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

2005-2006 School Year

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Executive Summary

The Accelerated Reading Instruction/Accelerated Math Instruction (ARI/AMI) Grant Program, administered by the Texas Education Agency (TEA), is one of the major components of the Student Success Initiative (SSI) and provides immediate, targeted instruction to students in Grades K through 6 identified as struggling in reading or math. In the 2005-2006 school year, the period under study, \$144.1 million in state funding was provided to local education agencies (LEAs) serving over 563,000 struggling reading students (24% of the population of students in the grades served at those campuses) and more than 474,000 math students (20% of the students in the grades served at those campuses).

By the end of the 2005-2006 school year, approximately two-thirds of participating reading and math students were performing on grade level.

This report presents detailed information about the ARI/AMI program for the 2005-2006 school year. It identifies the students served by the program and how funds were used by LEAs to achieve program goals. The report concludes with an analysis of aggregated student achievement outcomes for program participants.

Program Reach

The ARI/AMI Program has grown significantly over the years since first being implemented during the 1999-2000 school year. In 1999-2000, only Kindergarten students were provided with accelerated instruction in reading. During each successive year, an additional grade was added to the program. In 2003-2004, accelerated math instruction was implemented, serving students in Grades K-4. In 2004-2005, the AMI program was expanded to include Grade 5, and in 2005-2006 it served Grades K through

6.

During the 2005-2006 school year:

• The ARI program served 563,559 students in Grades K-6;

- \bullet The AMI program served 474,067 students in Grades K-6, $^{^2}$ and
- ARI/AMI program funding was used to serve, at least in part, more than 80% of the K-6 students identified as being at risk in either reading or math.

Includes school districts and open-enrollment charter schools.

Overall, ARI/AMI funding to promote accelerated instruction in reading and math appears to be reaching Texas school students in need and is working to achieve positive outcomes for these students in Grades K-6.

Program Funding

Funding for the 2005-2006 ARI was based on student performance on the first administration of the Reading portion of the 2005 Texas Assessment of Knowledge and Skills (TAKS), with LEAs receiving \$1,442 for each Grade 3 student who failed to meet state standards on the Grade 3 TAKS Reading exam. Funding for 2005-2006 AMI was based on student performance on the first administration of the 2005 Math TAKS, with LEAs receiving \$1,442 for each Grade 5 student who did not meet state standards.

Historical funding levels for the program for the past six years are as follows:

- 2000-2001: \$65.2 million;
- 2001-2002: \$57.5 million;
- 2002-2003: \$106.4 million;
- 2003-2004: \$75.1 million;
- 2004-2005: \$80.9 million; and
- 2005-2006: \$144.1 million.

Notably, funding levels have not increased in proportion to the expansion of the program's reach, and in fact, has sometimes been decreased. As noted above, funding levels are determined by the number of Grade 3 students not passing the Reading assessment, and the number of Grade 5 students not passing the Math assessment

² A student may be served by both the ARI and AMI programs, so there may be some overlap between the students receiving accelerating instruction in reading and mathematics. ³ The remainder of these students identified as struggling in reading or math were likely served through other funding sources.

(beginning in 2003-2004), yet funds serve students in grades K through 6 needing intervention. Dividing the total funding each year by the number of students served each year provides an illustration of the average funding per student, historically:

- 2000-2001: \$320;
- 2001-2002: \$189;
- 2002-2003: \$325;
- 2003-2004: \$113;
- 2004-2005: \$100; and
- 2005-2006: \$139.

Use of Funds and Instructional Strategies

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

- Over 92% of all 2005-2006 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 (23%), supplemental curriculum (27%), other supplies/materials (18%), and tutor pay (14%).

The predominant instructional grouping strategies (e.g., whole class, small group, one on one) and time of instruction strategies (e.g., before school, during regular school day, after-school, summer school) 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 84% of the LEAs indicated that they used ARI teacher and tutor pay predominantly for small group instruction this finding also held for AMI.
- Over 71% of the LEAs indicated that funds spent on supplemental curriculum and other supplies/materials to support the ARI and AMI programs were used primarily for small group instruction.

Instructional Timing Strategies

- There was substantial variation in how LEAs spent ARI and AMI funds on the various instructional timing strategies.
- During school instruction and summer school instruction were the most commonly-implemented strategies when teachers were providing instruction (for both ARI and AMI); though after-school instruction predominated when tutors were employed.
- For money spent within the supplemental curriculum and supplies/materials categories, funds were primarily used 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 the 563,559 Kindergarten through Grade 6 students identified as struggling in reading and served by the ARI program, 66% were reading on level by the end of the year.
- The percentage of ARI students on grade level in reading by the end of the school year varied from a low of 59% in Grade 1 to a high of 76% of students in Grade 3.
- Overall, LEAs had larger percentages of students 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.
- ARI results were consistent across all educational service center (ESC) regions in the state.

Math Results

[&]quot;On grade level" assessments for reading were based on diagnostic instruments (e.g., TPRI, Tejas LEE) for Grades K-2, and on the proportion of students passing the reading portion of the TAKS for Grades 3 through 6.

• Of the 474,067 Kindergarten through Grade 6 students identified as struggling in math and participating in the AMI program, 69% were assessed as on level in mathematics by the end of the year.

• The percentage of AMI students on grade level in math by the end of the school year varied from a low of 64% in Grade 1 to a high of 74% in Grade 5.

• AMI results were also consistent across all ESC regions in the state.

Conclusion

The ARI/AMI program provides services to a large population of K-6 students (approximately half of a million) struggling in the reading and math content areas. The ARI/AMI program data reported herein show positive findings regarding the ability of struggling students in the program to be on grade level in reading and math at year end. This is reflected in the fact that two-thirds of the students served (66% of the reading students and 69% percent of the math students) were on grade level in their respective subjects by the end of the school year.

Link to full text:

http://www.tea.state.tx.us/opge/progeval/ReadingMathScience/ARIAMI_annual_04-07.pdf

⁵ "On grade level" assessments for math were based on diagnostic instruments selected by school districts for Grades K-2, and on the proportion of students passing the math portion of the TAXS for Grades 3-6.