at the core of schooling, school boards in Tennessee and across the country have traditionally left curriculum and teaching issues to district staff.

Today, however, new standards and the First to the Top initiative have cemented a statewide focus on student achievement, and all stakeholders—especially school board and district leaders—are being called on to start fresh conversations and step up as leaders in the fight for school improvement.

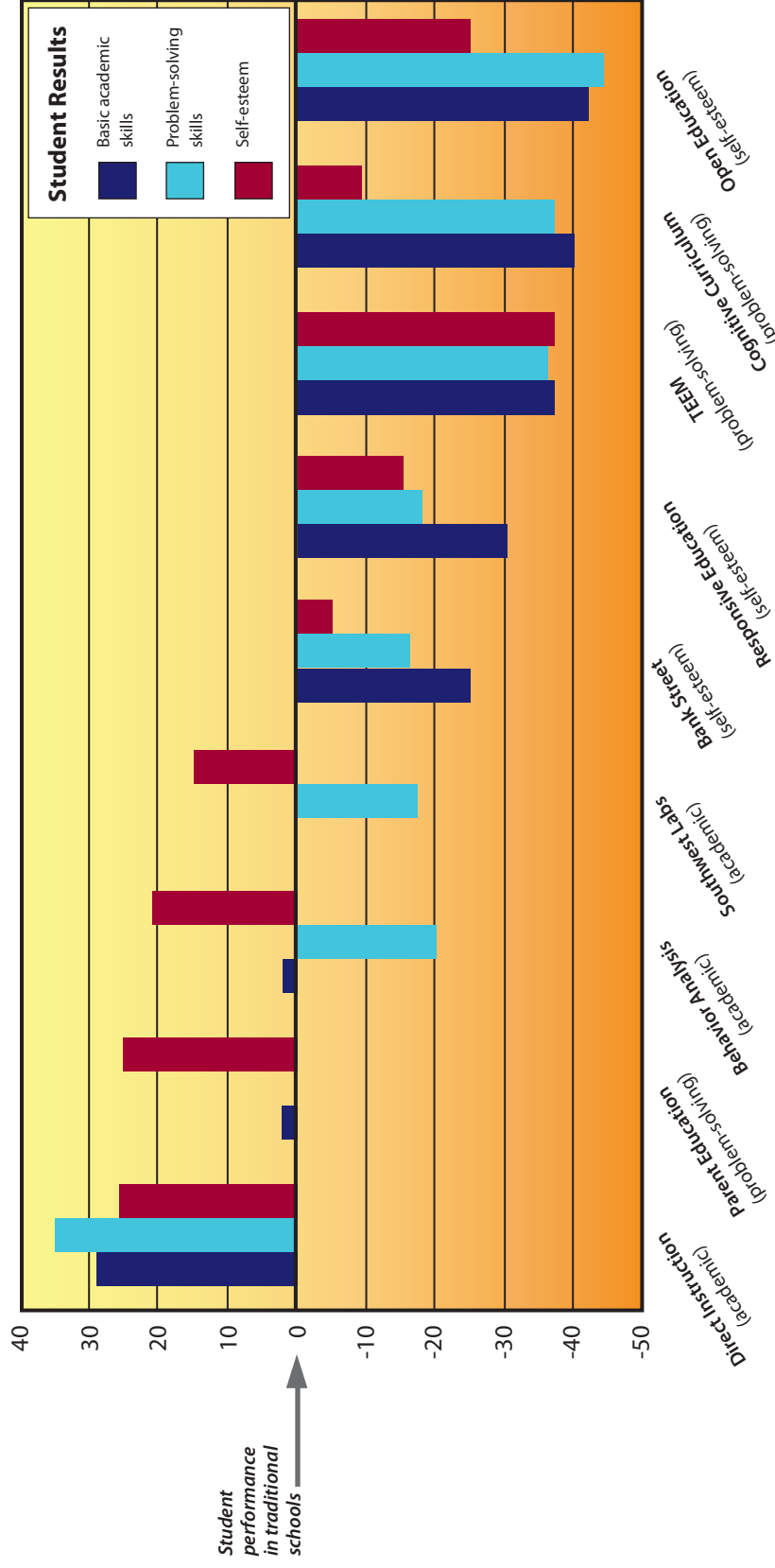
An example of this kind of collaborative call to arms comes from board and district leaders in Kennewick, Washington. They led a breakthrough change that is especially relevant to Tennessee school districts.

In their book titled *Annual Growth, Catch-Up Growth*, Kennewick's leaders described how they identified early reading instruction as the key leverage point in changing student outcomes then set about encouraging new approaches to teaching.²¹ In the end, Kennewick went from approximately 60% reading proficiency in the 3rd grade to more than 90%, a result that opened the door to significant improvements in student achievement in all succeeding grades and all subjects.

The same can happen in districts across Tennessee - provided that school board and community leaders get engaged on instruction and work with their districts to make productive change happen.

Project Follow Through, 1967 - 1977

Nine models of teaching K-3 compared in history's largest educational experiment



Findings:

- Nine models grouped into 3 broad teaching approaches: Academic focus, problem solving focus, or self-esteem focus.
- Three categories of results were measured: Basic academic skills, problem-solving skills, and changes in self-esteem.
- Direct Instruction produced the best results in all areas: Basic skills, problem solving, & self-esteem.
- Most other models were less effective than traditional schooling, yet many remain in use today!

consistent with their knowledge and beliefs—so long as those practices are in agreement with the aims and outcomes sought by parents and policy. Where there are mismatches, America’s long standing traditions of market freedom and intellectual diversity assure that virtually any approach to schooling that attracts parents and students will be afforded the opportunity to flourish. Charter schools and online services are only the beginning of the options available.

About the Education Consumers Foundation

The Education Consumers Foundation is a consumer organization—like the publisher of *Consumer Reports*—except that we focus exclusively on education. We are independent, non-profit, and have no financial connection to or interest in Direct Instruction or any other education program. After searching for practical and proven options that would dramatically impact student achievement, we concluded that Direct Instruction used at the preK-3 level would be the single most cost-effective step that school districts could take.

ECF believes that America’s educational failures are not the inevitable product of adverse social and economic circumstances; rather, they reflect a man-made dilemma that can be substantially alleviated by more effective schooling. Improvements in early reading skill will not guarantee future school success, but they will greatly enhance the chances of success for the more than 60% of America’s children who now face long odds because they can’t read. Until something more dependable and cost-effective is demonstrated, we believe that Direct Instruction is the best option.

What We Suggest

The needed change is less a matter of money than of leadership. Decisions about teaching practices do not often rise to the district level, but Tennessee’s reform initiatives invite new roles, fresh ideas, and a broadened conversation. We

think that once you have seen the benefits offered by DI, you will want to explore this proposal with your school board, district leadership, and, of course, the teaching staff.

Specifically, we encourage you to take the following steps:

- **First, Look at Your District’s Current Performance.** A graph comparing your district to the state and nation is enclosed. If your district is like most, you have 3rd grade reading proficiency numbers showing that a substantial number of students are not fully prepared to begin 4th grade work. If you want to compare your district with others in Tennessee, just visit the interactive charts on our website: ECF-DI charts.
- **Talk to Fellow District and Community Leaders.** Bring key stakeholders into this conversation and let them know you are interested in finding a better way forward.
- **Dig Deeper Into DI.** The Education Consumers Foundation has compiled an array of resources for those interested in learning more about DI. These resources, including links to videos, teacher testimonials, research, and information on how to contact our experts, can be found at <http://www.education-consumers.org/ECF-DI.htm>.
- **Try DI for Yourself.** If you have children or grandchildren, or if you work with young children in some capacity, you can teach them to read by using the *Funnix* software or the book *How to Teach Your Child to Read in 100 Easy Lessons*.²² There is no substitute for seeing firsthand how DI produces observable results.
- **Read Annual Growth, Catch-Up Growth.** As mentioned previously, the school board in Kennewick, Washington saw reading proficiency rates increase from 57% to over 90% in the 3rd grade.

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They did so by using DI, and their journey is detailed in this book.²³

- **Expand the Discussion.** To create real change, your district will need a consensus among board members, school and district leaders, and teaching staff. We can put you in contact with a DI expert or provide other resources for your board, school, or community meeting. Visit our website or contact us for more information at ecf@education-consumers.org.

Every year, thousands upon thousands of children in Tennessee are promoted from the 3rd grade without the literacy skills they need to go forward. By allowing this to happen, we are consigning them to a bleak educational and economic future. It's time to acknowledge that what we have been doing is ineffective and to recognize that proven practices are available. State leaders are doing all they can to raise standards and to help districts move ahead; it's time for the rest of us to join in the fight for a better future. The children of your community deserve it.

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