AISD K-4 Accelerated Reading and Mathematics Instruction Evaluation, 2003-04

Austin Independent School District
Department of Program Evaluation

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Executive Summary

The 78th Texas Legislature appropriated funding for school districts to provide accelerated reading and mathematics instruction for kindergarten through grade 4 (K-4) students during 2003-04. This funding supports the continuation of the 1999 Senate Bill 4 from the 76th Texas Legislature, which implemented the *Student Success Initiative* (SSI). The 2003-04 school year was the fifth year for the SSI funded *Accelerated Reading Instruction* (ARI) entitlement and the first year for the *Accelerated Mathematics Instruction* (AMI) entitlement. In 2003-04, the state ARI and AMI entitlement for AISD was $1,492,989 ($2,348,666 for ARI in 2002-03). To supplement this entitlement, AISD used other resources to fund intervention for K-4 students at risk of reading and mathematics difficulties.

Program Description

The 2003-04 AISD *Student Success Initiative* (SSI) *Plan* included the comprehensive core program for kindergarten through grade 5 as well as the after-school accelerated instruction program and summer school. The SSI Plan is the district's plan to provide early intervention to accelerate reading and mathematics learning for elementary students who additional support. The structure of the SSI Plan is a three-tier approach to intervention: classroom intervention (Level 1); after-school intervention (Level 2); and summer school for students in targeted grades who did not pass TAKS reading or TAKS mathematics (Level 3).

Grade 3 students had to meet the grade level promotion requirement in 2003-04, which meant that they had to pass TAKS reading to be promoted to grade 4. The promotion requirement, a component of the SSI initiative, will be expanded to include the passing of both TAKS reading and TAKS mathematics for grade 5 students in 2005 and for grade 8 students in 2008.

Because of funding reductions, the district chose to focus on grade 3 reading for ARI funding and grade 4 mathematics for AMI funding. The AISD goal for 2003-04 grade 3 students was that 100% would pass the reading portion of 2004 TAKS. The goal for grade 4 mathematics intervention was to build capacity for these students to pass the grade 5 TAKS mathematics assessment in 2005.

The 2003-04 ARI and AMI intervention program began in January 2004 because of late disbursement of funds from TEA. Three sessions (two school-year sessions and one summer school session) were planned for the ARI program in 2003-04. Small group instruction for an average of five to eight students per teacher was provided for identified students. Students met with ARI teachers for 60-90 minutes per class for a total of three hours per week. While most classes met after school, a few schools held sessions before school or conducted Saturday morning classes. One 15-week session, January–March 2004, preceded the first administration of the grade 3 TAKS reading test. After the grade 3 TAKS reading scores were available in late April, a second session was held for grade 3 students who had not passed the test. The students who did not pass the April administration were provided summer school instruction before the June administration of grade 3 TAKS reading. The AMI program provided one session for eligible grade 4 students from January through

the April TAKS mathematics test and a summer session for those who did not pass the test. The timing and structure of intervention provided by other resources varied by program.

Overall, 71% (n=13,778 duplicated count) of K-4 students identified as at risk for reading or mathematics difficulties received intervention other than Level 1 classroom intervention. This number includes all interventions regardless of funding source. Of those students served, the ARI/AMI entitlement funded 17% (n=2,383) of K-4 reading and mathematics intervention while other funding sources (e.g., Title I, Bilingual, OEYP, Reading First, Prime Time, 21st Century) funded 83% (n=11,395) of the intervention.

Because students could participate in multiple interventions, the unduplicated count of K-4 students who received intervention during 2003-04 was 11,249. Twenty-two percent (n=2,529) of all K-4 students served participated in both reading and math interventions. According to the 2003-04 AISD student records, demographics for all K-4 students who received reading and/or mathematics intervention funded by any source include the following.

- The grade distribution was 15% kindergarten, 14% grade 1, 13% grade 2, 30% grade 3, and 28% grade 4.
- Seventy-five percent (n=8,484) were from low-income families.
- Forty-three percent (n=4,785) had limited English proficiency (LEP).
- Gender was balanced with 52% male and 48% female.
- The majority (70%) of K-4 students receiving intervention were Hispanic.

Major Findings

Even with a more rigorous TAKS reading test, the 2004 outcome reflected student progress. After three administrations of the grade 3 TAKS reading test, 96% of AISD grade 3 students passed the 2004 TAKS English and Spanish reading tests. Some of the major findings from the 2003-04 reading and mathematics intervention data collection are presented in the following statements.

General Information

- The ARI program and other campus reading interventions served 84% (n=10,121) of the AISD K-4 students in need of reading intervention. The other 16% (n=1,863) received Level 1 classroom intervention.
- The AMI program and other campus mathematics interventions served 45% (n=3,273) of the AISD grade 2- 4 students in need of math intervention. The other 55% (n=4,065) of grade 2-4 students received Level 1 classroom intervention.
- Of all K-4 students who received any kind of reading intervention during 2003-04 and had end-of-year test scores, 53% (n=4,299) were on grade level in reading at the end of the year.
- Sixty-six percent of reading and math intervention outside of Level 1 classroom instruction was in English.
- District ARI/AMI curricula resources and teaching strategies were presented to 379 teachers and mentors in January-June 2004 for a total of 842 hours of training.
- In 2003-04, 453 AISD K-4 teachers participated in *Texas Reading Academies* through the AISD Professional Development Academy.

Grade 3 Achievement

- All grade 3 students who were at risk of reading difficulties (the district focus) were served by ARI (90%) or other campus reading interventions (10%).

- Of all grade 3 reading intervention students tested (n=2,804), 83% passed 2004 TAKS reading. The district passing average was 96%.
- Of all grade 3 mathematics intervention students tested (n=709), 67% passed 2004 TAKS mathematics. The district passing average was 83%.

Grade 4 Achievement

- Ninety percent of all grade 4 students at risk of mathematics difficulties (the district focus) were served by AMI (57%) and other campus mathematics interventions (33%).
- Of all grade 4 reading intervention students (n=1,809), 62% passed 2004 TAKS reading. The district passing average was 85%.
- Of all grade 4 mathematics intervention students (n=1,803), 59% passed 2004 TAKS mathematics. The district passing average was 84%.
- For grade 4 students, 467 reading and 798 mathematics intervention students failed the corresponding TAKS test in 2004. In fact, 511 of these students, including 142 students who participated in math intervention but not reading intervention, failed both 2004 TAKS reading and TAKS mathematics tests.

Summer School

A total of 759 (287 grade 3 and 472 grade 4) students from 66 AISD elementary campuses attended the four district elementary summer sites, Becker, Graham, Harris, and Williams, in 2004. Because of the reduced funding and the district focus on grade 3 and 4 students, the K-2 summer reading program was not part of summer school in 2004. Student progress is indicated by the following findings.

- Of the grade 3 students (n=266) who attended summer school and took the TAKS reading test in June 2004, 159 (60%) met the state standard.
- Of the grade 3 students (n=268) with pre- and posttest scores, 186 (69%) made gains in reading.
- Of the grade 4 students with pre- and posttest scores, 260 (63%) made gains in *reading* and 390 (97%) made gains in *mathematics.*

STRENGTHS OF THE PROGRAM

ARI and AMI teachers and mentors were asked to complete a survey about the reading and mathematics intervention programs during 2003-04. ARI and AMI school year intervention teachers overwhelmingly agreed that the immediate yearlong approach to reading and mathematics intervention was beneficial to student progress. According to one teacher, "The students showed improvement in the content area and increased confidence academically." Other areas that received praise included the following:

- Small group with individualized instruction;
- Support of mentor teachers, principals, and district staff;
- Addition of elementary mathematics intervention program;
- Structure and organization of the intervention plan;
- Curricula and materials to meet the needs of students who are having reading and math difficulties; and
- Dedicated teachers who worked with the students outside of the school day.

Areas of Program Improvement

While most students in the 2003-04 ARI/AMI program showed progress, there were areas of the intervention program that teachers and mentor teachers believed could be improved. The areas of improvement suggested for fine tuning the 2004-05 plan included the following:

- Begin reading intervention sessions earlier in the year;
- Reduce the amount of paperwork required;
- Have better coordination of district support staff;
- Provide more guidance with ARI curriculum and vary curriculum from regular-day instruction;
- Provide more teacher training with the curricula and assessments; and
- Improve communication of summer school plans and expectations to principals and parents.

Recommendations

The need for reading and mathematics intervention is great among AISD elementary students. In 2004-05, grade 5 will be added to the grant requirements in a significant way with half of the ARI/AMI funds likely going to the grade 5 students who need help with reading and/or mathematics skills. The challenge for the district will be to find the resources to provide reading and mathematics intervention for all K-5 students who are eligible for that service. In 2003-04, 71% of eligible students were served. Elementary campuses and the district will need to be creative when planning to maximize the available resources.

Classroom reading and mathematics intervention must be of the highest quality because many of the students needing academic assistance will not get to participate in interventions outside of the regular classroom. With the promotion requirements for grade 3 and 5 students and a higher TAKS standard for all grades and subjects in 2004-05, the district should continue to seek new reading and mathematics grants/funding for high-needs campuses and maximize use of funds from existing grants. The following recommendations to improve the K-5 intervention programs in 2004-05 are offered to district decision-makers for consideration:

1. Provide funding and support for all grade 3-5 students needing reading and mathematics intervention to prepare them for the TAKS testing requirements.
2. Seek additional funding to support prevention efforts in the earlier grades (K-2) that are not a focus for ARI/AMI.
3. Focus special attention and resources on the 2003-04 grade 4 intervention students (n=511) who failed both the 2004 TAKS reading and mathematics assessments because they will be the most at risk fifth graders facing the SSI promotion requirement in 2005.
4. Require teacher training to expand knowledge of classroom-based reading and mathematics intervention strategies and to support intervention programs outside of the classroom.
5. Communicate clearly the expectations for teachers, students, and parents in the efforts to accelerate reading and mathematics learning for K-5 students.
6. Coordinate with other grant evaluation staff to streamline data reporting requirements.

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INTRODUCTION

The 78th Texas Legislature appropriated funding for school districts to provide accelerated reading and mathematics instruction for kindergarten through grade 4 (K-4) students during 2003-04. This funding supports the continuation of the 1999 Senate Bill 4 from the 76th Texas Legislature, which implemented the *Student Success Initiative* (SSI).

In 1999-2000, the state *Accelerated Reading Instruction* (ARI) funding was targeted to kindergarten. In each of the following years, another grade level was eligible for support from funds with K-4 students being served in 2003-04. In addition, mathematics intervention was added in 2003-04 through the *Accelerated Mathematics Instruction* (AMI) entitlement. The purpose of the 2003-04 funding was stated by the Texas Education Agency (TEA) Division of Curriculum (2003) as follows:

- *Accelerated Reading Instruction* funding is to be used to provide intensive, targeted intervention programs for students in K-4 who have been identified as at-risk for reading difficulties, including dyslexia.
- *Accelerated Math Instruction* funding is to be used to provide intensive, targeted intervention programs for students in K-4 who have been identified as unlikely to achieve the TAKS (*Texas Assessment of Knowledge and Skills*) mathematics passing standards by the end of grade 5.

Grade 3 students had to meet the grade level promotion requirement in 2003-04, which meant that they had to pass TAKS reading to be promoted to grade 4. The promotion requirement, a component of the SSI initiative, will be expanded to include the passing of both TAKS reading and TAKS mathematics for grade 5 students in 2005 and for grade 8 students in 2008.

This report summarizes the intensive effort of the Austin Independent School District (AISD) to fulfill this mandate, by offering reading and mathematics intervention to K-4 students identified as being at risk of reading or mathematics difficulties. Many of the data presented here have been reported to TEA to meet the evaluation requirement of the ARI/AMI entitlement.

AISD STUDENT SUCCESS INITIATIVE PLAN

The 2003-04 AISD *Student Success Initiative Plan* included the comprehensive core program for kindergarten through grade 5 as well as the after-school accelerated instruction program and summer school. The SSI Plan is the district's plan to provide early intervention to accelerate reading and mathematics learning for elementary students who additional support. The structure of the local SSI Plan presents a three-tier approach to intervention. Classroom teachers were the first line of reading and mathematics intervention (Level 1 intervention). When students needed additional support, after-school intervention was provided (Level 2 intervention). For grade 3 students who did not pass 2004 TAKS reading and grade 4 students who did not pass 2004 TAKS mathematics assessments, summer school was provided (Level 3 intervention).

Because of funding reductions, the district chose to focus on grade 3 reading for ARI funding and grade 4 mathematics for AMI funding. Optional Extended Year Program (OEYP) funds supported the elementary SSI plan by providing accelerated instruction in reading and mathematics for grade 3 through 5 students. (See the *Optional Extended Year*

Program Report, 2003-04 from the Department of Program Evaluation for more details.) Other funding sources, including local, Reading First, 21st Century, Prime Time, Title I, and Bilingual, provided accelerated instruction in reading and mathematics for additional students needing intervention. **Seventy-one percent of all K-4 students who were eligible for reading or mathematics intervention were served.**

Although students were identified for accelerated reading and math instruction as of September 1, 2003, the ARI/AMI Notice of Grant Award (NOGA) from TEA was not received by AISD until December 5, 2003. Therefore, the district did not begin the ARI/AMI after-school intervention plan until January 2004.

The AISD goal for 2003-04 grade 3 students was that 100% would pass the reading portion of 2004 TAKS. The goal for grade 4 mathematics intervention was to build capacity for these students to pass the grade 5 TAKS mathematics assessment in 2004-05. Much of the data in this evaluation is reported for all elementary K-4 students receiving reading and/or mathematics intervention by any funding source because the ARI/AMI entitlement funded less than 20% of the students who were in need of intervention at the 74 AISD elementary campuses.

Accelerated Reading Instruction

The Texas Reading Initiative established by the 75th Texas Legislature in 1997 was the state's first effort to focus resources on teaching children to read. As stated in the Texas Reading Initiative (1997), "All students will read on or above grade level by the end of the grade 3 and continue to read on grade level or better throughout their schooling." This initiative evolved into the *Student Success Initiative* in 1999. Educational reading resources are available to local school districts to support accelerated instruction through SSI funds. Components of the SSI initiative include the following:

- Reading instruction based on scientific research-based methods of reading instruction that have been proven to work;
- Early reading assessment instruments (*Texas Primary Reading Inventory*, TPRI, and *Tejas LEE*) to make sound instructional decisions;
- Teacher Reading Academies to improve classroom reading instruction;
- Immediate reading intervention for children who struggle; and
- Elimination of social promotion.

In AISD, after-school reading intervention has been available for identified students through the ARI entitlement since 2002-03. Prior to that year, AISD used the ARI funds for the SOAR (*Summer Opportunity to Accelerated Reading*) summer reading program.

Beginning of the year assessments are critical to inform teachers, parents, and administrators of students' academic needs. AISD used the following assessments to determine eligibility for accelerated reading instruction:

- Kindergarten through Grade 2 - State-developed TPRI and *Tejas LEE; and DRA (Developmental Reading Assessment);*
- Grade 3 - District Benchmark beginning- of-year reading assessment; and
- Grade 4 - 2003 TAKS reading and the district Benchmark beginning-of-year reading assessment.

While ARI focused on grade 3 reading intervention, campuses used the eligibility data to provide intervention through funding sources other than ARI. Three sessions (two school-year sessions and one summer school session) were planned for 2003-04. Small group instruction, for an average of five to eight students per teacher, was provided for identified students. Students met with ARI teachers for 60-90 minutes per class for a total of three hours per week. While most classes met after school, a few schools held sessions before school or conducted Saturday morning classes. One 15-week session, January–March 2004, preceded the first administration of the grade 3 TAKS reading test. After the grade 3 TAKS reading scores were available in late April, a second session was held for grade 3 students who had not passed the test. The students who did not pass the April grade 3 TAKS reading test were provided summer school instruction before the June administration of the test. AISD's comprehensive research-based program of reading instruction was based on the following components:

- Instructional format that is consistently informed by reading assessment data and that provides repeated opportunities for students to engage in intensive, targeted learning;
- Instructional format that focuses on five areas of reading instruction, namely, phonemic awareness, phonics, fluency, vocabulary, and comprehension;
- Structure that provides for continuous monitoring of student achievement to adjust the program content and/or instructional approach to meet the reading needs of each student; and
- Program communications that frequently report individual student progress to the classroom teacher and to the parent/guardian of the student.

The AISD Curriculum Department provided initial training for ARI teachers. Mentor teachers were assigned to offer on-going support of ARI teachers at each campus. Students received reading intervention based on a deficiency in one of the following areas:

- Decoding skills - Involves skills in translating symbols (e.g., alphabet letters) into recognizable syllables and words; and
- Comprehension skills - Requires understanding of underlying concepts and critical thinking.

Curriculum resources selected for the ARI intervention program are listed in Table 1.

Table 1: Curriculum Used for AISD Grades 3 and 4 Reading Intervention by Language of Instruction, 2003-04

Language Of Instruction	2003-04 Grade	Reading Deficiency	Curriculum Used	Hours/ Week
English	3	Low Decoder	SRA Corrective Reading	3 hr/week
Spanish	3	Low Decoder	Trofeos	3 hr/week
English or Spanish	3	Low Comprehension	Orchestrating Reading Success	3 hr/week
English	4	Low Decoder	SRA Corrective Reading	3 hr/week
English or Spanish	4	Low Comprehension	Orchestrating Reading Success	3 hr/week

Source: AISD Department of Curriculum

Accelerated Mathematics Instruction

The 2003-04 school year was the first year for K-4 mathematics intervention to be funded through the *Accelerated Mathematics Instruction* entitlement grant. While K-4 students could be served, the focus of the 2003-04 AISD AMI program was to provide intensive intervention for grade 4 students that would prepare them for the 2005 grade 5 TAKS mathematics test. Eligibility for the intervention was based on the grade 3 2003 TAKS mathematics scores for 2003-04 grade 4 students, as well as district fall 2003 Benchmark test math data.

The structure of the AMI intervention program was the same as that of ARI. Frequent monitoring of AMI student progress was important to the success of the program. Mentor teachers worked with AMI teachers to offer instructional support and monitoring. As with reading, the Level 1 intervention is in the classroom. The *Elementary Mathematics Intervention Plan* was designed to assist Level 2 teachers in providing small group, intensive, short-term instruction. Level 2 interventions occurred for students who failed to master TEKS (*Texas Essential Knowledge and Skills*) that had already been taught during the core classroom instruction time. The following TEKS-based resources were suggested for use with AMI students at the initial training of AMI teachers:

- *TAKS Study Guide* from TEA – A good resource with which to begin, as it directly addresses the core knowledge and skills necessary to master each TEKS component using carefully laid out lessons;
- *Elementary and Middle School Mathematics: Teaching Developmentally* by John Van de Wall – A resource that allows teachers not familiar with knowledge and skills taught at other grade levels to understand how key mathematical concepts (e.g., place value, computation, algebraic reasoning, geometry, measurement, probability and statistics, problem-solving) develop in grades K-8;
- *Mathematics Standards in the Classroom* by the University of Texas Dana Center – A reteaching tool for clarifying activities and test items to use with students;
- *AISD Orchestrating Mathematics Success* - District curriculum distributed to campuses for math intervention programs; and
- *Region 4 Benchmark Assessments* –A rubric from Region 4 Educational Service Center that can be used to assess every tested grade level TEKS.

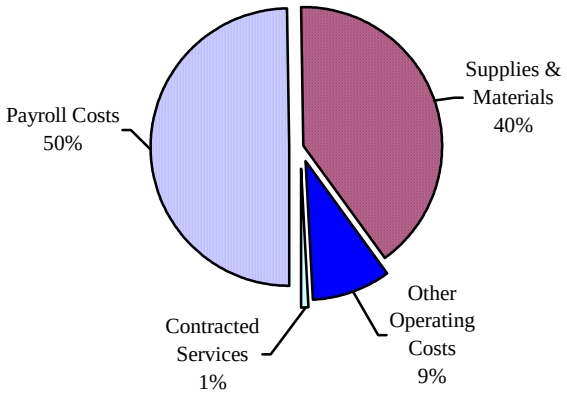
Budget

In 2003-04, the ARI state entitlement was based on $1,007.46 for each grade 3 student who failed to meet the standard on the first administration of the 2003 TAKS reading, and the AMI entitlement was based on $1,007.46 for each grade 5 student who failed to meet the passing standard on the 2003 TAKS mathematics assessment. The 2003-04 AISD actual expenditure for accelerated reading and mathematics instruction funded by the state ARI/AMI entitlement grant was $1,492,989 ($2,348,666 in 2002-03). With the reduction in funding ($855,677) and the concentration of resources on grade 3 and 4 students, 1,171 fewer students were served through this entitlement in 2003-04 than 2002-03.

The majority of the funds (57% or $854,947) was used for reading intervention to support the goal to have every grade 3 student pass TAKS reading. The mathematics funds spent (43% or $638,042) supported the mathematics initiative to have every grade 5 student pass TAKS mathematics in 2004-05. The average cost per student served by ARI/AMI was $626 ($700 in 2002-03), with an average cost per student of $738 for reading and $521 for mathematics. Because grade 3 students had three opportunities to pass TAKS reading in 2004, the cost of intervention prior to the March 3, April 28, and June 29 testing was higher than the cost for grade 4 mathematics intervention students prior to the April 2004 TAKS mathematics administration.

Half ($742,917) of the 2003-04 funds were used for payroll costs including extra duty pay for teachers, professional support, and summer school teachers and staff. The second largest expenditure ($599,149) was for supplies and for reading and mathematics materials. Figure 1 shows the percentages of ARI/AMI expenditures by category in 2003-04.

Figure 1: Percentage of AISD ARI/AMI Expenditures, 2003-04



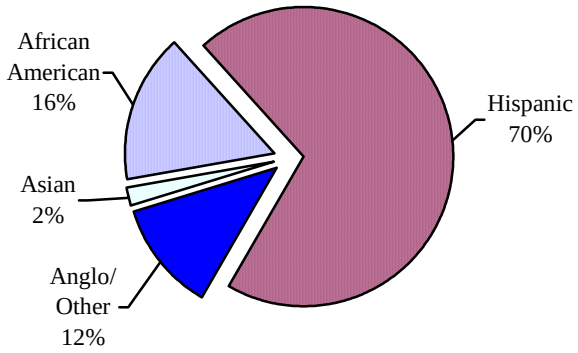
Source: AISD Finance Records

Student Demographics

A total of 11,249 students (unduplicated count) participated in AISD K-4 reading and mathematics interventions during 2003-04. This number includes K-4 students served through all interventions regardless of funding source. According to the 2003-04 AISD student records, demographics for all K-4 students who received reading and/or mathematics intervention funded by any source include the following.

- The grade distribution was 15% kindergarten, 14% grade 1, 13% grade 2, 30% grade 3, and 28% grade 4.
- Seventy-five percent (n=8,484) were from low-income families.
- Forty-three percent (n=4,785) were of limited English proficiency (LEP).
- Gender was balanced with 52% male and 48% female.
- As shown in Figure 2, the majority (70%) of students receiving intervention were Hispanic.

Figure 2: Ethnicity of AISD K-4 Reading and Mathematics Intervention Students, 2003-04



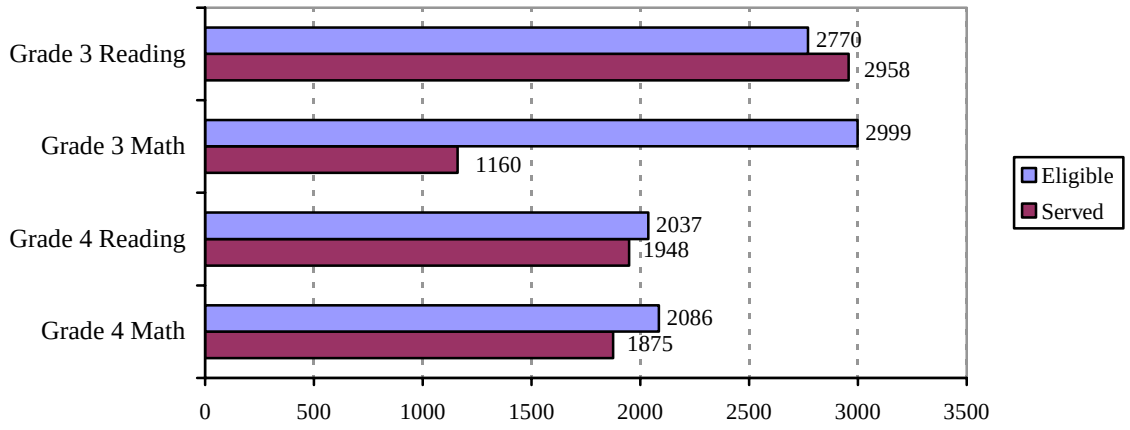
Source: AISD Student Records

INTERVENTION STUDENTS ELIGIBLE AND SERVED

Overall, 71% of K-4 students (n=13,778) identified as at risk for reading or mathematics difficulties were served outside of the classroom. Of those K-4 students served outside of the classroom, the ARI/AMI entitlement funded 17% (n=2,383) of K-4 reading and mathematics intervention while other funding sources (e.g., Title I, Bilingual, OEYP, Reading First, Prime Time, 21st Century) funded 83% (n=11,395) of the intervention. An overview of the grade 3 and 4 students who need help with reading or mathematics skills that were the focus of the district SSI Plan, reveals that all grade 3 reading students who were eligible were served.

In anticipation of the 2005 SSI promotion requirement for grade 5 students, the district and campuses focused resources on both reading and mathematics intervention for grade 4 students in 2003-04. Ninety-six percent of eligible grade 4 students received reading intervention and 90% of eligible grade 4 students received math intervention in 2003-04. Figure 3 shows the numbers of all AISD grade 3 and 4 reading and mathematics students who were eligible and served in reading and math intervention during 2003-04.

Figure 3: Numbers of All AISD Grades 3-4 Students Eligible and Served in Reading and Mathematics Intervention, 2003-04



Source: AISD K-4 Student Assessment Records and ARI Records, 2003-04

Reading Eligible and Served

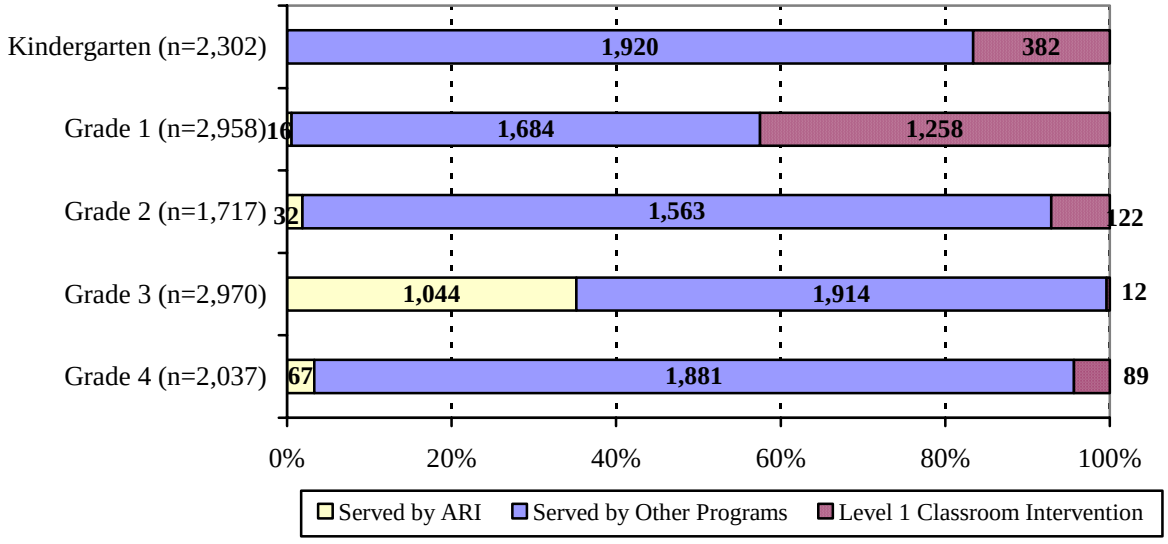
According to AISD fall (grades 1-4) and winter (kindergarten) Benchmark test data and 2003 TAKS reading scores, 11,984 (38%) students in K-4 were in need of reading intervention. AISD began the ARI program with the identified grade 3 students (n=2,970). A total of 1,159 grade 1-4 students received reading intervention funded by ARI; 90% of them were grade 3 students. Other local, state, and federal funds were used to serve the other 10% of eligible students.

Classroom teachers were the first line of reading intervention. *Teacher Reading Academies* provided training in scientific research-based reading instruction to assist classroom teachers with identification of reading difficulties and strategies to promote reading success.

In addition, the local budget funded a reading specialist at each elementary campus. During the day, the reading specialist delivered small group instruction to four to six students in K-4 with a priority on grade 3 reading intervention. Other resources were tapped to provide reading intervention programs to help fill the gap. A total of 8,962 AISD K-4 students received reading intervention funded through other sources including, locally-funded literacy support groups, Primetime, Project READ, HOSTS, AmeriCorps, Reading First, Title I, 21st Century, and LEP summer school.

The ARI program and other campus reading interventions served 84% (n=10,121) of the AISD K-4 students in need of reading intervention. The other 16% (n=1,863) received Level 1 classroom reading intervention. Grade 1 had the largest number of students (43%) who received Level 1 classroom intervention. Figure 4 shows the numbers and percentages of K-4 students identified for reading intervention and the numbers and percentages served by ARI, other interventions, and Level 1 classroom intervention.

Figure 4: Numbers and Percentages of AISD K-4 Students Eligible for Reading Intervention and the Type of Intervention Received, 2003-04



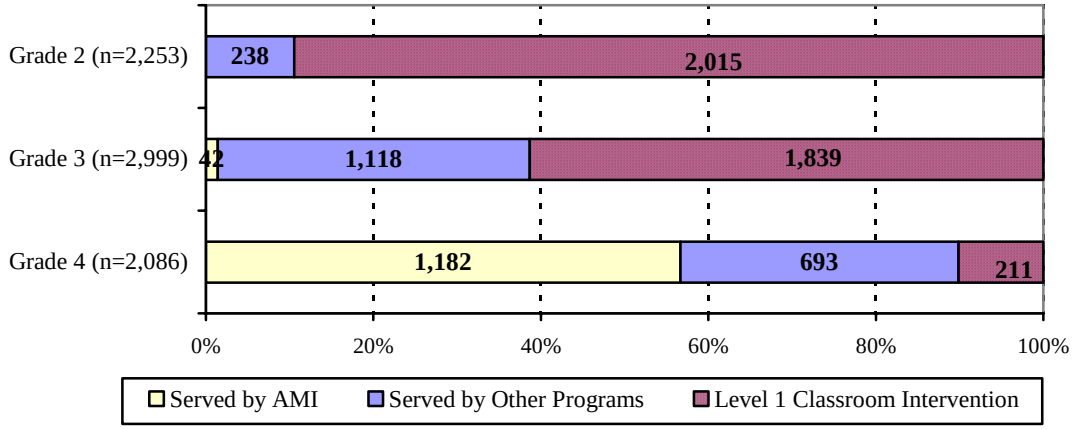
Source: AISD K-4 Student Assessment Records and ARI Records, 2003-04

Mathematics Eligible and Served

According to AISD beginning of year grade 2-4 Benchmark test data and 2003 TAKS data for grade 4 students, 7,338 (40%) grade 2-4 students were in need of mathematics intervention. While there is no district or state mathematics diagnostic test for K-1 students, 384 K-1 students participated in mathematics intervention provided by a funding source other than AMI. **The AMI program and other campus mathematics interventions served 45% (n=3,273) of the AISD grade 2-4 students in need of math intervention. The other 55% (n=4,065) received Level 1 classroom intervention.**

At grade 4, the focus of 2003-04 math resources, AMI served 57% and other funding sources served 33% of the eligible grade 4 mathematics intervention students, while 10% were served through Level 1 classroom intervention. At grade 3, only 1% of the eligible students were served by AMI, while 37% were served by mathematics intervention programs other than AMI. Figure 5 shows the numbers and percentages of eligible grade 2-4 students by the type of mathematics intervention they received.

Figure 5: Numbers and Percentages of AISD Grade 2-4 Students Eligible for Mathematics Intervention and the Type of Intervention Received, 2003-04



Source: AISD Grade 2-4 Student Assessment Records and AMI Records, 2003-04

AISD K-4 Intervention Students

In 2003-04, 13,778 (duplicated count) AISD K-4 students received reading and/or mathematics intervention (outside of the regular classroom) funded by multiple sources. Of these, 10,121 (73%) students received reading and 3,657 (27%) received mathematics intervention. Twenty-two percent of students served (n=2,529) participated in both reading and math intervention.

Because the ARI program concentrated on the grade 3 students with the poorest reading achievement and the AMI program concentrated on grade 4 students with the poorest mathematics achievement, the numbers of K-4 students served by the ARI/AMI grant were smaller than the numbers served by other funding sources in 2003-04. The numbers of K-4 students served by ARI, AMI, and other reading or mathematics interventions include the following:

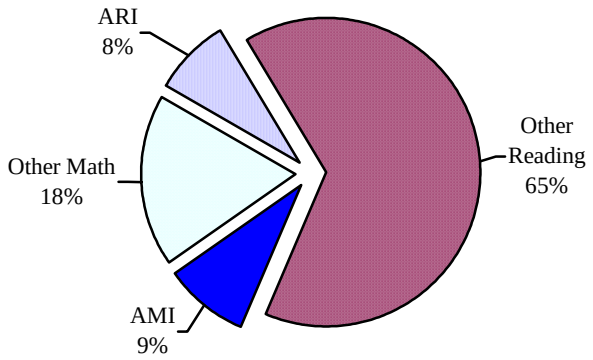
- 1,159 (3,554 in 2002-03) grade 1-4 students participated in ARI;
- 8,962 (4,771 in 2002-03) K-4 students received reading intervention funded by additional sources (e.g., locally-funded literacy support groups, 21st Century

Grant, Reading First, Primetime Reading, Title I, Bilingual funds);

- 1,224 grade 3 and 4 students participated in AMI intervention; and,
- 2,433 K-4 students participated in mathematics intervention funded by additional sources (e.g., Local, 21st Century Grant, Primetime Math, Title I).

Eighty-one percent (n=850) of the grade 3 ARI students also participated in another reading intervention during 2003-04. Only four percent (n=43) of grade 4 AMI students participated in another math intervention. Figure 6 shows that only 17% of the K-4 students received reading and/or mathematics intervention funded by the ARI/AMI grant.

Figure 6: Percentage of K-4 Students Served by Type of Funding, 2003-04



Source: AISD Program Evaluation ARI, AMI, and Other Reading and Math Interventions, 2003-04

Language of Instruction

Forty languages were reported as home languages among the K-4 students who received reading and/or mathematics intervention in 2003-04. The home languages reported with the most frequency were English (51% or 5,669) and Spanish (48% or 5,326). Of the thirty-eight other languages reported, the home languages reported with the most frequency were Italian (n=56) and Korean (n=21).

Sixty-six percent of reading and mathematics intervention instruction was offered in English. Table 2 shows the numbers and percentages of reading and mathematics participation by grade and by language of instruction in 2003-04.

Table 2: Numbers and Percentages of AISD Reading and Mathematics Intervention Students by Grade and Language of Instruction, 2003-04

Intervention & Language of Instruction	K	Grade 1	Grade 2	Grade 3	Grade 4	Total
Reading						
English	479	1,167	1,174	2,097	1,479	6,396
Spanish	1,438	531	418	848	442	3,677
Spanish/English	3	2	3	13	27	48
Mathematics						
English	99	202	183	751	1,460	2,695
Spanish	32	48	55	405	383	923
Spanish/English	3	0	0	4	32	39
Total	**2,054**	**1,950**	**1,833**	**4,118**	**3,823**	**13,778**
Percentage	15%	14%	13%	30%	28%	100%

* This table reflects a duplicated count as students could have participated in reading & math interventions.
Source: AISD Program Evaluation ARI/AMI/Other Intervention Records

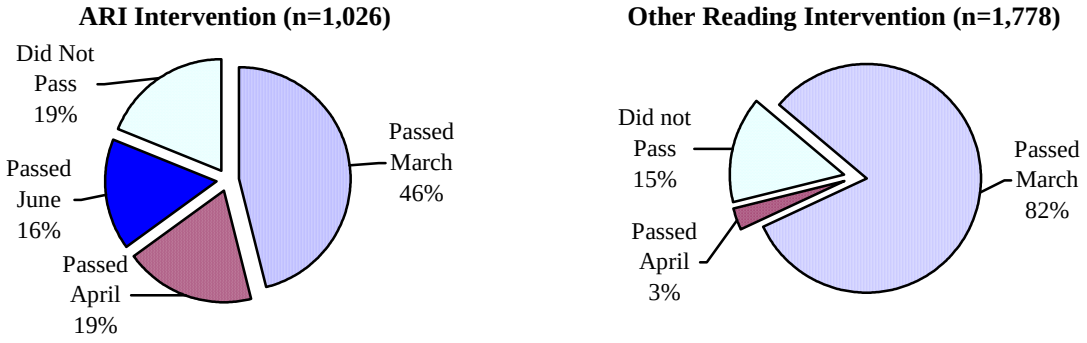
End-of-year Assessment Data

Intervention Students and 2004 TAKS Results

Making progress toward the local goal of 100% of grade 3 students passing 2004 TAKS reading in 2004 can be directly connected to the resources of the ARI grant and other reading interventions. Students had three opportunities to pass the test—March 3, April 28, and June 29. The students served by ARI and other reading interventions were tracked from the March administration of the test. A total of 1,026 ARI and 1,778 other reading intervention grade 3 students took TAKS reading at one or more of the three test administrations.

While 81% of the grade 3 ARI and 85% of other reading intervention grade 3 students who took 2004 TAKS reading passed, it required two or three attempts for many of these students to pass. A 2004 TAKS reading comparison of ARI students and other reading intervention students shows that on the March 3 administration of the test, 46% of ARI students and 82% of other reading intervention students passed that administration of the test. Figure 7 shows the percentages of ARI and other reading intervention grade 3 students who passed 2004 TAKS reading at each administration.

Figure 7: Percentages of AISD Grade 3 Reading Intervention Students Who Passed and Did Not Pass 2004 TAKS Reading, by Test Administration and Type of Funding



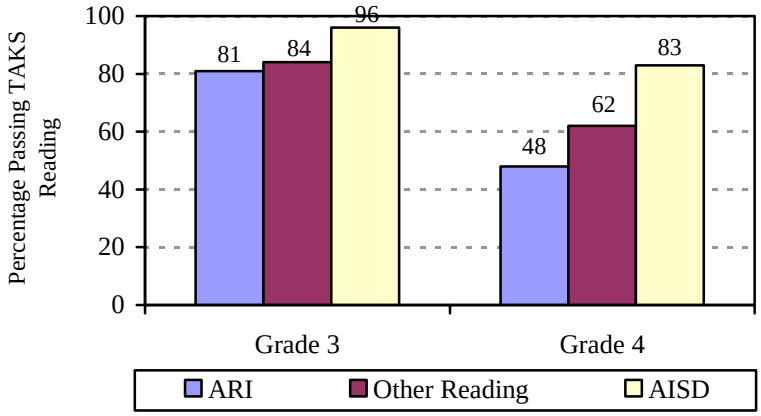
Source: AISD 2004 Grade 3 TAKS Reading Files

To determine the impact of all reading and mathematics interventions at the elementary campuses, the grade 3 and 4 2004 TAKS reading and TAKS mathematics passing rates were examined. Of all grade 3 reading intervention students tested (n=2,804), 83% passed 2004 TAKS reading. The district passing average was 96%. Of all grade 3 mathematics intervention students tested (n=709), 67% passed 2004 TAKS mathematics. The district passing average was 83%. (See Appendix A for a complete count of reading and mathematics intervention students on grade level at the end of the year by type of intervention.)

2004 grade 4 TAKS reading and mathematics results are cause for concern. Of all grade 4 reading intervention students tested (n=1,809), 62% passed 2004 TAKS reading. The district passing average was 85%. Of all grade 4 mathematics intervention students (n=1,803), 59% passed 2004 TAKS mathematics. The district passing average was 84%. This means that 467 of the grade 4 reading intervention students and 798 mathematics intervention students failed the corresponding TAKS test in 2004. In fact, 511 of these

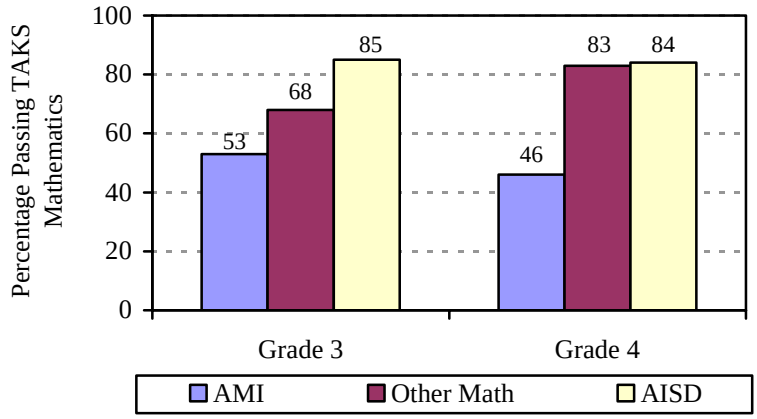
students, including 142 students who participated in math intervention but not reading intervention, failed both 2004 TAKS reading and TAKS mathematics tests. These grade 4 students are of special concern because they will be required to pass both grade 5 TAKS reading and TAKS mathematics in 2005 to be promoted to grade 6. Figures 8 and 9 show the percentages of grade 3 and 4 intervention students who passed TAKS reading and mathematics in 2004.

Figure 8: Percentages of AISD Grade 3 and 4 Students in 2003-04 ARI or Other Reading Interventions Who Passed 2004 TAKS Reading (English and Spanish)



Source: AISD Program Evaluation and Grade 3 TAKS Reading File

Figure 9: Percentages of AISD Grade 3 and 4 Students in 2003-04 AMI or Other Math Interventions Who Passed 2004 TAKS Mathematics (English and Spanish)



Source: AISD Program Evaluation and 2004 Grade 3 TAKS Reading File

Even with a more rigorous TAKS reading test, the 2004 outcome reflected student progress. After three administrations of the grade 3 TAKS reading test, the statewide passing average for English and Spanish was 97% (96% in 2003). AISD grade 3 students made progress toward the goal of 100% of the grade 3 students passing the 2004 TAKS reading with an overall passing average for English and Spanish of 96% (95% in 2003). (See Appendix B for the 2004 TAKS reading and TAKS mathematics scores for grades 3 and 4.)

On Grade Level Assessments of K-2 Intervention Students

Because K-2 students do not take TAKS assessments, grade level in reading was determined for these students by using the *TPRI, Tejas LEE,* and *Developmental Reading Assessment* (DRA) end-of-year assessment scores. Only 48 K-2 students were served by ARI because these grades were not the district priority for reading intervention; 12 (25%) of these students were on grade level at the end of the year. A total of 6,977 (36%) of all AISD K-2 students were eligible for reading intervention in 2003-04. For K-2 (n=5,167) students who received reading intervention through other funding sources, 54% (n=4,252) were on grade level in reading by the end of the year. In addition, 53% (n=2,279) of all K-4 students who received any kind of reading intervention during 2003-04 and had end-of-year test scores were on grade level in reading at the end of the year. Table 3 shows the numbers and percentages of K-2 ARI and other reading intervention students who had end-of-year test scores and who were on grade level at the end of the year.

Table 3: Numbers and Percentages of K-2 Students Served by ARI and Other Interventions Who Were On Grade Level in Reading at the End of Year, 2003-04

Number of Students	Kindergarten	Grade 1	Grade 2	Totals
2003-04 AISD Average Enrollment	6,725	6,536	6,237	19,498
Identified for Reading Intervention	2,302	2,958	1,717	6,977
	(34%)	(45%)	(28%)	(36%)
Served by ARI	NA	16	32	48
Took End-of-year Assessment	NA	16	31	47
On Grade Level End of Year	NA	2	10	12
		(13%)	(32%)	(26%)
Served by Other Interventions	1,920	1,684	1,563	5,167
Took End-of-year Assessment	1,561	1,514	1,177	4,252
On Grade Level End of Year	1,041	688	551	2,279
	(67%)	(41%)	(35%)	(54%)

Source: AISD Student Achievement Data and ARI Data, 2003-04

There is no state assessment to determine eligibility for elementary mathematics intervention. AISD developed Benchmark math tests beginning with grade 2 to use for diagnosing student mathematics difficulties based on the TEKS. In October 2003, 2,253 grade 2 students were identified as being at risk for mathematics difficulties on the Benchmark math test.

Neither is there a state or local definition for "on grade level" for mathematics in kindergarten through grade 2. A total of 622 K-2 students received mathematics intervention funded by a source other than AMI during 2003-04, but no summary evaluation data for these students are available.

Professional Development

Professional development in scientific research-based instruction was provided for ARI/AMI teachers. In 2003-04, 379 teachers and mentors (duplicated count) attended 842 hours of training in district ARI/AMI curriculum resources and teaching strategies from January through June 2004. Mentor teachers, whose job it was to oversee ARI or AMI after-school reading and mathematics intervention, had monthly meetings to update them on curriculum, evaluation, and payroll practices. Another role of the mentor teachers was to be the liaison between ARI and AMI teachers and evaluation and program staff.

In support of the SSI initiative, many K-4 teachers have attended the state-sponsored *Teacher Reading Academies*. The academies began in 1999 with training for kindergarten teachers. As with the other components of SSI, teachers from an additional grade level were added each year. *Teacher Reading Academies* help teachers to learn how to provide effective classroom-based reading intervention. In 2003-04, 453 AISD K-4 teachers participated in *Texas Reading Academies*. Professional Development Academy (PDA) records indicate that since June 2000, 2,191 AISD K-4 teachers have participated in the *Texas Reading Academies*. Teachers received a $600 stipend to attend the four-day training session. Many other professional development opportunities in elementary language arts and mathematics for classroom and intervention teachers were available through PDA.

Summer School 2004

In 2004, ARI funded reading intervention for grade 3 students at the AISD elementary summer school. The eligibility requirement for students to attend was failure of the grade 3 2004 TAKS reading assessment. AMI funded grade 4 mathematics intervention with eligibility based on failure of the grade 4 2004 TAKS mathematics assessment. Also offered at the summer school sites were a Title I-funded science program for grade 4 students low in science skills and SARI, *Systemic Accelerated Reading Intervention*, for grades 2-4 special education students who were struggling readers.

A total of 759 (287 grade 3 and 472 grade 4) students from 66 AISD elementary campuses attended the four district elementary summer school sites, Becker, Graham, Harris, and Williams, in 2004. This was the first year since 1998 that the SOAR, *Summer Opportunity to Accelerate Reading*, K-2 reading program was not included in the elementary summer program.

A total of 65 teachers (32 grade 3 and 33 grade 4) participated in a day and a half of professional development specific to summer school curriculum. This represented 45% (378 hours) of the total professional development hours for the ARI/AMI program.

Program managers hired experienced teachers to work with students four hours each day of the 20-day program. Most teachers had participated in the school year ARI or AMI intervention program and were familiar with the curriculum. Grade 3 students' instruction concentrated on reading skills, while grade 4 students received two hours of reading and two hours of mathematics instruction.

Summer school pre- and posttest assessments for grade 3 and 4 students were district-developed. The assessment for grade 3 students was an eight-item TAKS-formatted pretest and posttest. The TAKS reading test on June 29 was the final assessment

for third graders. Grade 4 students were assessed in reading with an eight-item TAKS-formatted pre- and posttest and in mathematics with a 20-item TAKS-formatted pre- and posttest. Results for the AISD elementary summer school program for grade 3 reading and grade 4 reading and mathematics include the following.

Grade 3 Summer Reading

- Of the grade 3 students (n=266) who attended summer school and took the TAKS reading test in June 2004, 159 (60%) met the state standard.
- Of the grade 3 students (n=268) with pre- and posttest scores, 186 (69%) made gains in reading. The pretest average was 3.4 items correct and the posttest average was 4.9 items correct. The average gain was 1.5 items. This represents an overall increase of 19% in the number of items correct from pretest to posttest.
- The average attendance for all grade 3 students (n=288) who attended was 17.6 days. For students with pre- and posttest scores, the average attendance was 18.3 days.
- Of all grade 3 ARI students (n=288), 114 (40%) had perfect attendance.

Grade 4 Summer Reading and Mathematics

- Of the grade 4 students with pre- and posttest scores, 260 (63% of 411) made gains in *reading* and 390 (97% of 404) made gains in *mathematics*.
- Of the grade 4 students (n=411) with pre- and posttest scores on the *reading* test, the pretest average was 3.8 items correct and the posttest average was 4.9 items correct. The average gain was 1.1 items. This represents an overall increase of 14% in the number of items correct from pretest to posttest.
- Of the grade 4 students (n=407) with pre- and posttest scores on the *mathematics* test, the pretest average was 7.2 items correct and the posttest average was 13.6 items. The average gain was 6.4 items. This represents an overall increase of 32% in the number of items correct from pretest to posttest.
- The average attendance for all grade 4 students (n=472) who attended was 17.0 days. For students with pre- and posttest scores (n=411), the average attendance was 18.3 days. A total of 143 (31% of 472) grade 4 students had perfect attendance.

Strengths of the 2003-04 ARI/AMI Program

Teachers and mentor teachers from the yearlong ARI and AMI program were surveyed about the strengths of the district elementary reading and mathematics intervention plan. A summary of their feedback is included.

School Year ARI and AMI Teacher Feedback

It was important to the program managers to have feedback from the teachers and mentor teachers who implemented the reading and mathematics intervention plan. ARI and AMI teachers and mentors were asked to complete a survey about the reading and mathematics intervention program during 2003-04. ARI and AMI school year intervention teachers overwhelmingly agreed that the immediate yearlong approach to reading and mathematics intervention was beneficial to student progress. According to one teacher,

who responded about the strengths of the program, "The students showed improvement in the content area and increased confidence academically." Other areas that received praise include the following.

- ***Small Group Instruction*** - Highest on the teachers' list of reading and mathematics intervention program strengths was small group instruction with individualized instruction. Teachers met with groups of five to eight students. One after-school teacher wrote, "Extended time led to a deeper understanding of skills and concepts. Children in the classes had more time for trial and error practice. There were more opportunities for one on one instruction." Another teacher wrote, "The small group format allowed more individual attention and more time on task for each student."
- ***Mentor Teacher Support*** – The mentor teachers who assisted ARI and AMI teachers with small group intervention received praise for their support, guidance, and organization. Mentor teachers were available to assist teachers with materials, books, resources, program expectations, observation, and feedback. On the ARI/AMI teacher survey, 94% of the teachers agreed or strongly agreed with the statement, "The mentor teacher at my campus worked cooperatively with teachers to make this intervention beneficial for students." One ARI teacher wrote, "Our mentor teacher was very helpful in providing assistance to make the most of our intervention time." (See Appendix C for the results of the 2003-04 ARI and AMI teacher survey.)
- ***Mathematics Program*** – The AMI teachers were very pleased to have, for the first time, an elementary focus on mathematics intervention. Teachers and mentors liked the math resources, manipulatives, and detailed/specific monitoring expectations. One math teacher wrote, "Students were given opportunities to use problem-solving strategies in groups and to identify the strategy that was required to solve the problem. Then they wrote a summary about their mathematical problem." Another teacher summed up the strength of the math program by saying that "it was available."
- ***Curriculum and Materials*** – Curriculum and materials for ARI and AMI were varied and sufficient to meet the needs of students who were having difficulties in reading or math. One teacher wrote that there was "well organized information to teachers regarding student strengths, weaknesses, and remediation strategies." An AMI teacher said, "The strengths of this program were the effective strategies and reasoning used in the curriculum." Prepared plans and materials, graphic organizers, math manipulatives, and the variety of materials helped motivate students and made learning fun.
- ***Teachers*** – ARI and AMI mentor teachers realized that the key to success of the intervention program was the dedicated teachers who worked with students in small groups. One mentor teacher wrote, "My teachers are extremely dedicated to their students' success." Another mentor teacher said, "The programs were directed by master teachers who were knowledgeable and communicated with each student's teacher about progress and needs." Teachers fine-tuned their instruction and assessment skills. According to one mentor teacher, "The teachers constantly monitored data to provide data-driven

lessons that met students' individual needs. The documented progress was evidence of quality instruction."

Summer School Principal and Teacher Feedback

Summer school principals and mentor teachers indicated the strengths of the AISD summer reading and mathematics intervention programs for grade 3 and 4 students in the following order of frequency.

- Support system in place from program managers;
- Experienced and knowledgeable teachers and mentor teachers;
- Plenty of supplies and materials; and,
- Good parent support.

AREAS FOR PROGRAM IMPROVEMENT FOR ARI AND AMI

School Year ARI and AMI Teacher Feedback

While most students in the 2003-04 ARI/AMI program showed progress, there were areas of implementation that teachers and mentor teachers believed could be improved. A summary of the program improvement suggestions made by school-year ARI and AMI teachers and mentor teachers follows.

- ***Begin Intervention Earlier*** - Because the ARI and AMI grant funds were not available until January 2004, many teachers and mentor teachers expressed their concerns that this would not be enough time to accelerate learning before the 2004 TAKS tests. Teachers suggested that if grant funds were not available, perhaps other district funds could be utilized until the funds are available. The problem will be avoided in 2004-05 because of the availability of state ARI and AMI funds in September 2004.
- ***Less Paperwork*** – Teachers overwhelmingly agreed that the amount of paperwork required for the after-school interventions should be reduced. Teachers were required to support documentation for the ARI/AMI grant evaluation. Because some of the teachers and mentor teachers were also funded by the Optional Extended Year Program (OEYP), they also had to complete forms for that grant. In addition, program managers required an ARI/AMI/OEYP Instructional Plan as well as other data throughout the semester. One mentor teacher said, "Paperwork needs to be streamlined to lessen the heavy workload on the mentor teachers. The job is practically full time as it is now." Only 68% of ARI and AMI teachers agreed or strongly agreed with the statement, "District staff provided adequate information for reading or mathematics programs in grant requirements."
- ***Curriculum and Materials*** –Teachers asked that the curriculum and assessment materials arrive on time and that they be demonstrated to intervention teachers. One teacher wrote, "We need explicit programs that vary from classroom instruction (math had that) so that students didn't have the same type of instruction. We need a variety to choose from that works with students." Teachers said that the quality of materials was good, but they need more materials so that they do not have to share materials. According to one teacher,

ARI needs to provide more guidance in curriculum for teachers "like the AMI lessons, practice, and assessments."

- ***Teacher Training*** – Some teachers wanted to have more training during the year to ask questions and get successful tips from other teachers. There was only one curriculum training session on Saturday before the start of the program. The other trainings focused on procedures, evaluation, and grant requirements. Because AMI was new this year, some teachers and mentor teachers suggested that more math intervention training was needed. Some teachers asked that training be more informative with clear expectations for teachers. One teacher said that, "More training is needed for teachers who provide instruction" and program managers should distribute "a handout with clear and specific expectations."

Summer School Principal and Teacher Feedback

Summer school principals and mentor teachers were asked for feedback on the 2004 elementary summer program for grade 3 and 4 students who failed TAKS. Although principals and mentor teachers were complementary of the program, they had the following recommendations for future summer school programs (listed in order of frequency reported).

- Home campuses need to give parents the correct information about summer school. One campus gave the wrong starting date. Other campuses told students to "just show up" the first day without being registered. As one mentor teacher said, "Some parents were upset when we gave them different information than they received at their home campus."
- Missing student information (e.g., end-of-year assessment data, LEP status, special education status) from the home campus slows down class assignments and beginning assessments. Getting information from the SASI student data system was a problem at some of the campuses.
- Summer sites should have similar numbers of students and similar student-to-teacher ratios. The size of student enrollments ranged from 142 at Graham to 243 at Williams. Williams also had 18 buses to manage. Some grade 4 teachers had as many as 17 students, which is too high for an effective intervention program, according to principals.
- Some additions (such as visualization activity) or changes (word study too difficult) to the curriculum were requested to better prepare students for the TAKS tests.

Program Manager Feedback

Every year there are new challenges for the program managers of the ARI/AMI entitlement grant. In 2003-04, mathematics intervention was added to the program and grade 4 students became eligible for reading and/or mathematics intervention. In addition, the amount of funding was lower in 2003-04 than 2002-03.

Major Challenges

Peggy Mays, grant manager for ARI/AMI, indicated that because of the lower funding and the late release of funds (December 2003), "providing campuses with enough funding in a timely manner to meet the needs of all identified struggling learners" was a major challenge. According to Mrs. Mays, "Coordinating with other departments to ensure a seamless, integrated process and to ensure program implementation" was another challenge throughout the school year and during summer school. Particularly challenging, she said, was "working with the Transportation Department to ensure that buses were available to all eligible students participating in an accelerated reading or math intervention program."

Strengths of the Program

There were many benefits to the ARI/AMI intervention program for teachers and students, according to Mrs. Mays. The following strengths of the program were apparent during the school year and the summer program:

- Professional development for teachers;
- Instructional materials for intervention classes;
- Overall student achievement in the program;
- Mentor teachers to provide training, mentoring, and support; and
- Support of AISD curriculum staff.

Improvements for the Program

While there are many successes, the elementary reading and mathematics intervention program continues to need improvement if the district is to meet the federal mandate that all students read on grade level by 2014. Mrs. Mays believes that additional funding (either local or state) will be necessary to ensure that all eligible students are served. According to the findings in this report only 84% of the students eligible in reading and 60% of students eligible in mathematics received intervention through any type of funding. There would be more K-1 students eligible for mathematics intervention if there were a district diagnostic assessment for math at those grades.

One of the difficulties of this year's program was that the state did not release the ARI/AMI funds until December. This meant that the district intervention program could not begin until the second semester. Principals had to use other funding, if available, to provide necessary interventions during the fall semester. Mrs. Mays said that the state should "release the funding earlier to districts so that more time is available to provide intervention opportunities to struggling students throughout the school year."

At the district level, Mrs. Mays said that program requirements for teachers are very demanding. Mrs. Mays will ask that support staff streamline paperwork required for program documentation to ensure that teachers and campus contacts are not overly burdened.

SUMMARY AND RECOMMENDATIONS

Even with a more rigorous TAKS reading test, the 2004 outcomes reflected student progress. After three administrations of the grade 3 TAKS reading test, AISD grade 3 students made progress toward the goal of 100% of the grade 3 students passing the 2004

TAKS reading with an overall passing average for English and Spanish of 96% (95% in 2003). The statewide passing average was 97% for English and 94% for Spanish test-takers.

In 2003-04, the state ARI and AMI entitlement for AISD was $1,492,989 ($2,348,666 in 2002-03). With the reduction in funding ($855,677) and the concentration of resources on grade 3 and 4 students, 1,171 fewer students were served by this entitlement in 2003-04 than 2002-03. While the ARI/AMI entitlement funded only 17% of the reading and mathematics intervention for eligible K-4 students in 2003-04, other funding sources (e.g., Title I, Bilingual, OEYP, Reading First, Prime Time, 21st Century) were used to fill the gap. The numbers and percentages of K-4 students who were eligible for reading and/or mathematics intervention and the numbers and percentages served by the AISD Student Success Initiative Plan in 2003-04 are as follows:

- The ARI program and other campus reading interventions served 84% (n=10,121) of the AISD K-4 students in need of reading intervention. The other 16% (n=1,863) received Level 1 classroom intervention.
- The AMI program and other campus mathematics interventions served 45% (n=3,273) of the AISD grade 3 and 4 students in need of math intervention. The other 55% (n=4,065) received Level 1 classroom intervention.

Only 48 K-2 students were served by ARI and no K-2 students were served by AMI because these grades were not the district priority for reading or mathematics intervention. A total of 5,837 K-2 students received reading (n=5,215) or math (n=622) intervention through other funding sources. Fifty-three percent (4,299) of K-2 reading intervention students with TPRI, Tejas LEE, or DRA assessments were on grade level at the end of the year. However, there is no district or state grade level assessment for K-2 mathematics.

To determine the impact of all reading and mathematics interventions at the elementary campuses, the grade 3 and 4 2004 TAKS reading and TAKS mathematics passing rates were examined. Of all grade 3 reading intervention students tested (n=2,804), 83% passed 2004 TAKS reading. The district passing average was 96%. Of all grade 3 mathematics intervention students tested (n=709), 67% passed 2004 TAKS mathematics. The district passing average was 83%.

2004 Grade 4 TAKS reading and mathematics results are cause for concern. Of all grade 4 reading intervention students tested (n=1,809), 62% passed 2004 TAKS reading. The district passing average was 85%. Of all grade 4 mathematics intervention students (n=1,803), 59% passed 2004 TAKS mathematics. The district passing average was 84%. This means that 467 of the grade 4 reading and 798 mathematics intervention students failed the corresponding TAKS test in 2004. In fact, 511 of these students, including 142 students who participated in math intervention but not reading intervention, failed both 2004 TAKS reading and TAKS mathematics tests. These grade 4 students are of special concern because they will be required to pass both grade 5 TAKS reading and TAKS mathematics in 2005 to be promoted to grade 6.

The need for reading and mathematics intervention is great among AISD elementary students. In 2004-05, grade 5 will be added to the grant requirements in a significant way, and it is likely that half of the ARI/AMI funds will be supporting the intervention with grade 5 students low in reading and/or mathematics skills. The challenge

for the district will be to find enough resources to provide reading and mathematics intervention for all K-5 students who are eligible for those services. In 2003-04, 71% of eligible students were served. Elementary campuses and the district will need to be creative when planning to maximize the available resources.

Classroom-based reading and mathematics intervention will need to be of the highest quality because many of the students needing academic assistance will not get to participate in interventions outside of the regular classroom. With the promotion requirements for grade 3 and 5 students and a higher TAKS standard for all grades and subjects in 2004-05, the district should continue to seek new reading and mathematics grants/funding for high-needs campuses and maximize use of funds from existing grants. The following recommendations to improve the K-5 intervention programs in 2004-05 are offered to district decision-makers for consideration:

1. Provide funding and support for all grade 3-5 students needing reading and mathematics intervention to prepare them for the TAKS testing requirements.
2. Seek additional funding to support prevention efforts in the earlier grades (K-2) that are not a focus for ARI/AMI.
3. Focus special attention and resources on the 2003-04 grade 4 intervention students (n=511) who failed both the 2004 TAKS reading and mathematics assessments because they will be the most at-risk grade 5 students facing the SSI promotion requirement in 2005.
4. Require teacher training to expand knowledge of classroom-based reading and mathematics intervention strategies and to support intervention programs outside of the classroom.
5. Communicate clearly the expectations for teachers, students, and parents in the efforts to accelerate reading and mathematics learning for K-5 students.
6. Coordinate with other grant evaluation staff to streamline data reporting requirements.

APPENDICES

Appendix A: 2003-04 AISD Grade Level Information for K-4 Reading and Mathematics Intervention Students by Type of Intervention

2003-04 Reading Interventions (Unduplicated Count – ARI Students and Other reading students are unique groups)

Grade	ARI # Served	ARI # Tests	ARI # On Grade Level EoY	ARI % On Grade Level EoY	Other Reading # Served	Other Reading # Tests	Other # On Grade Level EoY	Other % On Grade Level EoY	All Reading # Served	All Reading # Tested	All Reading # Passing	All Reading % On Grade Level
K	0	NA	NA	NA	1,920	1,561	1,041	67%	1,920	1,561	1,041	67%
1	16	16	1	6%	1,684	1,514	687	45%	1,700	1,530	688	45%
2	32	31	10	32%	1,563	1,177	551	47%	1,595	1,208	561	46%
3	1,044	1,026	835	81%	1,914	1,778	1,502	84%	2,958	2,804	2,327	83%
4	67	63	30	48%	1,881	1,746	1,090	62%	1,948	1,809	1,120	62%
Total	**1,159**	**1,136**	**876**	**77%**	**8,962**	**7,776**	**4,871**	**63%**	**10,121**	**8,912**	**5,747**	**64%**

2003-04 Mathematics Interventions (Unduplicated Count – AMI students and Other mathematics students are unique groups)

Grade	AMI # Served	AMI # Tests	AMI # On Grade Level EoY	AMI % On Grade Level EoY**	Other Math # Served	Other Math # Tests	Other # On Grade Level EoY	Other % On Grade Level EoY**	All Math # Served	All Math # Tested	All Math # Passing	All Math % On Grade Level**
K	0	NA	NA	NA	134	NA	NA	NA	134	NA	NA	NA
1	0	NA	NA	NA	250	NA	NA	NA	250	NA	NA	NA
2	0	NA	NA	NA	238	NA	NA	NA	238	NA	NA	NA
3	42	32	17	53%	1,118	677	460	68%	1,160	709	477	67%
4	1,182	1,165	540	46%	693	638	527	83%	1,875	1,803	1,067	59%
Total	**1,224**	**1,197**	**557**	**47%**	**2,433**	**1,315**	**987**	**75%**	**3,657**	**2,512**	**1,544**	**61%**

* EoY – End of year

** Calculation for "Percent of on grade level" for all students receiving math intervention does not include K-2 students served because there is no state definition of "on grade level" at grades K-2.

Note: "On grade level" for reading intervention students was determined by the TPRI/Tejas LEE (K-2) and 2004 TAKS reading (Grades 3 and 4). "On grade level" for mathematics intervention students was determined by 2004 TAKS mathematics (Grades 3 and 4). There is no definition of "on grade level" for K-2). Not all students served had assessment records for end of year.

Appendix B: Numbers and Percentages of AISD Grade 3 and 4 Students Taking and Passing TAKS Reading and TAKS Mathematics, 2004

Subject	Grade	Language	Total # Tested	Number Passing	Percent Passing
Reading	3	English	4,229	4,102	97%
		Spanish	1,083	1,007	93%
Mathematics	3	English	4,319	3,804	88%
		Spanish	1,043	765	73%
Reading	4	English	4,486	3,797	85%
		Spanish	583	415	71%
Mathematics	4	English	4,623	3,972	86%
		Spanish	533	363	68%

Note: Grade 3 reading is cumulative percentage meeting passing standard over three administrations.

Source: AISD 2004 TAKS Reading and TAKS Mathematics files

Appendix C: Results of 2003-04 ARI and AMI Teacher Survey

The ARI and AMI teachers responded to statements about the district reading and mathematics interventions. The scale is as follows: 5=Strongly Agree; 4=Agree; 3=Unsure; 2= Disagree; 1=Strongly Disagree. The responses are reported by reading teacher, math teacher, and teachers who taught both reading and mathematics intervention. Responses below an average of 4 (agree) are in bold.

	Reading (n=81)	Math (n=71)	Reading & Math (n=16)	All (n=168)
1) Professional development provided useful information about the curriculum to be used in accelerated learning for struggling students.	4.05	**3.98**	**3.88**	4.00
2) The curriculum used in my program was effective in accelerating student progress.	4.19	4.00	4.13	4.10
3) The monitoring assessments used in my program gave accurate information about student progress.	**3.98**	**3.92**	**3.88**	**3.95**
4) The mentor teacher at my campus worked cooperatively with teachers to make this intervention beneficial for students.	4.59	4.44	4.19	4.50
5) District staff provided adequate information for reading or mathematics programs in the following areas:				
a) Eligibility criteria.	4.24	4.17	4.06	4.20
b) Curriculum and instruction.	4.12	4.04	**3.94**	4.07
c) Assessment options.	**3.92**	**3.89**	**3.56**	**3.89**
d) Data collection and reporting.	**3.97**	**3.96**	**3.69**	**3.96**
e) Grant requirements.	**3.74**	**3.78**	**3.81**	**3.76**
f) Payroll procedures.	4.09	4.19	**3.75**	4.11
g) Clear expectations for student success.	4.28	4.19	**3.88**	4.11
h) Clear expectations for teacher participation.	4.24	4.19	**3.87**	4.16

Note: Numbers bolded are below a rating of 4, which denotes agreement.

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