# **Preliminary Analysis of Touchpoint Connection**

# **Amphitheater High School, Year 1 (2008-09)**

### Pre and post program

Key indicators for the participants in Touchpoint Connection were compared for Semester II of the previous year (2007-08) and Semester II after the program was initiated (2008-09). The key indicators that the program aimed to influence were the number of discipline referrals, grades and school attendance.

Another report will compare the group of participating students (the treatment group) with a comparison group on the same indicators.

## **Demographics**

Thirty-two students participated in the first year of the program at Amphitheater High School (AHS). Almost two-thirds of the participants were girls: 21 girls (65.6%) and 11 boys (34.4%). The largest percentage of participants were Hispanic (13, 40.6%), followed by white non-Hispanic (10, 31.3%). See the table below:

Table 1. Student Ethnicity

	Number of	
	participants	Percent
Asian/Pacific Islander	2	6.2
Black	6	18.8
Hispanic	13	40.6
Native American	1	3.1
White	10	31.3
Total	32	100.0

Half of the participants (16, 50%) were in Grade 9 in 2008-09, followed by participants in Grade 10 (9, 28.1%). See the table below:

Table 2. Student Grade Level in 2008-09

	Number of	
	participants	Percent
Grade 9	16	50.0
Grade 10	9	28.1
Grade 11	6	18.8
Grade 12	1	3.1
Total	32	100.0

### **Changes in key indicators**

The key indicators of student success were the number of discipline referrals, grades, and attendance. Program goals were to decrease the number of discipline referrals and the absence rate, and increase the grade average.

Semester II of each year was selected to compare program effects because the first coachstudent pairs were not set up until mid-November 2008.

Discipline referrals were counted each semester with no attempt to distinguish categories.

A grade average was calculated by weighting each A, B, C and D. Grades of Passing/Not passing and No Credit were omitted. This calculation is for the purpose of this study and is not the same as the official school Grade Point Average.

Absence rate was calculated by dividing the number of absences each semester by the number of attendance days during which the student was enrolled.

#### Global measures

Program effects in the first year were generally negligible. Discipline referrals and grades did not change in the expected direction. Only attendance improved as hoped, and that improvement was slight. See the table below:

Table 3. Program Effects for All Students

	Semester I	Semester II 2007-08		Semester II 2008-09	
	Mean	SD	Mean	SD	Change
Discipline referrals	3.41	5.05	8.94	8.37	5.53
Grade average	2.03	0.80	1.66	0.86	-0.38
Absence rate	0.12	0.09	0.08	0.10	-0.04

The data were analyzed in various ways to investigate why discipline referrals increased and grades dropped after starting the coaching program. High and low program dosage, coaching style and student grade level were looked at to see what patterns emerged. As seen below, student grade level seemed to be the most important factor influencing the results.

# Program dosage

Students had from 1 to 19 meetings with their coach. The median number of meetings was 4.5, so the group was divided into *Low* (1-4 meetings) and *High* (5-19 meetings) groups with 16 members each.

Results for the two groups were similar to each other and to the whole-group results above, but counter to what might be expected, the indicators for the Low dosage group were more positive than for the High dosage group. Possible explanations might be that

these students realized they needed to reach out to their coach more, or that they sought more meetings to get out of other school obligations. See the table below:

Table 4. Effects of Program Dosage

		Semester II 2007-08		Semester II 2008-09		
		Mean	SD	Mean	SD	Change
Discipline referrals	Low	2.13	4.23	7.44	7.86	5.31
	High	4.69	5.59	10.44	8.85	5.75
Grade average	Low	2.33	0.68	2.01	0.89	-0.32
	High	1.78	0.84	1.37	0.73	-0.41
Absence rate	Low	0.14	0.11	0.09	0.10	-0.05
	High	0.11	0.07	0.08	0.10	-0.03

*Note*. N= 16 Low, 16 High.

### **Coaching style**

Three trainers with different coaching styles trained the 26 coaches. To see if one coaching style was more effective than another, students were grouped according to the trainer of the coach with whom they were matched

The group sizes were too small for conclusions to be drawn, and no clear patterns emerged. All groups showed an increase in discipline referrals and a decrease in grade average. The only group to show improved attendance was the group coached with Blankenship's style.

Table 5. Effects of Coaching Style

		Semester II 2007-08		Semester II 2008-09		
		Mean	SD	Mean	SD	Change
Discipline referrals	Blankenship	4.80	6.41	10.07	9.77	5.27
	Gall	3.22	4.06	7.44	6.52	4.22
	Updegraff	1.00	1.07	8.50	8.09	7.50
Grade average	Blankenship	1.89	0.94	1.79	0.69	-0.10
	Gall	2.41	0.56	1.93	1.09	-0.48
	Updegraff	1.85	0.67	1.06	0.83	-0.79
Absence rate	Blankenship	0.15	0.10	0.04	0.05	-0.11
	Gall	0.09	0.06	0.12	0.14	0.03
	Updegraff	0.11	0.06	0.12	0.10	0.01

*Note.* N= 15 Blankenship, 9 Gall, 8 Updegraff.

#### **Grade level**

Half of the students were freshmen, a grade level often considered turbulent as students adjust to high school and adolescence. Students were grouped as Grade 9 or Grades 10-12, with 16 members each. There were too few students in Grades 10-12 for further breakdown. There was a pronounced difference between freshmen and non-freshmen on the indicators.

Grade 9 students had showed few discipline referrals (mean 1.13) the previous spring, but in Semester II of Grade 9 they had more (mean 9.50) than the students in other grades (mean 8.38). This was an average increase of 8.37 discipline referrals more than in Grade 8. Grade 10-12 students had an increase of 2.69 more than the previous year.

The decline in grades was also more marked for the freshmen: their average grade the year before was higher (2.42) than that of students in other grades (1.70), but decreased more (-0.62 points, compared to Grade 10-12 students' decline of -0.17 points).

Both groups improved in attendance, but the improvement was more marked for the Grade 10-12 students.

Possible explanations for these differences might be that the transition from middle school to high school is particularly difficult for some students; that the Grade 9 students identified as benefitting from coaching were selected in a different way than the other students; or that middle schools tend to be easy on Grade 8 students.

Table 6. Effects of Grade Level

		Semester II 2007-08		Semester II 2008-09		
		Mean	SD	Mean	SD	Change
Discipline referrals	Grade 9	1.13	1.50	9.50	8.34	8.37
	Grades 10-12	5.69	6.27	8.38	8.64	2.69
Grade average	Grade 9	2.42	0.52	1.80	0.82	-0.62
-	Grades 10-12	1.70	0.87	1.53	0.90	-0.17
Absence rate	Grade 9	0.09	0.08	0.08	0.09	-0.01
	Grades 10-12	0.15	0.09	0.09	0.11	-0.06

*Note*. N= 16 Grade 9, 16 Grades 10-12.

# **Further analysis**

With only one semester of implementation and some students' having only met one time with their coach, these results are not surprising. In addition, the small population size limits breakdown into groups to determine differential effects, for example, how dosage interacts with grade level. Further analysis is needed to determine what patterns emerge in the second year and if the same patterns hold for the comparison group and for the larger group of participants in 2009-10.