

TouchPoint Connection 2007-11

Amphitheater High School, Tucson AZ

Initial Analyses of Data through December, 2010

After two years of implementation of the TouchPoint Connection coaching program at Amphitheater High School (Amphi High), possible program effects can be compared for participating and nonparticipating students. This report covers only data available through school records and some implementation data from TouchPoint. It does not cover the process of implementation or any student or coach feedback.

Student records were first researched for the initial group of 32 participating students and 57 others invited to participate in 2008-09. For these students, the outcomes of attendance, grades and discipline referrals the previous school year (2007-08) were tracked. Additional students were invited to participate the following year (2009-10), bringing the participants to 59 including 7 from the previous year's participants and 8 from the nonparticipants. Non-participating invitees in 2009-10 were 56, including those who had been invited the previous year. This analysis includes only the students invited or participating in 2008-09 and 2009-10 and continues tracking these students through 2010-11 if they are still enrolled; it does not cover any new participants from 2010-11.

A preliminary analysis comparing the treatment group pre and post-treatment in spring 2009 found little difference in attendance, grades and discipline referrals. However, the program had only one semester of operation, so this result was not unexpected.

Student Demographics

Students invited to participate were roughly representative of the distribution of ethnic groups at Amphi High in 2009-10:

Demographics of Participants and Nonparticipants

Ethnic group	Number	Percent	Amphi High Percent
Asian	3	2	6
Black	15	12	7
Hispanic	65	54	59
Indian/Native American	5	4	3
White	33	27	25
Total	121	100	100

Note. Ethnic classification was not readily available for 14 students of the total of 135. Percentages may not add up to 100 because of rounding

More girls than boys were invited:

Gender of Participants and Nonparticipants

Gender	Number	Percent
Female	78	57.8
Male	57	42.2
Total	135	100.0

As seen in the table below, most of the students invited – participants and nonparticipants – were in Grade 9 in 2008-09. By 2010-11 this cohort was in Grade 11. Of the 135 invitees, 51 had graduated or left the school by 2010-11.

Distribution of Grades of Participants and Nonparticipants

Grade	2007-08		2008-09		2009-10		2010-11	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
--	105	77.8	5	3.7	19	14.1	51	37.8
8	14	10.4	13	9.6	0	0.0	0	0.0
9	9	6.7	82	60.7	16	11.9	0	0.0
10	6	4.4	20	14.8	76	56.3	14	10.4
11	1	0.7	13	9.6	13	9.6	58	43.0
12	0	0.0	2	1.5	11	8.1	12	8.9
Total	135	100.0	135	100.0	135	100.0	135	100.0

Note. A dash indicates students who were not enrolled or not tracked for discipline, grades and attendance for that school year. Percentages may not add up to 100 because of rounding.

Participants and Nonparticipants

As seen in the table below, the number of participants nearly doubled in the second year of TouchPoint coaching. Some students each year were not tracked for outcomes because they were not enrolled in the school, or because they had not yet been invited to participate.

Each year some students from the list were not enrolled at Amphi High and so are indicated with a dash for that year. In addition, students who in 2008-09 had not yet been invited to participate are indicated with a dash. Students who were enrolled for only part of the year are counted as enrolled for the year. One student from the participant group in 2009-10 had been misclassified as a nonparticipant in the previous analysis, and some students thought to be nonparticipants turned out not to have been enrolled. In addition, two students in 2009-10 who signed up for the program did not meet with their assigned coach, so were re-assigned to the nonparticipant group for this study. The table below shows the participation by year:

Distribution of Participants and Nonparticipants

Group	2008-09		2009-10		2010-11	
	Number	Percent	Number	Percent	Number	Percent
--	46	34.1	20	14.8	51	37.8
Nonparticipants	57	42.2	56	41.5	66	48.9
Participants	32	23.7	59	43.7	18	13.3
Total	135	100.0	135	100.0	135	100.0

Note. A dash indicates students who were not enrolled or not tracked for discipline, grades and attendance for that school year. Percentages may not add up to 100 because of rounding.

2008-09 Cohort

In 2008-09, 26 coaches met with the 32 participating students between November and April. One coach met with 3 students and three met with 2 students each. The number of meetings was from 1 to 19, with an average of 4. Students with 4 or fewer meetings with their coach were classified as getting a Low dosage, and those with 5 or more meetings were classified as having a High dosage. These dosage levels were compared to the nonparticipating group to identify any differential effects.

Baseline data from 2007-08 was gathered for participants but not for the nonparticipants.

Demographics

A higher proportion of girls than boys decided to participate:

Gender Distribution

	Nonparticipants		Participants	
	Number	Percent	Number	Percent
Female	25	43.9	21	65.6
Male	32	56.1	11	34.4
Total	57	100.0	32	100.0

Note. A dash indicates no gender was reported. Percentages may not add up to 100 because of rounding.

Outcomes

Expected outcomes of the coaching program were reduced discipline referrals, improved grades and improved attendance.

Discipline referrals

Discipline referrals were counted each quarter with no attempt to distinguish categories. Each disciplinary consequence (reprimand, short term suspension, long term suspension, etc.) was counted as a single “discipline referral”, although multiple infractions may have occurred in a single event. The table below tracks the rate of discipline referrals for nonparticipants and participants with high and low program dosages each quarter. The quarterly rate is the sum of all discipline referrals (total referrals) divided by the number of students in the group enrolled for the quarter.

Discipline referrals peaked for all students in the second, third and fourth quarter of 2008-09, when over 60% of the students were in Grade 9. All groups show a marked decrease in referrals the following fall and a further decrease in 2010-11, when 51 (37.8%) of the group were no longer enrolled, and 58 (43%) were in Grade 11. Another possible explanation is that school policies were applied more rigorously in the last half of 2008-09, resulting in more referrals school-wide.

Enrollment the following year was checked for the 10 students of all groups who had the highest number of referrals (12 or more) at the peak (Quarter 4 of 2008-09) to see if the decrease the following fall was due to some of these students leaving school. However, all of them were enrolled for at least a partial year in 2009-10.

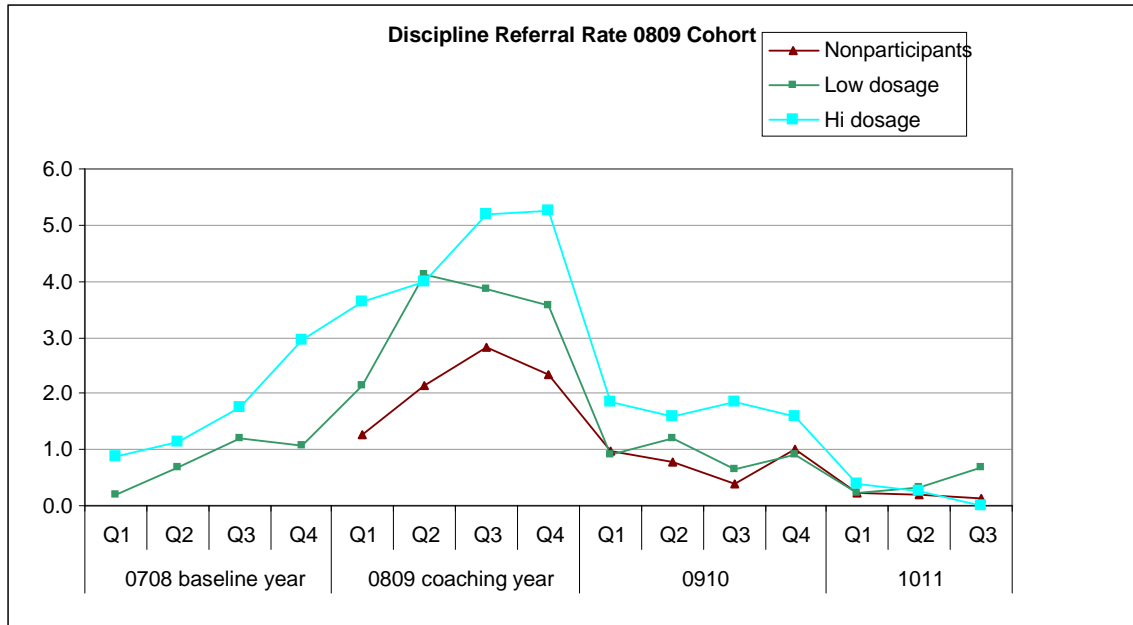
Participants showed a higher referral rate at almost every quarter, and high-dosage students had a higher rate than low-dosage students. Data from 2007-08 show that the high-dosage students had a higher discipline referral even then than the low-dosage group. This suggests that the difference in rates is due to pre-existing differences in the groups.

The table below presents the total number of referrals each quarter and the per-person rate of referral.

Discipline Referrals and Quarterly Rate for 2008-09 Participants and Nonparticipants

School Year	Group	N	Q1		Q2		Q3		Q4		Avg. Rate
			Total Ref.	Rate	Total Ref.	Rate	Total Ref.	Rate	Total Ref.	Rate	
2007-08 baseline	Nonparticipants	--	--	--	--	--	--	--	--	--	--
	Low dosage	15	3	0.2	10	0.7	18	1.2	16	1.1	0.8
	Hi dosage	16	14	0.9	18	1.1	28	1.8	47	2.9	1.7
2008-09 coaching	Nonparticipants	55	69	1.3	118	2.1	150	2.8	121	2.3	2.1
	Low dosage	16	34	2.1	66	4.1	62	3.9	57	3.6	3.4
	Hi dosage	16	58	3.6	64	4.0	83	5.2	84	5.3	4.5
2009-10	Nonparticipants	51	49	1.0	38	0.8	18	0.4	41	1.0	0.8
	Low dosage	11	10	0.9	12	1.2	7	0.6	9	0.9	0.9
	Hi dosage	6	11	1.8	8	1.6	11	1.8	8	1.6	1.7
2010-11	Nonparticipants	27	6	0.2	5	0.2	3	0.1			0.2
	Low dosage	9	2	0.2	2	0.3	4	0.7			0.4
	Hi dosage	5	2	0.4	1	0.3	0	0.0			0.2

Note. N is the maximum number of students in the group during the school year.



Grades

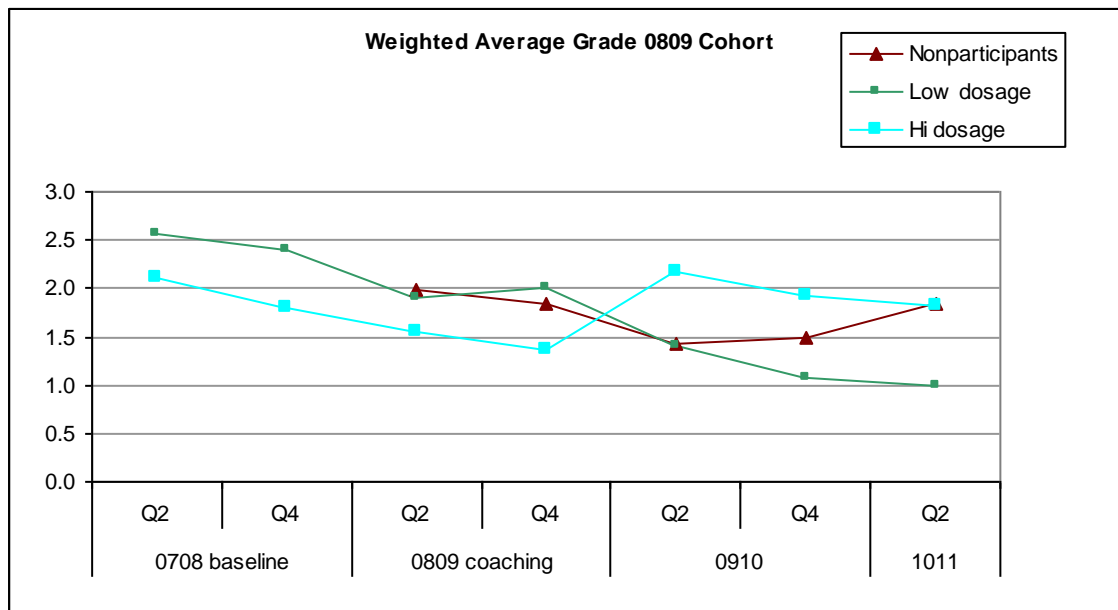
A grade average was calculated by weighting each A, B, C and D. Grades of Passing/Not passing and No Credit were omitted. This calculation is for the purpose of this study and is not the same as the official school Grade Point Average. High school grades were reported only for the semester (Quarters 2 and 4), although middle school and the alternative school (grades 6-12) reported grades quarterly. This report shows only Quarters 2 and 4 because the other quarters had too few students to be meaningful.

High-dosage students started with lower grades at baseline and during the coaching year than the other two groups, but then raised their grades the following year (2009-10). Low-dosage students saw a steady decrease in grades. Nonparticipants initially followed a pattern very similar to the low-dosage group, but then raised their grades in 2010-11.

These data suggest that coaching effects are seen in grades the following year.

Average Grades for 2008-09 Participants and Nonparticipants

School Year	Group	Q2	Q4	Average
2007-08	Nonparticipants	--	--	--
	Low dosage	2.56	2.40	2.48
	Hi dosage	2.12	1.80	1.96
2008-09	Nonparticipants	1.99	1.85	1.92
	Low dosage	1.90	2.01	1.96
	Hi dosage	1.55	1.37	1.46
2009-10	Nonparticipants	1.42	1.49	1.45
	Low dosage	1.40	1.07	1.24
	Hi dosage	2.18	1.93	2.05
2010-11	Nonparticipants			1.85
	Low dosage			1.00
	Hi dosage			1.82



Absences

The absence rate is calculated by dividing the number of absences by the number of days a student was enrolled during that quarter. Students frequently were enrolled for only part of the year, so the number of participants, nonparticipants and non-enrolled students changed quarterly.

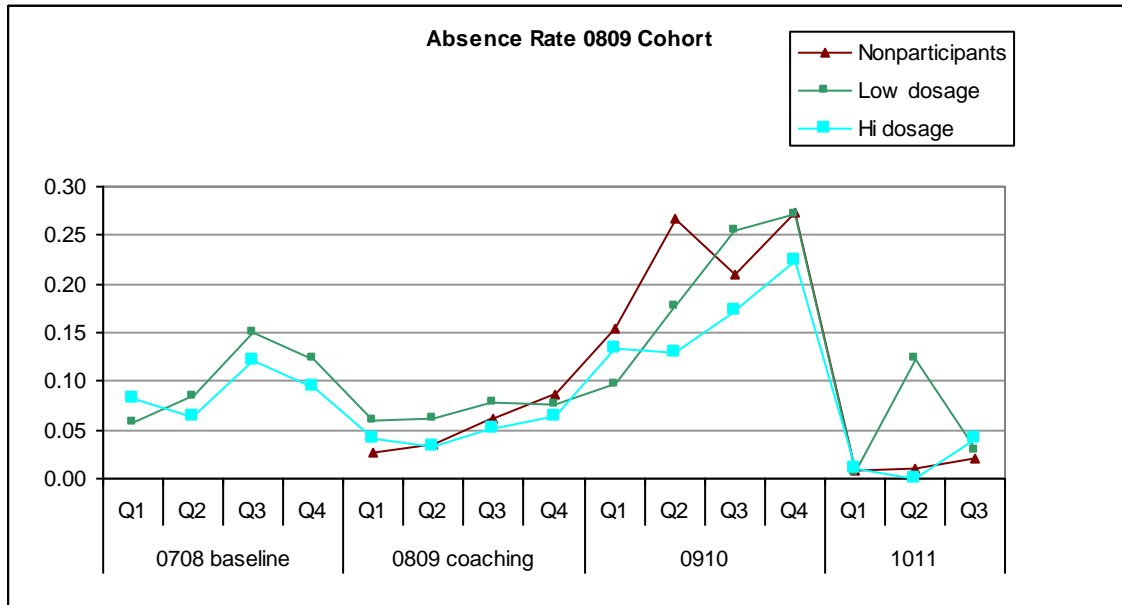
Absences for all groups increased over the course of each school year and peaked in the last quarter of 2009-10, although nonparticipants had a second peak of absences in the second quarter that year. Over 65% of the students in the study and enrolled that year

were sophomores and had just finished the AIMS exit exam for high school. This may explain the peak.

High-dosage students generally had fewer absences than the other groups. This trend began in the baseline year, suggesting that the program had little effect on absences for these students.

Absence Rate for 2008-09 Participants and Nonparticipants

School year	Group	Q1	Q2	Q3	Q4	Average
2007-08	Nonparticipants	--	--	--	--	--
	Low dosage	0.06	0.08	0.15	0.12	0.10
	Hi dosage	0.08	0.06	0.12	0.10	0.09
2008-09	Nonparticipants	0.03	0.03	0.06	0.09	0.05
	Low dosage	0.06	0.06	0.08	0.08	0.07
	Hi dosage	0.04	0.03	0.05	0.06	0.05
2009-10	Nonparticipants	0.15	0.27	0.21	0.27	0.23
	Low dosage	0.10	0.18	0.26	0.27	0.20
	Hi dosage	0.13	0.13	0.17	0.22	0.17
2010-11	Nonparticipants	0.01	0.01	0.02		0.01
	Low dosage	0.01	0.12	0.03		0.05
	Hi dosage	0.01	0.00	0.04		0.02



2009-10 Cohort

In 2009-10, 7 of the 2008-09 participants continued, and 8 of the new participants had been in the nonparticipant group the previous year. The number of newly-invited students who decided to participate was 44.

Students met with their coach from 1 to 17 times during the school year. As mentioned above, two students who decided to participate did not meet with their coaches, and so were re-classified as nonparticipants. The number of coaches participating was 61; 4 of these met with 3 different students, and 12 met with 2. The low-dosage group met 4 times or fewer (28 students) and the high-dosage group met 5 times or more (31 students).

Demographics

In 2009-10 the proportion of girls in the participant group remained similar to the previous year, at about 65%. In contrast, the nonparticipants were about equally split between boys and girls.

Gender Distribution

	Nonparticipants		Participants	
	Number	Percent	Number	Percent
Female	29	51.8	38	64.4
Male	27	48.2	21	35.6
Total	56	100.0	59	100.0

Note. A dash indicates no gender was reported. Percentages may not add up to 100 because of rounding.

Outcomes

Discipline referrals

Participants and nonparticipants in the 2009-10 cohort were tracked from their baseline year of 2008-09 through 2010.

As with the 2008-09 cohort of students, this group showed a similar spike in discipline referrals in the last two quarters of 2008-09, although the spikes are not as high as in the first group. The spike is again followed by a notable decrease in referrals the following fall.

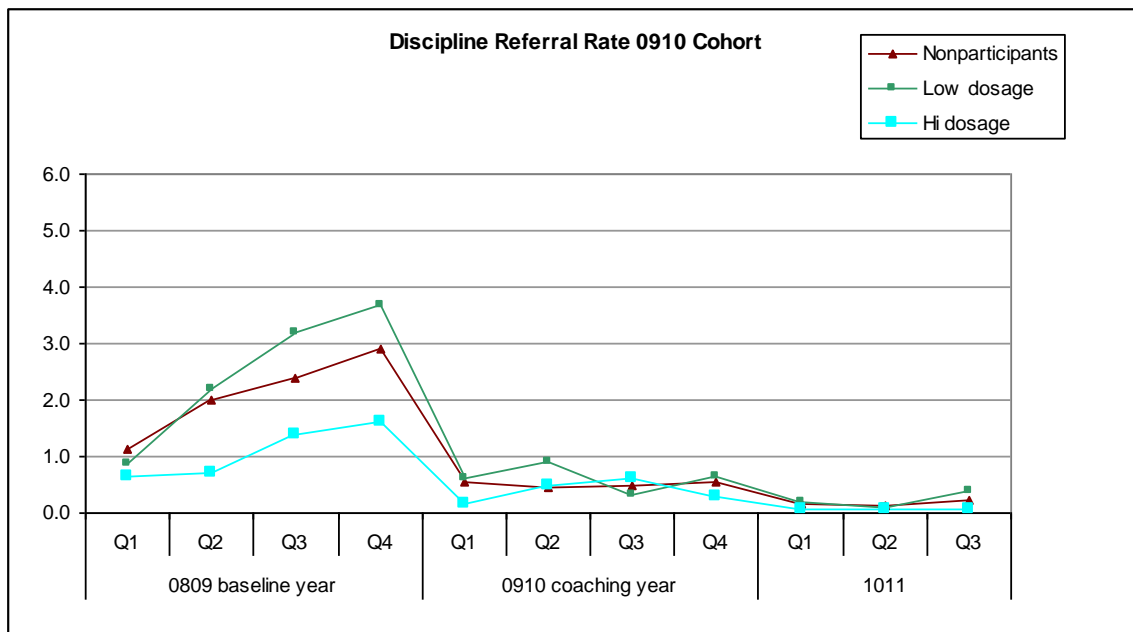
Here the high-dosage group continued its baseline tendency to have fewer referrals than the other two groups during almost every quarter. The low-dosage group seemed the most volatile, while the nonparticipating students had a steady rate during 2009-10 and decreased again in 2010-11.

The similarity of patterns with the 2008-09 cohort and the tendency of each group to maintain its relative position suggest that factors other than the coaching program are affecting the discipline referrals.

Discipline Referrals and Quarterly Rate for 2009-10 Participants and Nonparticipants

School year	Group	N	Q1		Q2		Q3		Q4		Avg. Rate
			Total Ref.	Rate	Total Ref.	Rate	Total Ref.	Rate	Total Ref.	Rate	
2008-09 baseline	Nonparticipants	62	70	1.1	125	2.0	149	2.4	180	2.9	2.1
	Low dosage	26	23	0.9	57	2.2	83	3.2	96	3.7	2.5
	Hi dosage	25	16	0.6	18	0.7	35	1.4	40	1.6	1.1
2009-10 coaching	Nonparticipants	64	35	0.6	29	0.5	31	0.5	35	0.6	0.5
	Low dosage	28	17	0.6	24	0.9	8	0.3	17	0.7	0.6
	Hi dosage	31	5	0.2	15	0.5	19	0.6	8	0.3	0.4
2010-11	Nonparticipants	64	11	0.2	7	0.1	11	0.2			0.2
	Low dosage	24	5	0.2	2	0.1	8	0.4			0.2
	Hi dosage	27	2	0.1	2	0.1	2	0.1			0.1

Note. N is maximum number of students for the year; may vary per quarter.



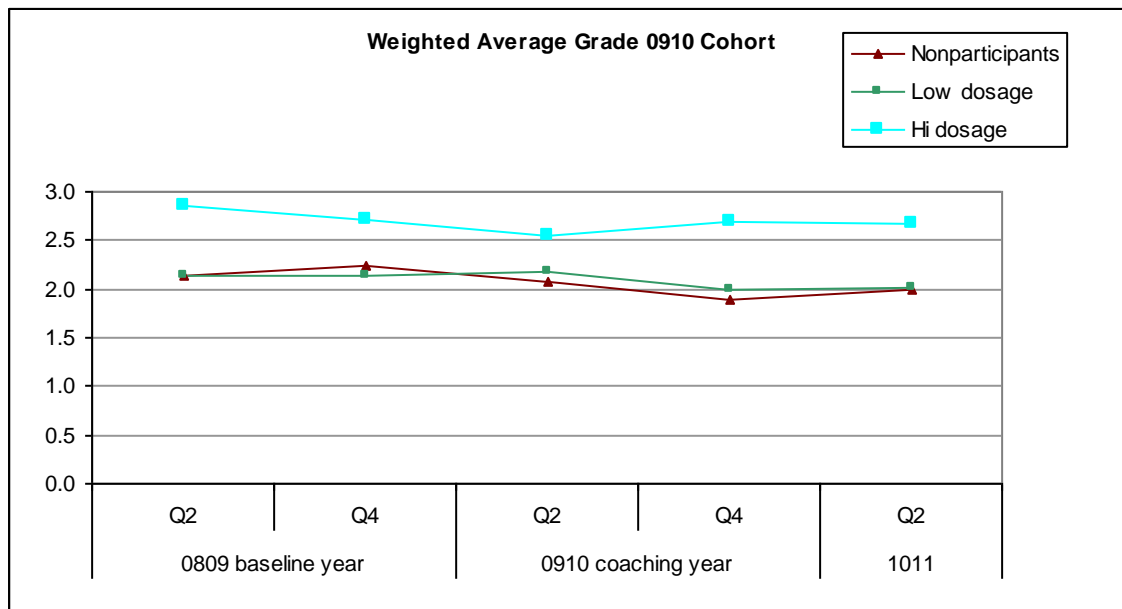
Grades

The 2009-10 low-dosage and nonparticipant groups had very similar average grades from baseline through the first semester of 2010-11. This was also similar to low-dosage and nonparticipant groups in 2008-09, which were very close until nonparticipants increased their grades in the spring of 2009-10. The low-dosage group continued to decrease.

In contrast, the high-dosage group in 2009-10 shows consistently higher grades than the other groups -- a very different pattern from the high-dosage group in 2008-09.

Average Grades for 2009-10 Participants and Nonparticipants

School year	Group	Q2	Q4	Average
2008-09 baseline	Nonparticipants	2.14	2.23	2.19
	Low dosage	2.13	2.13	2.13
	Hi dosage	2.85	2.71	2.78
2009-10 coaching	Nonparticipants	2.07	1.90	1.98
	Low dosage	2.18	1.99	2.09
	Hi dosage	2.55	2.69	2.62
2010-11	Nonparticipants	1.99		1.99
	Low dosage	2.01		2.01
	Hi dosage	2.67		2.67

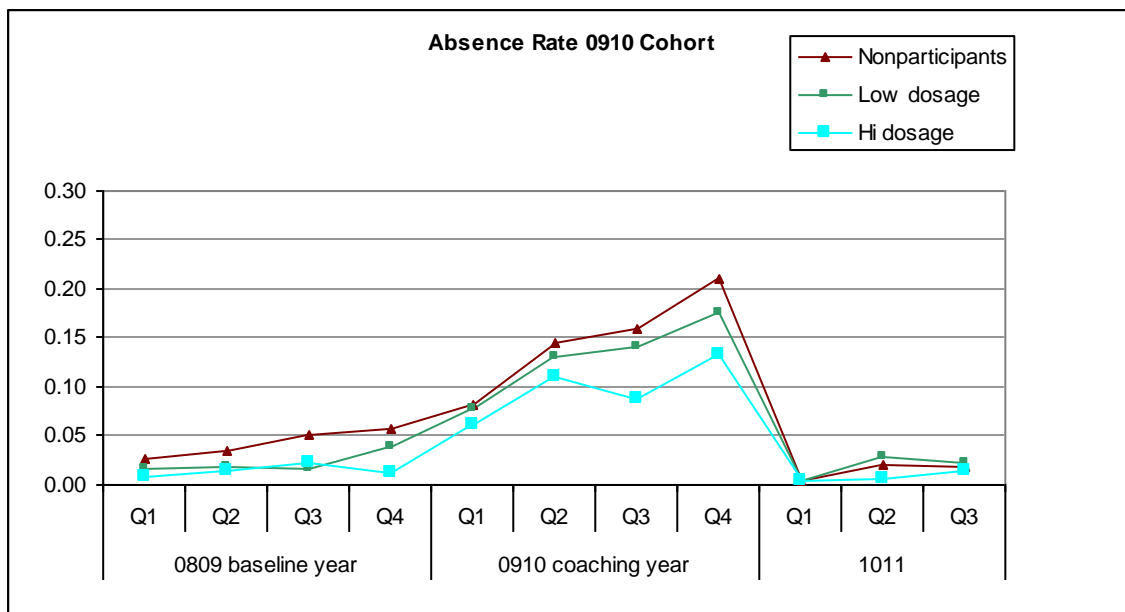


Absences

The absence rate for 2009-10 shows a similar pattern for all groups, with the nonparticipants having the highest rate of absences at almost all points and the high-dosage group the lowest. The steadily rising absences during 2009-10 leading to a marked peak in the last quarter and a sharp decline the following fall is also very similar to the pattern of the 2008-09 cohort.

Absence Rate for 2009-10 Participants and Nonparticipants

School year	Group	Q1	Q2	Q3	Q4	Average
2008-09 baseline	Nonparticipants	0.03	0.03	0.05	0.06	0.04
	Low dosage	0.02	0.02	0.02	0.04	0.02
	Hi dosage	0.01	0.01	0.02	0.01	0.01
2009-10 coaching	Nonparticipants	0.08	0.15	0.16	0.21	0.15
	Low dosage	0.08	0.13	0.14	0.18	0.13
	Hi dosage	0.06	0.11	0.09	0.13	0.10
2010-11	Nonparticipants	0.00	0.02	0.02		0.01
	Low dosage	0.00	0.03	0.02		0.02
	Hi dosage	0.00	0.01	0.02		0.01



Observations

Distinguishing between high and low dosage for the participants showed that the low-dosage group was generally very similar to the non-participating group in both years. The difference between the high and low groups was more marked in the 2008-09 cohort. Between-group differences may be related to the process of invitation, self-selection to participate, and affinity between coach and student.

There was also a marked difference between the 2008-09 and 2009-10 groups, especially of outcomes for the high-dosage groups. Participants in 2009-10 had more favorable outcomes as compared both to nonparticipants and to participants in 2008-09. This may be an effect of changes in the selection of the invitees – perhaps the first group had more students at “greater risk” than the second cohort. Also the question of motivation is not explored here: did participants self-select and ask for more meetings because they felt

more need for help? Or did students decide not to participate because they felt they didn't need help, they didn't need that kind of help, or they were beyond help?

More girls than boys were invited, and almost two-thirds of the participants each year were girls. Are girls more often in the "somewhat at risk/unrealized potential" position than boys? Or are they more amenable to the idea of coaching? Participant and nonparticipant feedback may throw light on the gender differential. As more data are available, more nuanced interpretation will be possible.

Program effects are suggested by the increase in grades the following year of the 2008-09 high-dosage participants, but the other indicators follow the tendency established during baseline or to show little difference in pattern from the other groups.

All groups showed a peak in discipline referrals at the end of 2008-09. As mentioned above, this may be because a high number of students were in Grade 9, often a turbulent year, or enforcement of school policies may have gotten stricter. All groups also showed a peak in absences toward the end of 2009-10, possibly an effect of having taken the AIMS test, required of sophomores and of juniors and seniors who had not passed earlier.

Summary

Analysis of discipline referrals, grades and absences of two cohorts of Touchpoint participants and nonparticipants suggest that there are intrinsic differences in the groups that persist through coaching and follow-up. Participants with high and low program dosage showed different effects – low dosage students showed patterns of outcomes generally similar to the nonparticipants. High-dosage students showed generally more negative outcomes than the other groups in the 2008-09 cohort, and more positive outcomes in the 2009-10 cohort. A positive program effect on grades for the 2008-09 high-dosage group is suggested. Feedback from participants and nonparticipants may shed light on motivation. More nuanced analysis may show differential effects by gender, by coaching method and by grade level.