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

2003-2004 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 requiring 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 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 funding for the Accelerated Reading Instruction (ARI) and the Accelerated Math Instruction (AMI) programs 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 (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 ARI program has expanded over the years since its inception during the 1999-2000 school year. Each year, an additional grade has been added and subsequently increasing numbers of students have been expanding the reach of the program. By the 2003-04 school year:

- The ARI program provided service to more than five times the number of students that it served during its initial year (75,340 during the 1999-00 school year and 388,619 during 2003-04);

- The AMI was added; during the 2003-04 school year it served 273,810 struggling math students; and

- ARI/AMI program funding was used to serve, at least in part, well over 80% of the K-4 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.

Spending and Strategies

Analysis of how local education agencies (LEAs) used their ARI/AMI funds revealed that:

- Over 90% of all 2003-2004 ARI/AMI funds were concentrated in two broad budget categories--payroll costs and supplies/materials; and

- Most LEAs spent the bulk of their funding on four specific budget items: teacher pay (27%), tutor pay (10%), supplemental curriculum (26%), and other materials (16%).

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

Instructional Grouping Strategies

- Of the LEAs that reported that either teacher pay (37%) or tutor pay (10%) was their largest ARI budget category, between 81% and 88% of the LEAs indicated that they used these funds predominantly for small group instruction—this finding also held for AMI;

- Of the LEAs that reported that supplemental curriculum (22%) was their largest ARI budget category, 64% of the LEAs indicated that funds were used primarily for small group instruction and 27% noted that funds were concentrated on whole group instruction. Small group instruction was also the preferred strategy for the use of AMI supplemental curriculum funds.

- Of the LEAs that reported that "other materials" (17%) was their largest ARI budget category, 56% of the LEAs indicated that funds were used primarily for small group instruction and 37% reported that funds were spent predominantly for whole group instruction. Similar to the other budget categories included in this

analysis, small group instruction was also the preferred strategy for the use of "other materials" used for the AMI program.

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).

- Of the LEAs that indicated that teacher pay was their largest ARI budget category, over half (51%) noted that these funds were used primarily for regular school day instruction, 30% reported that the funds were used mostly for summer school instruction, and 17% indicated that teacher pay was used mainly for after school intensive instruction.

- AMI funds for teacher pay were more evenly distributed across timing of instruction strategies: regular school day (39%); summer school (36%); and after school (25%).

- Of the LEAs that indicated that tutor pay was their largest ARI budget category, over half (54%) reported that these funds were used primarily for regular school day instruction. However, tutor pay was more likely than teacher pay to be used primarily for after school instruction (40%), and less likely to be used for summer school (5%).

- Of the LEAs that indicated that tutor pay was their largest AMI budget category, 47% of the LEAs reported that these funds were used primarily for after school instruction; while 42% of the LEAs noted that they were used predominantly for regular school tutoring and only 10% were utilized for summer school tutoring services.

- Not surprisingly, of the LEAs that indicated that supplemental curriculum materials was their largest AMI budget category, the vast majority spent their ARI funds (73%) and AMI funds (79%) primarily to support regular school day instruction.

Outcomes

- Early Reading Instruments (ERI) results for LEAs, as well as ARI/AMI-specific measures, suggest that the program is working to bring struggling children on grade

level by the end of the grade year. Evidence of improvement in student performance at LEAs show that:

Reading Results

- Of students, kindergarten through Grade 4, served by the ARI program, 70% 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 Grade 1 (64%) and highest in Grade 3 (81%).

- Overall, LEAs had larger percentages of children testing as "developed on screen" at the end of the year when compared to their performance at the beginning of the year;

- Tests for associations between the predominant grouping and time of instruction strategies used and the proportions of students on level by the end of the year yielded only small differences and should be interpreted cautiously;

- Grade 3 and Grade 4 ARI students from LEAs with small groups as the predominant grouping strategy had slightly higher and statistically significant proportions of students passing the reading portion of TAKS than those that used other strategies.

<u>*Math Results*</u>

- Of the 273,810 students, kindergarten through Grade 4, identified as struggling in math and participating in the AMI program, 84% 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 Grade 1 (79%) and highest in Grade 3 (88%)

Overall, ARI/AMI funding to promote accelerated instruction in reading and math appears to be reaching Texas schoolchildren in need and is working to achieve positive outcomes for these students in Grades K-4.