

# Apache Junction Unified School District

PHOENIX, ARIZONA.

## ELEVENTH-GRADE STUDENTS MAKE GAINS IN READING AND MATHEMATICS

DURING THE 2004-05 SCHOOL YEAR, AT-RISK ELEVENTH-GRADE STUDENTS IN THE APACHE JUNCTION UNIFIED SCHOOL DISTRICT PARTICIPATED IN THE TRIAGE INTERVENTION PROGRAM TO IMPROVE STUDENT PERFORMANCE ON THE STATE ASSESSMENT TEST, ARIZONA'S INSTRUMENT TO MEASURE STANDARDS (AIMS). WHEN THE SPRING 2004 AND THE FALL 2004 AIMS SCORES WERE COMPARED, ELEVENTH-GRADE STUDENTS PARTICIPATING IN THE TRIAGE PROGRAM USING PLATO® INSTRUCTIONAL COURSEWARE MADE AVERAGE SCALE SCORE POINT GAINS OF 21 IN READING AND 26 IN MATHEMATICS, WHILE THEIR NON-USER ELEVENTH-GRADE COUNTERPARTS MADE SCALE SCORE POINT GAINS OF 12 IN READING AND 8 IN MATHEMATICS.

AFTER NINE WEEKS OF THE TRIAGE PROGRAM IMPLEMENTATION, THE TOTAL NUMBER OF ELEVENTH-GRADE STUDENTS WHOSE LEVEL ASSESSMENT RESULTS FOR READING MET OR EXCEEDED PERFORMANCE LEVELS ON ARIZONA'S INSTRUMENT TO MEASURE STANDARDS (AIMS) ROSE FROM 68% TO 86%, WHEN THE SPRING 2004 AND WINTER 2005 AIMS SCORES WERE COMPARED. IN MATHEMATICS, THE TOTAL NUMBER OF ELEVENTH-GRADE STUDENTS WHOSE AIMS LEVEL ASSESSMENT RESULTS MET OR EXCEEDED THE PERFORMANCE LEVELS ROSE FROM 34% TO 63%. IN 2004 A SCALE SCORE OF 500 OR HIGHER IS REQUIRED FOR A HIGH SCHOOL STUDENT TO PASS THE AIMS TEST.

WHEN THE SPRING 2005 AIMS SCORES WERE EXAMINED, LEVEL ASSESSMENT RESULTS FOR THE AT-RISK ELEVENTH-GRADE STUDENTS ATTENDING THE TRIAGE CLASSES USING PLATO® INSTRUCTIONAL COURSEWARE SHOWED 63% MET OR EXCEEDED THE AIMS READING PROFICIENCY LEVELS, 52% MET OR EXCEEDED THE AIMS WRITING PROFICIENCY LEVELS AND 82% MET OR EXCEEDED THE AIMS MATHEMATICS PROFICIENCY LEVELS. OF THE ELEVENTH-GRADE STUDENTS NOT ATTENDING THE TRIAGE CLASS, 41% MET OR EXCEEDED THE AIMS READING PROFICIENCY LEVELS, 47% MET OR EXCEEDED THE AIMS WRITING PROFICIENCY LEVELS AND 37% MET OR EXCEEDED THE AIMS MATHEMATICS PROFICIENCY LEVELS. IN 2005 A SCALE SCORE OF 674 OR HIGHER IS REQUIRED FOR A HIGH SCHOOL STUDENT TO PASS THE AIMS TEST.

APACHE JUNCTION UNIFIED SCHOOL DISTRICT CHOSE TO IMPLEMENT A THREE-YEAR TRIAGE PROGRAM USING PLATO® INSTRUCTIONAL COURSEWARE IN READING AND MATHEMATICS. STUDENTS WERE SELECTED FOR PARTICIPATION BASED ON THEIR SPRING 2004 AIMS SCORES. STUDENTS ATTENDED THE TRIAGE CLASSES EACH DAY FOR TWO HOURS. PROGRAM SUCCESS WAS MEASURED BY THEIR IMPROVEMENT ON THE ARIZONA INSTRUMENT TO MEASURE STANDARDS (AIMS) TEST.

SCHOOL PROFILE	
5200 STUDENTS GRADES PK-12 5 Elementary Schools 2 Middle Schools 1 High School 6 Title I Schools 82% White 18% Minority	
PLATO® INSTRUCTIONAL COURSEWARE™ IMPLEMENTATION	
Grade 11 Implementation Classroom Model Reading/Mathematics Focus	
RESEARCH INSTRUMENTS	
Arizona's Instrument to Measure Standards (AIMS)	
RESEARCH TIME FRAME	
2004-05 School Year	

## SCHOOL IMPLEMENTATION PROGRESS

**Standards:** The Apache Junction School District has emphasized the use of technology as a meaningful part of the educational environment. The district focuses instruction on state standards and on meeting high school academic requirements as measured by the state's criterion reference tests. The district chose to implement PLATO® instructional courseware as part of a TRIAGE program to differentiate instruction and close skill gaps for at-risk high school students.

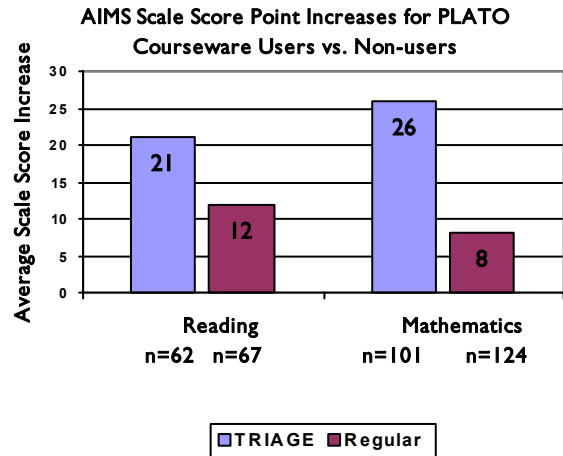
**Curriculum and Instruction:** Instruction was targeted for at-risk eleventh-grade students who were grouped and rank ordered for differentiated instruction. There were three reading group levels and five math group levels. Students were assigned to classrooms of twenty four students where class was taught by a certified elementary school teacher and one instructional aid. Each classroom was also equipped with 12 student computers and one teacher computer station. Students received the TRIAGE intervention two hours each day using PLATO® instructional courseware and worked on identified skill gaps. The TRIAGE program also used a variety of other reading and mathematics programs to support individual student learning.

**Assessment/Evaluation:** Student progress was monitored by performance on school assessments and program success was measured by level assessment results on Arizona’s Instrument to Measure Standards (AIMS) test in the spring.

**Professional Development:** Professional Development sessions were centered around the training of master elementary school teachers who ran the TRIAGE program at Apache Junction High School so that the instructional focus would be on foundational skill development through an aligned curriculum. Much of the support from the PLATO® Educational Consultant was in aligning the PLATO® courseware to district and school reading and mathematics curricula and to Arizona’s Instrument to Measure Standards (AIMS).

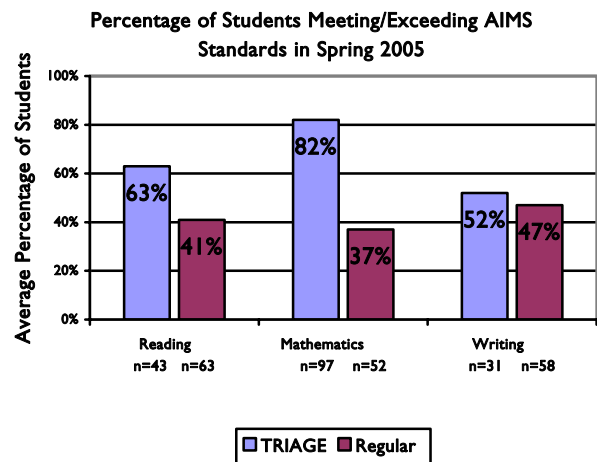
## Scale score gains larger for students using PLATO® instructional courseware

When the spring 2004 and fall 2004 scores on Arizona’s Instrument to Measure Standards (AIMS) were examined, low-risk eleventh-grade students, who used the PLATO® courseware as part of the TRIAGE program in the Apache Junction Unified School District, made average scale score gains of 21 in Reading in contrast to an average scale score gain of 12 points in Reading made by their eleventh-grade counterparts (Regular) not using PLATO® instructional courseware. Eleventh-grade students using PLATO® mathematics courseware made an average scale score increase of 26 points, while their non-user eleventh-grade counterparts made a scale score increase of 8 points. A scale score of 500 or higher is required to pass the AIMS test.



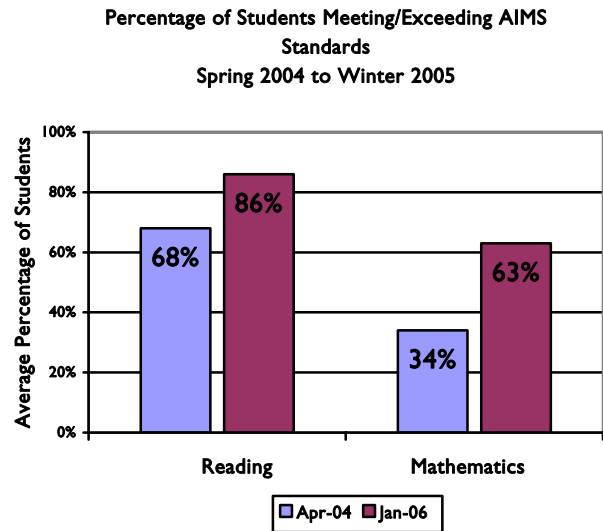
## Percentage of students meeting designated standards higher among students using PLATO® instructional courseware

When the spring 2005 scores on Arizona’s Instrument to Measure Standards (AIMS) test were examined for eleventh-grade students participating in the TRIAGE program that used the PLATO® instructional courseware, 63% met or exceeded the AIMS Reading assessment levels, 82% met or exceeded the AIMS Math assessment levels, and 52% met or exceeded the AIMS Writing assessment levels. For the eleventh-grade student not participating in the TRIAGE program (Regular), 41% met or exceeded the AIMS Reading assessment levels, 37% met or exceeded the AIMS Mathematics Assessment levels, and 47% met or exceeded the AIMS Writing assessment levels. A scale score of 674 or higher is required to pass the AIMS test.



## Percentage of students meeting AIMS standards increased after nine weeks of using PLATO® instructional software

After nine weeks of participating in the *TRIAGE* program in the Apache Junction Unified School District using PLATO® instructional courseware, the number of eleventh-grade students meeting or exceeding proficiency on Arizona's Instrument to Measure Standards (AIMS) for Reading rose from 68% to 86% when the spring 2004 and winter 2005 AIMS scores were compared. In Mathematics, the number of eleventh-grade students who met or exceeded the AIMS assessment levels rose from 34% to 63%. A scale score of 500 is required to pass the AIMS test.



### Apache Junction Unified School District

Apache Junction Unified School District is in the East Valley suburb of Phoenix, Arizona. The vision for the district is “KIDS FIRST” and is the basis of all their instructional decisions. The district believes that improved student achievement leads to improved self-esteem.

After a careful examination of student scores on the spring 2004 Arizona's Instrument to Measure Standards (AIMS), the Apache Junction School District determined that 40% of the class of 2006 would not be able to pass the AIMS test which was a graduation requirement. The district embarked on an aggressive three-year program called *TRIAGE* to address the skill gaps of their at-risk eleventh-grade students.

The basis of the *TRIAGE* program was differentiated instruction. Eleventh-grade students with AIMS scores in the “Falls Far Below” category were selected for participation. Students were enrolled in the *TRIAGE* reading and math classes or in both subject classes. The classes were held during two instructional hour-blocks each day. Each of the participating classrooms was equipped with 12 student computers and one teacher computer. The classes were taught by master elementary school teachers. The teachers had access to a “toolbox” which included leveled texts, a test-item bank, and PLATO® instructional courseware in reading and mathematics.

The students who were identified for participation in the *TRIAGE* program were rank ordered and then placed in three groups for reading and five groups for mathematics. The range of reading scores allowed for larger groups. Mathematics scores required a wider distribution of skill groups. Each day the students rotated through simultaneous direct instruction, computer time and silent study. Each classroom also had an instructional aid to assist students.

Professional development began with the district's Academy which included sessions to instruct teachers in differentiated instruction and how to make data driven decisions to guide instruction. The district decided to use elementary teachers to teach in the *TRIAGE* program since they were more skilled at addressing specific foundational skill development. Each teacher attended the Academy and was then trained in the use of PLATO® educational software and used continuous assessment results to tailor instruction. The PLATO® Educational Consultant was instrumental in aligning the courseware to state and district standards. Since the *TRIAGE* program will be a three-year program, selected high school teachers will be trained in differentiated

teaching methods and paid to assist in the *TRIAGE* classrooms during their “prep” times in order to gain experience in grouping and providing instruction by learning levels.

The Apache Junction Unified School District believes that the use of PLATO® instructional courseware in their *TRIAGE* program has directly contributed to improved student performance. They believe that the built-in motivational components in the software improve student performance and raise self-esteem. Some of the participating instructors have remarked that students are “motivated to learn for the first time and that they are experiencing academic success.....for many for the first time.” The district attributes much of the success to the comprehensive instructional software and support provided by PLATO® Learning, Inc.



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