



## Direct Instruction Fact Sheet

The Baltimore Curriculum Project has helped implement Direct Instruction in Baltimore City public schools since 1996 with remarkable success. When implemented properly, students attain reading, writing, and math skills beyond their current grade level in a relatively short amount of time. Direct Instruction is supported by over 30 years of research and has been consistently rated as one of the most effective comprehensive school reform models.

### What is Direct Instruction?

Direct Instruction is a comprehensive school reform model that consists of carefully scripted lessons, backed by texts and workbooks. Direct Instruction establishes an interactive, energetic engagement between a teacher and a group of students who are at approximately the same level of learning – an engagement that is carefully organized, directed, and paced. Student responses are both individual and choral and are directed in such a way that no one is left unengaged.

The Direct Instruction model offers a comprehensive approach to school reform, which includes professional development, measurable weekly goals, staff support, and evaluation and coordination of resources. Thirty years of research has demonstrated that Direct Instruction is effective in boosting student achievement.

### Direct Instruction is a Comprehensive School Reform (CSR) model

Comprehensive school reform is an important component of the No Child Left Behind Act. The Department of Education's CSR program, which was authorized by No Child Left Behind, helps raise "student achievement by assisting public schools across the country to implement effective, comprehensive school reforms that are based upon scientifically based research and effective practices."<sup>i</sup>

CSR models like Direct Instruction offer a comprehensive set of services that support curriculum implementation, professional development, governance, scheduling, family and community relations and other changes needed to improve schools. Rather than use individual, piecemeal programs or approaches, effective CSR is meant to integrate research-based practices into a unified effort to raise student achievement and achieve other important outcomes such as reduced dropout rates or improved behavior.

### BCPSS recommended continuation of Direct Instruction in 2003.

- A 2003 report prepared for the BCPSS Board of Commissioners recommended that BCPSS "continue the Direct Instruction program in reading." (Addison, 42)<sup>ii</sup>
  - "Results show that Direct Instruction reading has had a positive effect on students at all grade levels compared to their BCPSS comparison group counterparts. Additionally, results from the supplemental study of this report show that mobility in and out of Direct Instruction does not have a negative effect on student achievement." (Addison, 42)<sup>iii</sup>
  - The study demonstrated that "Direct Instruction students not only passed the Maryland Functional Reading and Mathematics Test at higher rates than the comparison group, but also at a higher rate than BCPSS." (Addison, i)<sup>iv</sup>
  - The report also recommended that another evaluation of the DI schools be conducted in 2005-2006.

## Direct Instruction has been effective in Baltimore City public schools for 9 years.

- For 9 years BCP has implemented Direct Instruction in 17 Baltimore City schools. Direct Instruction is research-driven and has been proven effective through numerous scientific studies.
- **City Springs School:** Direct Instruction helped to transform City Springs School from one of the lowest performing schools in Baltimore into a national model for educational reform. City Springs became only the 2nd Baltimore City School to ever be removed from the State's reconstitution eligible list and only the 4th in the state.
- **Collington Square School:** the percentage of Collington Square students scoring advanced or proficient on the State's 3rd and 5th grade reading exams has increased by 385% and 110% respectively since 2003. The percentage of students scoring advanced or proficient on the 3rd grade math exam has increased by 464% since 2003. <sup>v</sup>
- **Hampstead Hill Academy:** the percentage of Hampstead Hill students scoring advanced or proficient on the State's 3rd grade reading and math exams has increased by 126% and 135% respectively since 2003. <sup>vi</sup>
- **Roland Park Elementary/Middle:** 95% of Roland Park third graders scored advanced or proficient on the State's reading exam in 2005. The percentage of third graders scoring basic on the State's reading exam has decreased by 72% since 2003. <sup>vii</sup>
- **Dr. Rayner Brown Elementary:** the percentage of Rayner Brown students scoring proficient or advanced on the State's 3rd grade reading exam has increased by 224% since 2003. The percentage of students scoring proficient on the State's 4th grade math exam has increased by 105% since 2004. <sup>viii</sup>

## There is a clear and extensive research basis for Direct Instruction's effectiveness in improving student achievement.

- **A 2005 study by the American Institutes for Research's Comprehensive School Reform Quality Center found strong evidence to support Direct Instruction's effectiveness.** Of the 22 elementary school comprehensive school reform models reviewed, Direct Instruction was one of only two models that received *Moderately Strong* ratings for *Evidence of Positive Overall Effects* and *Evidence of Positive Effects for Reading*. (No models received *Strong* ratings.) <sup>ix</sup>
- **A 2003 four-year study of Direct Instruction in six Baltimore City schools concluded that Direct Instruction** "is a viable whole-school reform option for raising student achievement in reading and mathematics." The 2003 study, published by the Center for Research on the

Education of Students Placed at Risk (CRESPAR), stated that "there have been sufficient achievement gains to justify its continuation as a reform option. In schools where teachers have become heavily invested in the program and scores are rising, we believe *it is particularly important to continue implementing the reform, as change would be potentially disruptive.* [italics added]" (Mac Iver, vi) <sup>x</sup>

- **A 2002 study of the Rodeo Institute for Teacher Excellence (RITE) program "found that primary students in 20 Direct Instruction elementary schools in Houston made significantly greater gains in reading than students in 20 control schools** (Carlson & Francis, 2002). The differences were particularly pronounced in kindergarten and first grade. Students who had spent more years in the program outperformed children with less program exposure, and students with teachers who demonstrated greater use of Direct Instruction techniques outperformed other students." <sup>xi xii</sup>
- **Direct instruction was categorized as showing "strongest evidence of effectiveness"** in a 2002 study by Dr. Geoffrey Borman and colleagues (University of Wisconsin, Madison). Of the 29 programs studied, only 3 received this rating. <sup>xiii</sup>
- **The "instructional content and design of Corrective Reading [a Direct Instruction program] is consistent with Scientifically Based Reading Research"** according to a 2004 synthesis of research on the Direct Instruction SRA Corrective Reading program, conducted by the Florida Center for Reading Research. <sup>xiv</sup>

- **A 2002 study by Bonnie Grossen of the University of Oregon** demonstrated the effectiveness of Direct Instruction at Charles M. Goethe Middle School, a high-poverty, low performing school in Sacramento City USD, California.<sup>xv</sup>
  - Students at Goethe improved by two grade levels during the first year in both reading comprehension and mathematics.
  - During year one, the number of English language learners reading at approximately grade level (grade 7 and above) increased by more than 3.5 times.
  - In year two, students again achieved a two-year gain for one year of instruction at all instructional levels.
  - Goethe Middle School achieved the highest gains among all low-achieving middle schools in California.
  
- **A study of 45 kindergarten students (Benner et al., 2002) reported that statistically significant differences favoring the DI group were found** for all four of the Test of Auditory Comprehension of Language subtests.<sup>xvi</sup>
  
- **In December 2004 Woodlawn Community Academy of Chicago led 79 Chicago public schools that posted major gains on both local and state tests.** “Woodlawn officials attributed its double-digit gains to redoubled use of Direct Instruction ... Even kindergarteners are reading at the low-income charter school.”<sup>xvii xviii</sup>
  
- **A 2001 study by the Wisconsin Policy Research Institute concluded that** “the research base for Direct Instruction is unusually solid,” and that, in the schools visited, Direct Instruction looked “as good in practice as it does in the research studies.”<sup>xix</sup>
  
- **A 1999 review of reading programs by the Milken Family Foundation gave Direct Instruction a rating of *Comprehensive Evidence*:** Large amount of research conducted with majority of findings showing reading improvement. Open Court received a rating of *Evidence*: Some research with majority of findings showing reading improvement.<sup>xx</sup>
  
- **Direct Instruction was one of only two models that received a "strong" rating for evidence of positive effects on student achievement,** the highest rating given, in a 1999 study of 24 programs for school-wide reform prepared by American Institutes for Research. The report was sponsored by five national associations of educators (AASA, AFT, NAESP, NASSP, and NEA) and was the first report to systematically evaluate and rate each of the most prominent CRS models “based on what the research shows about the model’s effects on student achievement.”<sup>xxi</sup>
  
- **Direct Instruction provided “strong” evidence of positive effects on student achievement, the highest rating given,** in a 1999 study by the Fordham Foundation. Only 2 of the 10 models studied received this rating.<sup>xxii</sup>
  
- ***Current Practice Alerts* gave Direct Instruction its highest rating in 1999, indicating there is a solid research base for the effectiveness of the Direct Instruction approach.** The division for learning disabilities (DLD) and the division for research (DR) of the council for Exceptional Children sponsor the alerts.<sup>xxiii</sup>
  
- **The American Federation of Teachers endorsed Direct Instruction in 1998** as one of "Six Promising Schoolwide Programs For Raising Student Achievement." It stated that when Direct Instruction is properly implemented "the results are stunning."<sup>xxiv</sup>

- **The Project Follow Through evaluation found that Direct Instruction was the most effective approach in all three areas studied:** basic skills (reading, language, spelling, and math), cognitive skills, and affective behavior. Project Follow Through was a large-scale federal research project that funded and examined multiple approaches to educating disadvantaged students from kindergarten to third grade.<sup>xxv xxvi</sup>
- **Power4Kids, the largest rigorous science-based study of remedial reading instruction ever conducted in public schools, tested four programs including Corrective Reading (a Direct Instruction program).** Although the results of the 2003-2004 study are not available yet, “Deer Lakes School District administrators have been so pleased with the informal outcomes that they are continuing Corrective Reading this year, even though funding for their portions of the study ended last year.”<sup>xxvii</sup>
- **The Council of Scientific Society Presidents (CSSP) gave its 2002 annual award for Education Research that improves student learning to Siegfried Engelmann, the developer of Direct Instruction.** The award stated that Engelmann’s “concepts have improved learning outcomes of a wide spectrum of students more effectively than many more widely utilized models and have been used for teaching over a million children.” CSSP represents over 70 scientific societies, 3 million scientists, and includes the American Psychological Association, Association for the Education of Teachers in Science, National Association for Research in Science Teaching, National Council of Teachers of Mathematics, and the Psychometric Society.<sup>xxviii</sup>

#### BCPSS Schools Using Direct Instruction:

- **17 schools in Baltimore use the Direct Instruction Curriculum.** Eight of those schools would be immediately impacted by the elimination of DI (Roland Park Elementary/Middle, Langston Hughes, William Penderhughes, Charles Barrister, Federal Hill, George Kelson, Dickey Hill and Glenmoun Elementary/Middle). Six are NCLB Reading First schools and would lose DI in two years – once the Reading First money terminated. Reading First requires research based reading programs and, accordingly, DI would have to remain in the school until the Reading First program ended. The other three DI schools are charter schools (City Springs, Collington Square and Hampstead Hill) and would continue the DI curriculum.

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The Baltimore Curriculum Project exists to improve educational opportunities for all Baltimore City Public School students through direct operation of charter schools and advocacy of policies that provide equitable opportunities for all city schools and students.

We believe that all students can learn when their teachers have effective tools and the training to use these tools; that all students deserve access to teachers with these tools and training; and that effective teaching tools are developed and improved through scientific research.

<sup>i</sup> Comprehensive School Reform Program. U.S. Department of Education. <<http://www.ed.gov/programs/compreform/2pager.html>>

<sup>ii</sup> Addison, K. & Yakimowski, M. (2003). An Evaluation of the Direct Instruction Program: A Report Prepared for the Board of School Commissioners. Division of Research, Evaluation, Assessment, and Accountability, Baltimore City Public School System. <[http://www.bcps.k12.md.us/Student\\_Performance/Program\\_Evaluation/direct\\_instruction.asp](http://www.bcps.k12.md.us/Student_Performance/Program_Evaluation/direct_instruction.asp)>

<sup>iii</sup> Addison, K. & Yakimowski, M. (2003). An Evaluation of the Direct Instruction Program: A Report Prepared for the Board of School Commissioners. Division of Research, Evaluation, Assessment, and Accountability, Baltimore City Public School System. <[http://www.bcps.k12.md.us/Student\\_Performance/Program\\_Evaluation/direct\\_instruction.asp](http://www.bcps.k12.md.us/Student_Performance/Program_Evaluation/direct_instruction.asp)>

<sup>iv</sup> Addison, K. & Yakimowski, M. (2003). An Evaluation of the Direct Instruction Program: A Report Prepared for the Board of School Commissioners. Division of Research, Evaluation, Assessment, and Accountability, Baltimore City Public School System. <[http://www.bcps.k12.md.us/Student\\_Performance/Program\\_Evaluation/direct\\_instruction.asp](http://www.bcps.k12.md.us/Student_Performance/Program_Evaluation/direct_instruction.asp)>

<sup>v</sup> 2005 Maryland Report Card. Maryland State Department of Education. <<http://www.mdreportcard.org/>>

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- <sup>vi</sup> 2005 Maryland Report Card. Maryland State Department of Education. <<http://www.mdreportcard.org/>>
- <sup>vii</sup> 2005 Maryland Report Card. Maryland State Department of Education. <<http://www.mdreportcard.org/>>
- <sup>viii</sup> 2005 Maryland Report Card. Maryland State Department of Education. <<http://www.mdreportcard.org/>>
- <sup>ix</sup> (2005). CSRQ Center Report on Elementary School Comprehensive School Reform Models. The Comprehensive School Reform Quality Center. Washington, DC: American Institutes for Research. <<http://www.csrq.org>>
- <sup>x</sup> Mac Iver, M.A. Kemper, E. & Stringfield, S. (2003). The Baltimore Curriculum Project: Final Report of the Four-Year Evaluation Study. Baltimore: Center for Research on the Education of Students Placed At Risk. < <http://www.csos.jhu.edu/crespar/techReports/report62.pdf>>
- <sup>xi</sup> The Catalog of School Reform Models: Direct Instruction Model (K-8). NW Regional Educational Laboratory. <<http://www.nwrel.org/scpd/catalog/ModelDetails.asp?ModelID=13>>
- <sup>xii</sup> Carlson, C. D., & Francis, D. J. (2002). Increasing the reading achievement of at-risk children through Direct Instruction: Evaluation of the Rodeo Institute for Teacher Excellence (RITE). *Journal of Education for Students Placed At Risk*, 7(2), 141-166.
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- <sup>xv</sup> Grossen, B. (2004). Success of a Direct Instruction Model at a Secondary Level School with High-Risk Students. *USA Reading & Writing Quarterly*. Oregon: University of Oregon.
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- <sup>xviii</sup> Grossman, K. (12/16/2004). State Schools Chief Faults No Child. *Chicago Sun-Times*. <[http://susanohanian.org/show\\_nclb\\_outrages.html?id=932](http://susanohanian.org/show_nclb_outrages.html?id=932)>
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- <sup>xx</sup> Schacter, J. (1999). Reading Programs that Work: A Review of Programs for Pre-kindergarten to 4<sup>th</sup> grade. Santa Monica, CA: Milken Family Foundation.
- <sup>xxi</sup> Herman, R., Aladjam, D., McMahon, P., Masem, E., Mulligan, I., Smith, O., O'Malley, A., Quinones, S., Reeve, A., and Woodruff, D. (1999). *An Educator's Guide to Schoolwide Reform*. The American Association of School Administrators, American Federation of Teachers, National Association of Elementary School Principals, National Association of Secondary School Principals, National Education Association, and Educational Research Service.
- <sup>xxii</sup> Traub, J. (1999). Better by Design? A Consumer's Guide to Schoolwide Reform. The Thomas B. Fordham Foundation. <[www.fordhamfoundation.org/library/bbd/better\\_by\\_design.html](http://www.fordhamfoundation.org/library/bbd/better_by_design.html)>
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