Evaluation of Accelerated Reading Instruction (ARI) and Accelerated Math Instruction (AMI) Program

2004-2005 School Year

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Executive Summary

The Student Success Initiative (SSI), originated by Senate Bill (SB) 4 of the 76th Texas Legislature, and expanded during the 77th and 78th Texas Legislatures, aims to provide students with comprehensive research-based instruction to prepare them for academic success. A major component of the SSI mandates new grade advancement requirements that students advance to the next grade level only if they meet the passing standard of specified sections of the Texas Assessment of Knowledge and Skills (TAKS) or if the student's Grade Placement Committee (GPC) determines unanimously that the student is likely to be successful at the next grade level with accelerated instruction. In order to ensure that the students meet these goals, the Legislature has funded a number of major education initiatives including teacher reading and math academy training, diagnostic assessment of students, and the Accelerated Reading Instruction (ARI) and the Accelerated Math Instruction (AMI) program for students struggling in these subject areas.

The focus of this report is the ARI/AMI program. It identifies the students served by the program and how funds were used by local education agencies (LEAs) (e.g., school districts and open-enrollment charter schools) to achieve program goals, and concludes with an analysis of aggregated student achievement outcomes for program participants.

Program Reach

The accelerated instruction initiative has grown over the years since the inception of the ARI program during the 1999-2000 school year. In 2003-2004, accelerated math instruction was added to the program. Each year, an additional grade has been added to ARI and AMI programs, expanding the reach of the initiative. By the 2004-2005 school year:

- The ARI program provided service to almost six times the number of students that it served during its initial year (75,340 during the 1999-00 school year and 448,382 during 2004-2005);
- The AMI was added in 2003-2004, initially serving 273,810 struggling math students; during the 2004-2005 school year students utilizing AMI increased by almost 100,000 (from 273,810 to 361,511); and

- ARI/AMI program funding was used to serve, at least in part, more than 80% of the K-5 students identified as being at risk in either reading or math. Services provided to the student population not served through the ARI/AMI program were funded exclusively through other sources.

Program Funding

ARI/AMI funding consists of non-competitive grants awarded on a formula basis. Funding in 2004-2005 for ARI was based on the number of students who did not pass the first administration of the 2004 Grade 3 TAKS reading assessment, with LEAs receiving $905.84 for each student who failed to pass. Funding for 2004-2005 AMI was based on the number of students who did not pass the first administration of the 2004 Grade 5 TAKS math section, with LEAs receiving $905.84 for each child who did not pass. Historical funding levels for the program for the past five years are as follows:

- 2000-2001: $65.2 million;
- 2001-2002: $57.5 million;
- 2002-2003: $106.4 million;
- 2003-2004: $75.1 million; and
- 2004-2005: $80.9 million.

Use of Funds and Instructional Strategies

Analysis of how LEAs used their ARI/AMI funds revealed that:

- Over 90% of all 2004-2005 ARI/AMI funds were concentrated in two broad budget categories – payroll costs and supplies/materials; and
- LEAs spent the bulk of their funding on four specific budget items: Teacher Pay (25%), Supplemental Curriculum (24%), Tutor Pay (18%), and Other Supplies and Materials (15%).

The predominant instructional grouping strategies and time of instruction strategies used by the districts indicate that they are in line with recommended “best practices” deemed to be most effective. Key findings related to these strategies are as follows:

Instructional Grouping Strategies

- More than 80% of the LEAs indicated that they used ARI Teacher and Tutor Pay predominantly for Small Group instruction – this finding also held for AMI;
- More than 60% of the LEAs indicated that funds spent on Supplemental Curriculum and Other Supplies and Materials to support the ARI and AMI programs were used primarily for Small Group instruction and approximately 22% noted that funds were concentrated on Whole Group instruction.

Instructional Timing Strategies

- There was substantial variation in how LEAs spent ARI and AMI funds on the various instructional timing strategies (i.e., Before School, During School, After School, Summer School).
- In terms of Teacher Pay, about 40% of the LEAs used ARI/AMI funds for Summer School instruction, and more than 30% for instruction during regular school hours. Approximately 40% of the LEAs used ARI and AMI funds on Tutor Pay almost equally for During School and After School activities. However, Tutor Pay was more likely than Teacher Pay to be used primarily for After School instruction, and less likely to be used for Summer School instruction.
- For Supplemental Curriculum materials, the vast majority of LEAs spent their ARI/AMI funds primarily to support regular school day instruction.

Outcomes

Data reported through the statutorily required Early Reading Instruments (ERI) report, as well as ARI/AMI-specific measures, suggest that the ARI/AMI program is working to bring struggling students on grade level by the end of the school year. Evidence of improvement in student performance at LEAs is as follows:

Reading Results

- Of Kindergarten through Grade 5 students identified as struggling in reading and served by the ARI program, 63% were reading on level by the end of the year;
- The proportion of ARI students reading on level by the end of the school year was lowest in Grades 1 and 2 (57%) and highest in Grade 3 (72%).

- Overall, LEAs had larger percentages of children testing as "developed on screen" (i.e., demonstrating essential reading concepts) at the end of the year when compared to their performance at the beginning of the year;

Math Results

- Of the 361,511 Kindergarten through Grade 5 students identified as struggling in math and participating in the AMI program, 68% were on level in mathematics by the end of the year;
- Similar to the reading results, the proportion of AMI students on level in mathematics by the end of the school year was lowest in Grades 1 and 2 (64%) but highest in Kindergarten (73%)

Overall, ARI/AMI funding to promote accelerated instruction in reading and math appears to be reaching Texas school children in need and is working to achieve positive outcomes for these students in Grades K-5.

Link to full text: http://www.tea.state.tx.us/opge/progeval/ReadingMathScience/ARI_AMI_04_05_EvaluationReport_Final.pdf