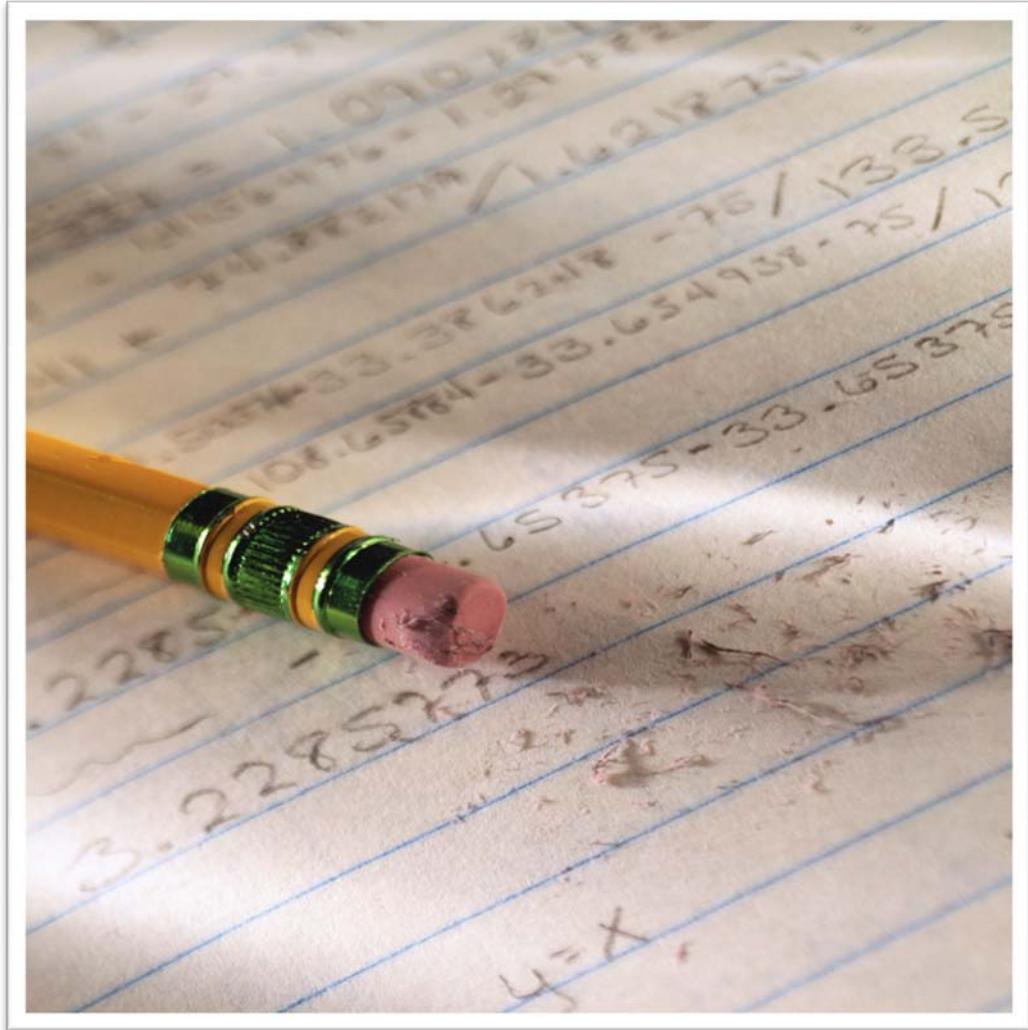


**TUTORING INCENTIVE PROGRAM
AT EASTSIDE MEMORIAL HIGH SCHOOL,
SPRING 2009**



Austin Independent School District
Department of Program Evaluation

June 2009

08.42

EXECUTIVE SUMMARY

The Tutoring Incentive Program (TIP) provided through Austin Community College District (ACC) focused on providing support for 9th-grade students enrolled in Algebra I at Eastside Memorial High School. One hundred fifteen 9th-grade students were enrolled in Algebra I, and a total of 16 students participated in TIP during the spring semester. A program evaluation was conducted to assess the TIP students' academic progress.

MAJOR FINDINGS

- Student recruitment and retention in the program were challenging, with only 16 of all students recruited choosing to participate in the program. Nine of those participated in the program from beginning to end.
- Student attendance rates ranged between 60% and 100%, with a mean attendance rate of 79.7%. Sixty-four percent of all absences were unexcused.
- Compared with the control group, significantly greater percentages of TIP students passed each grading period, passed their final exams, and earned credit for the course.
- TIP students with higher numbers of participation hours earned significantly higher final exam scores, compared with TIP students who completed lower numbers of hours.
- TIP students with an attendance rate above the mean earned significantly higher final exam scores and had a higher mean semester grade, compared with those who had an attendance rate below the mean.
- In the spring semester, the TIP participants who participated throughout the semester had higher passing averages and mean course grades compared with the fall semester.
- Although passing rates were low for both student groups, a higher percentage of TIP participants passed the Texas Assessment of Knowledge and Skills (TAKS) math test, and their mean scale score differed significantly from that of the control group.
- On a program survey, students reported they liked the program and believed the program helped improve their confidence and math skills.

RECOMMENDATIONS

- Continue the program with modifications in implementation.
- Modify student recruitment strategies to enlist support from the classroom teacher.
- Revise the student selection process to better identify students who would be promising candidates for the program.
- Use campus staff to facilitate the program to capitalize on the relationships and resources within the school.
- Explore alternative incentives for student participation to increase student participation.

PROGRAM DESCRIPTION

The Tutoring Incentive Program (TIP) provided through Austin Community College District (ACC) focused on providing support for 9th-grade students enrolled in Algebra I at Eastside Memorial High School. TIP provided additional algebra instruction aligned with the course curriculum and assisted students in completing homework assignments. Mirroring the course activities, TIP also provided Texas Assessment of Knowledge and Skills (TAKS) test preparation 2 weeks prior to the test. The program was piloted and designed to serve 20 students in Spring 2009.

The program developed a firm attendance policy to increase the outcomes for participants. Students were required to attend 3 days a week: Tuesdays, Thursdays, and Saturdays, with the exception of Spring Break, the Saturday before Easter, and the Tuesday and Thursday of TAKS testing. The students were required to participate fully in the tutoring session to receive a daily attendance credit. Students were not to exceed five unexcused absences from the program across the semester.

If students met participation requirements, they were compensated for their time. At the end of each 6-week grading period, program staff totaled the student participation hours and paid students \$6.00 per hour of participation. Students received their compensation on a Visa gift card at the end of each grading period.

One hundred fifteen 9th-grade students were enrolled in Algebra I at Eastside Memorial High School in January 2009. From these students, the district's Department of Program Evaluation (DPE) staff randomly selected twenty 9th-grade Algebra I students attending Eastside Memorial High School to participate in TIP. DPE staff provided program staff with the list of randomly selected participants ($n = 20$) and selected alternate participants to be invited if the originally selected students chose not to participate ($n = 70$).

School staff personally invited and provided program information to 75 students, 83% of all eligible students, based on the order in which they appeared on the student list (copies of information forms are provided in the appendices). Program staff documented non-participation reasons for 48 students. Other after-school commitments; student lack of follow through; and unmet program prerequisites (i.e., school attendance and discipline) were identified as the primary reasons students who were listed as prospective participants did not elect to take part (Table 1).

Table 1. Student Reasons for Non-Participation in TIP, Spring 2009

	Ineligible: Absences, discipline, or no longer enrolled	Sports	Said yes: Failed to return program forms	Other responsibilities: Childcare or work	Declined without reason given
# of students	19	9	8	7	5

Source. Program participation records, June 9, 2009

Of those invited, a total of 16 students completed the enrollment process and participated during the spring semester, and 9 participated throughout the whole semester. Eleven other students completed the program enrollment process; however, those students either did not show up to participate or only participated in one or two sessions. Thus, they were not considered to be program participants in this study.

Total operating costs for the program were \$18,569.01 for the spring semester. These costs included salaries, student incentives, and supplies. The cost per student calculated for all 16 TIP participants was \$1,160.56. Program cost (i.e., including only the 9 students who completed the program from beginning to end) was calculated as \$2,063.22 per student.

METHODS

PURPOSE OF THE EVALUATION

The Austin Independent School District's (AISD) DPE conducted this evaluation of TIP to provide information for decision makers about continuing program implementation and to facilitate decisions for program modification or improvement.

EVALUATION QUESTIONS

The following questions guided the evaluation of TIP:

- What were the course grade outcomes for the 9th-grade Algebra I students participating in TIP at Eastside Memorial High School?
- How did TIP participants perform in Algebra I, compared with other 9th-grade Algebra I students who did not participate in the program?

DATA COLLECTION AND ANALYSIS

Quantitative data pertaining to clearly defined performance measures were collected to assess the students' progress toward program goals. These data included program attendance, course grades for each grading period, final exam scores, and TAKS scores.

To determine the outcomes for TIP participants, district DPE staff developed an evaluation plan to compare the outcomes for TIP participants with those of their peers. From the population of 9th-grade Algebra I students at Eastside, DPE staff randomly selected a control

group of students ($n = 25$) who were not to be invited to participate in the program, in addition to randomly selecting students for participation. To ensure the participant and control groups were comparable, all students were enrolled in a class designated as Algebra 1 regular, and equal numbers of males and females were selected. No special education or pre-advanced placement (Pre-AP) class sections were considered.

DPE staff used descriptive and inferential statistics to describe the outcomes for program participants, compared with outcomes for the randomly selected control group. Descriptive statistics were used to summarize outcomes for each group. Two sample t -tests were conducted to determine if statistical differences existed between the two groups' mean scores on each variable.

LIMITATIONS

This study is subject to limitations. Even though students were invited to participate based on random assignment, they ultimately decided whether or not to participate in the program. This self-selection bias makes it difficult to determine program effects because additional factors may have affected the students' grades. The small sample size (i.e., less than 30) also reduced the precision of the statistical procedures. Therefore, the results of this study should be interpreted with caution.

RESULTS

PROGRAM ATTENDANCE DESCRIPTION

Student participation was examined and found to be variable throughout the program. During the spring semester, a total of 16 students participated in TIP. Fourteen students started on or before the fifth 6-week grading period (between February 10th and 26th), and 2 students started at the beginning of the sixth 6-week grading period (April 21st). Of the 14 students who started at the beginning of the program, 9 (64%) completed the program at the end of May. During the program, 5 students withdrew at varying points in the semester.

Participant attendance varied throughout the semester. Accounting for individual beginning and ending dates, student attendance rates ranged between 60% and 100%. The mean attendance rate for all participants ($n = 16$) was 79.7%, and the median attendance rate was 78.1%. Students ($n = 12$) who were participating in the program at the end of the year had an average attendance rate of 84.5%. Student absences were explained by a variety of circumstances, including illness, school activities, and unexplained reasons. Sixty-four percent of all absences were reported as unexcused. Three students were withdrawn based on the number of their unexcused absences exceeding program attendance requirements.

The variation in the duration or consistency of student participation resulted in differing levels of program support received by the students. Participants received between 16.5 and 70.0 hours of tutoring. Participants received an overall average of 45.0 hours of tutoring. The median number of tutoring hours was 49.0.

ACADEMIC OUTCOMES

Algebra I passing rates, final exam scores, and course grade averages were compared for the TIP participants and the control group for each grading period in the spring semester. The percentages of students passing each 6-week grading period, their final exam scores, and their course averages varied across the semester for both student groups (Table 2). Before the program began, both student groups were passing at similar rates in the fourth 6-week grading period. Compared with the control group, significantly greater percentages of TIP students passed during the fifth 6-week grading period (which marked the first full grading period for program participation); passed their final exams; and passed their Algebra I course.

Table 2. Students Passing Algebra I, by Grading Period, Spring 2009

	4 th 6-weeks		5 th 6-weeks		6 th 6-weeks		Final exam		Average	
	#	%	#	%	#	%	#	%	#	%
Control group	20	85%	20	70%	20	85%	20	20%	20	60%
TIP participants: Per grading period	16	81%	14	100%*	14	100%*	14	64%*	16	81%*
TIP participants: Full program	9	78%	9	100%*	9	100%*	9	78%*	9	89%*

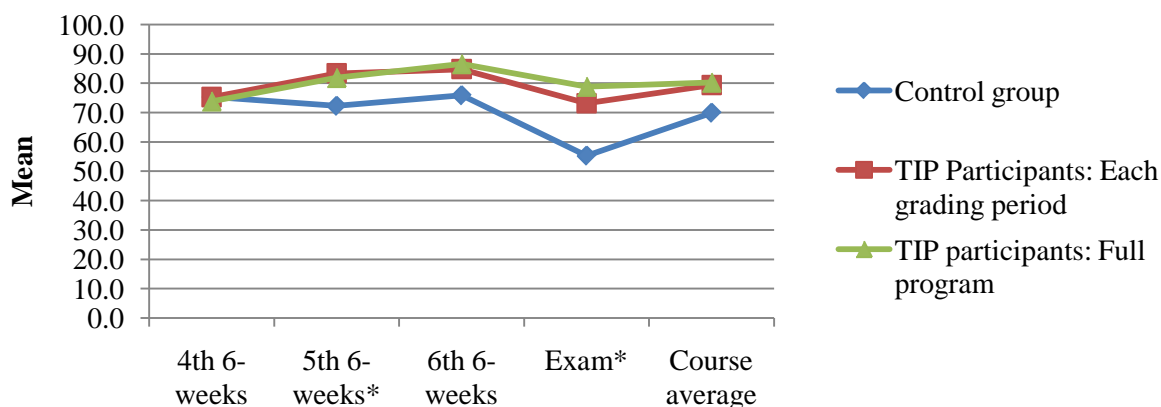
Source. District student enrollment and course grade files, June 9, 2009

Note. Note. The 4th 6-week grading period provides a baseline measure for the spring semester, since students did not start the program until the latter part of the 4th 6-week grading period (February 10, 2009). Students were considered passing if they earned an average of 70 or better in the class.

* Indicates significant difference, $p < .05$

When the course grade averages were compared, TIP participants had consistently higher mean scores throughout the semester than did the control group (Figure 1). Significant differences were found between both groups of TIP participants and the control group in the fifth 6-week grading period and on the final exams.

Figure 1. Algebra I Mean Course Grades, Spring 2009



Source. District student enrollment and course grade files, June 9, 2009

* Indicates significant difference, $p < .05$

Within the TIP participant group, students experienced varying outcomes based on the total number of hours they participated in the program (Table 3). Students with high participation levels, measured by the total number of hours in which they were tutored, earned significantly higher final exam scores, compared with students who completed a medium or low number of tutoring hours. When the overall course average was examined, students who had a high number of hours of participation and students who had a medium number of hours had similar course passing averages. A significant difference was found between the students with high levels of participation and students with low levels of participation.

Table 3. Algebra I Mean Course Grades, by Number of TIP Tutoring Hours, Spring 2009

	n	Final exam	Course average
High (70–48 hours)	8	79*	80*
Medium (47–24 hours)	<5	59	78
Low (<23 hours)	<5	60	68

Source. District student enrollment and course grade files, June 9, 2009

Note. Students had to attend at least half of a tutoring session to get credit for their daily participation; however, they were compensated by the hour. Thus, the analysis examined course outcomes by hours of participation.

* Indicates significant difference, $p < .05$

Because the total number of program participation hours was accrued based on the variable length of time the students participated in the program, and expectations for attendance were high, the program attendance rates also were examined (Table 4). In this analysis,

participants were divided into two groups, indicating an attendance rate above and below the group mean (79.7%). Students with an attendance rate above the mean earned significantly higher final exam scores, compared with those who had an attendance rate below the mean. Participants with higher program attendance rates also had a higher mean semester grade.

Table 4. Algebra I Mean Course Grades, by TIP Attendance Rate, Spring 2009

	n	Final exam	Course average
Program attendance rate >79%	7	80*	82
Program attendance rate <79%	9	63	74

Source. District student enrollment and course grade files, June 9, 2009.

Note. Attendance rates were calculated based on the total number of days a student was enrolled in the program and the actual days they attended.

* Indicates significant difference, $p < .05$

Considering student commitment may influence the program attendance rates and duration of participation, course outcomes also were examined for the 9 students who participated in the program from beginning to end in the spring semester. In the spring semester, the students generally had higher passing averages and mean course grades compared with the previous semester. In some cases, the percentages of students passing their final exam and the mean course grades were significantly different between the semesters.

Table 5. Algebra I Passing Rates and Mean Course Grades for TIP Full program Participants by Semester, 2008-2009 School Year

	1st 6-weeks		2nd 6-weeks		3rd 6-weeks		Final Exam		Course Average	
Fall 2008 (n=9)	%		%		%		%		%	
	Passing	Mean	Passing	Mean	Passing	Mean	Passing	Mean	Passing	Mean
	56%	69.1	67%	79.1	78%	76.8	45%	71	67%	74.2
Spring 2009 (n=9)	4th 6-weeks		5th 6-weeks		6th 6-weeks		Final Exam		Course Average	
	%		%		%		%		%	
	Passing	Mean	Passing	Mean	Passing	Mean	Passing	Mean	Passing	Mean
	78%	73.9	100%	81.9	100%	86.6	78%*	78.9	89%	80.3*

Source. District student enrollment and course grade files, June 9, 2009.

Note. The 4th 6-week grading period provides a baseline measure for the spring semester, since students did not start the program until the latter part of the 4th 6-week grading period (February 10, 2009).

* Indicates significant difference, $p < .05$.

TIP was not designed to be a tutoring program to help student pass the TAKS; however, tutors spent a small portion of time helping participants prepare for the exam. The test preparation tutoring covered material from the Algebra I course and other material that may have been presented on the test because the 9th grade TAKS math test does not cover solely Algebra I content. Although passing rates were low for both student groups, a higher percentage of TIP

participants than control group students passed the TAKS math test, and their mean scale score differed significantly from that of the control group (Table 6).

Table 6. Summary of TAKS Math Test Outcomes, Spring 2009

	Met math passing standard	Mean scale score
Control group (n = 17)	29.40%	1997
TIP participants (n = 15)	33.30%	2039*

Source. District TAKS test files, June 9, 2009

* Indicates significant difference, $p < .05$

STUDENT SURVEY RESULTS

Program participants were asked to complete a short program survey to determine their perceptions of program outcomes (Table 7). Students reported they liked the program and believed the program helped improve their confidence and math skills. All students reported they would participate in another tutoring program paying incentive money. However, only 61.6% of the respondents reported they would participate in a tutoring program that did not pay incentive money. Students also explained their reasons for participating in the tutoring program. Most of the students wanted to improve their math skills (92.3%) and to get paid incentive money (84.6%). A few students provided additional reasons indicating they liked to learn and thought the tutors were fun.

Table 7. Summary of TIP Tutoring Program Survey Results, May 2009

	Strongly agree	Agree	Disagree	Strongly disagree
I liked going to the TIP math tutoring sessions.	61.50%	38.50%	0%	0%
TIP tutoring helped improve my math skills.	61.50%	38.50%	0%	0%
I feel more confident in my math skills now than I did at the beginning of the semester.	61.50%	38.50%	0%	0%
The tutors explained the material to me in a clear and helpful way.	75.00%	25.00%	0%	0%
I would participate again in a math tutoring program that pays incentive money.	75.00%	25.00%	0%	0%
I would participate in math tutoring program that does not pay incentive money.	23.10%	38.50%	30.80%	7.70%
I decided to participate in the tutoring program because I wanted to.....(choose all that apply)	Response percentage			
get paid incentive money.	84.6%			
improve my math skills.	92.3%			

	Strongly agree	Agree	Disagree	Strongly disagree
I decided to participate in the tutoring program because I wanted to.....(choose all that apply)	Response percentage			
improve my Algebra I course grade.	76.9%			
socialize with other students in the program.	38.5%			
satisfy my parent or guardian since he/she wanted me to participate.	46.2%			
work with college tutors.	53.8%			

Source. TIP Student Survey administered by DPE, May 2009

Note. Thirteen students completed the survey.

DISCUSSION

Program records and follow-up discussions with program staff revealed areas for consideration in the student recruitment process. Because the pilot program offered incentives and could only accommodate 20 students, students were randomly ordered on a list to ensure the program provided fair opportunities for student participation. Program staff reported challenges in recruiting students in this manner. This process was time consuming for program staff and may not have appropriately targeted students who were likely to be interested or need the help. On the other hand, the personal invitation extended to students was thought to be appreciated and to increase the likelihood students would consider participating.

It is important to note the program was coordinated and facilitated by an ACC employee who was not a regular member of the high school staff. Program records and campus staff reports revealed the TIP coordinator worked diligently and meticulously to recruit and retain students in the program and provide quality tutoring services. However, the coordinator did not have the benefit of established relationships with the teachers and students from which to draw in her work. This may have influenced the amount of teacher support in the student recruitment process and students' decisions to participate.

The program staff experienced challenges in student recruitment and retention. Twenty-one percent of all students recruited chose to participate in the program. Of the students participating, 31% (5 of 16) withdrew before the end of the program. To address these challenges, students were recruited into the program at the start of each grading period. Although only five unexcused absences per semester were allowed, no limits were placed on the total number of excused absences.

Overall enrollment, attendance, and retention form a complex issue in the context of this incentivized program. The students who were committed to the program attended regularly and experienced positive results. Program participants at the end of the semester reported they

wanted to improve their math skills (92.3%) and identified the incentive as being an important factor in their decision to participate (84.6%). Other students reported a variety of reasons for their non-participation, their absences during the program, and their reasons for withdrawing from the program. However, the role the incentive money played in the students' decisions is unclear. Other factors may have been equally or more important in student decision making.

The tutoring program appeared to be well aligned with the scope and sequence of the Algebra I course. The program coordinator met regularly with the Algebra I teachers to review course content. Each week, the program coordinator developed lessons and activities to supplement the students' class assignments. During tutoring sessions, first priority was placed on completing assignments from the classroom teacher. After those assignments had been completed, students participated in activities supporting their mathematics skill development and proficiency. The alignment of program activities with classroom content and the focus on completing classroom assignments also may have contributed to the success of TIP students, compared with non-participants. More information should be gathered about the tutoring curriculum and its possible influence on student academic performance.

CONCLUSIONS AND RECOMMENDATIONS

The program results are encouraging. TIP participants often had more positive outcomes than did their peers. TIP participants who had higher participation levels had better outcomes, compared with the participants with lower levels of participation. The participants seemed to like the program. However, the results are qualified by the small number of students who participated and by the fact that the students decided whether or not to participate in the program and to what degree.

Given the challenges in program implementation and the limitations of the study, recommendations are provided for consideration.

- *Continue the program with modifications in implementation.* Academic support for students enrolled in Algebra I is a continuing need, and program results were promising. Efforts should be made to improve program operations and offer opportunities for additional groups of students.
- *Modify student recruitment strategies to enlist support from the classroom teacher.* Eliminate the random selection process and provide more flexibility in the student recruitment process. Allow program staff to visit math classrooms to provide information about the program. After the initial visit by the program staff, teachers should follow up with individual students who might be promising candidates for the program. Teachers should provide a list of students who are in need of or interested in the program to the

program coordinator. The program coordinator should, in turn, contact students on the lists provided by teachers to discuss the program in greater detail.

- *Revise student selection process.* The modification of student recruitment strategies might generate too many students for the program to support. Should space availability become an issue, students could be selected through a lottery process, drawing from completed applications, or students could be served on a first-come, first-served basis.
- *Use campus staff to facilitate the program.* The program coordinator should be a member of the campus staff to capitalize on the relationships and resources within the school. If this is not possible, the school should provide a stipend for a faculty member or administrator to assist the ACC coordinator with program recruitment and student/teacher outreach throughout the semester.
- *Explore alternative incentives for student participation.* Program survey results indicate program participants valued the incentive money provided for their attendance. However, it is unclear how most students, including non- and former participants, perceived the incentive. A slightly higher pay threshold or other incentives might have a greater influence on whether students choose to participate or on the degree to which they participate.

APPENDICES



February 2, 2009

Important Announcement

Dear _____ & Parents,

The Tutoring Incentive Program—a collaboration with Eastside Memorial High School, Austin Community College, and the former Mayor of Austin, Bruce Todd—is a free math tutoring program being offered this semester on our campus. You have been selected to take advantage of this valuable program designed to enhance your math skills and improve your academic progress in your current Algebra class.

This fun and interactive tutoring program is designed to offer individualized and small group tutoring with a well-qualified tutor as well as successful study techniques, test-taking strategies, problem-solving skills, and other academic skills. **The tutoring sessions are scheduled Tuesdays and Thursdays from 4:15-5:45pm and Saturdays from 9am-12 noon in Room 108. Tutoring begins Tuesday, February 10th.**

In addition to improving your math skills and performance, you will also receive \$6 per hour of participation in the after school and Saturday tutoring sessions. Based upon your attendance and passing grade performance in your math class, you will be provided a Visa debit card that will be loaded at the end of each six-week grading period. Why not take advantage of this program to increase your opportunities for academic success!

If you would like to participate, you and your parents will need to complete the attached *Student Commitment* and return to: **Ms. Beverly Stringer by Wednesday, February 4.**

If you have additional questions, please feel free to contact Ms. Stringer at 414-5810.

Sincerely,

Dr. David Kernwein
Principal

Student Commitment

ACC/AISD Tutoring Incentive Program

Student's Name (please print) _____

Congratulations on your decision to attend and participate in the Tutoring Incentive Program! To be successful, your commitment to this program is very important. You will work at your own level in a small group with a tutor.

I hereby make the commitment to improve my math academic skills in a positive way.

Conditions

1. I will attend and fully participate in all scheduled tutoring sessions.
2. I will comply with all campus school policies including the directions and requests made of me by my tutors.
3. I will maintain a 90% attendance rate for all of my classes throughout each six-week period.
4. If an emergency situation arises, I will get an excused absence from the high school.
5. I have my parent's permission and approval of the provided Visa debit card.

Tutoring Schedule

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		4:15-5:45pm Room 108		4:15-5:45pm Room 108		9am - 12 noon Room 108

I understand that **if I miss more than five (5) tutoring sessions during the semester**, I will lose the privilege of continuing in the program.

I have read and agree to my commitment as specified above.

STUDENT'S SIGNATURE

DATE

PARENT'S SIGNATURE/PERMISSION

DATE



February 4, 2009

Tutoring Incentive Program Update

Dear _____ & Parents,

Congratulations! You have turned in the necessary paperwork and are officially accepted into the Tutoring Incentive Program. The tutors from Austin Community College look forward to working with you this semester to develop your math skills. Just to remind you, the tutoring schedule is:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		4:15-5:45pm Room 108		4:15-5:45pm Room 108		9am - 12 noon Room 108

Please come prepared with a pencil, your notebook and math class assignments.

Also, remember that in order to receive \$6/hour for the tutoring you must comply with the program's conditions for the ENTIRE six-week grading period. At the end of each grading period you will receive a Visa debit card loaded with the money for the hours of tutoring you completed.

Conditions:

1. I will attend and fully participate in all scheduled tutoring sessions.
2. I will comply with all campus school policies including the directions and requests made of me by my tutors.
3. I will maintain a 90% attendance rate for all of my classes throughout each six-week period.
4. If an emergency situation arises, I will get an excused absence from the high school.
5. I have my parent's permission and approval of the provided Visa debit card.

If you have any questions, please feel free to contact Ms. Beverly Stringer at 414-5810.

Thank you for participating in this new and exciting tutoring program!

Sincerely,

Dr. David Kernwein

AUSTIN INDEPENDENT SCHOOL DISTRICT

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