

Interview Survey of Grade 12 Students, Rick Hansen S.S. - All Year Long Math

Interviews of Grade 12 students at Rick Hansen S.S. were conducted on June 18 and 26, 2015 by Stan Taylor (interviewer). Students were surveyed regarding their recollections of Math and Phys. Ed. instruction in their Grade 9 school year. These students participated in a Peel DSB pilot program which offered math and physical education on alternate school days (A/B Schedule) within an otherwise Block Semester scheduled school.

The interviews on June 18th were conducted between 11:00 am to 1:00 pm in order to interact with students leaving and returning to the school on their lunch break. Interviews on June 26 were conducted between approx. 12:00 pm and 2 pm in order to interact with students who were attending to learn of final grades on the last day of the school year.

Students were asked, '**Now that you are graduating Grade 12, looking back to your Grade 9 experience regarding Math and Phys. Ed., do you believe you benefitted by having Math and Phys. Ed paired on alternate days throughout the school year?**' (Answers: Benefit or No Benefit)

The results are listed in the table below:

Student's Response	June 18/15		June 26/15		Totals	
		%		%		%
No Benefit	4	26.67%	5	38.46%	9	32.14%
Benefit	11	73.33%	8	61.54%	19	67.86%
Total Students	15		13		28	

Background Information

The interview process was as follows:

1. Pre-screening

The interview site was the public sidewalk along the south side of Dream Crest Rd., Mississauga in proximity to a wide walkway leading to an entrance to Rick Hansen S.S. The Students arriving to or departing from the school were asked if they were in Grade 12 and whether or not they had attended the school in their Grade 9 year. Only students responding in the affirmative were questioned further; referred to hereafter as Qualified Students .

2. Preamble to Survey Question

Once a qualified student was identified, the interviewer offered a brief introduction as being a parent within Peel advocating for math instruction all year long (Disclosure) .

The students were asked if they remembered that in their Grade 9 year they had received math and physical education on alternate days throughout the school year. Then the survey question above was posed and response recorded.

Comments:

There were no students that identified as being in Grade 12 that later refused to engage in the survey. Other students generally identified as being in other grades and walked off.

Surprisingly, three qualified students were unaware that Grade 9 Math and Phys. Ed. were no longer paired and lamented that current students were not able to have the same benefit.

A pair of qualified students (obviously close school friends) were stopped together and asked to respond to the survey question. One answered for Benefit, the other No Benefit. This sparked a short but lively debate among them; which appeared to continue as they walked off to get lunch.

From the Benefit group, positive comments included: slower pace, more time to do homework, more time to get help; also enjoyed Phys. Ed. throughout the year as opposed to Phys. Ed. in later years.

From the No Benefit group, negative comments were in two main camps. The first camp, felt they saw no benefit; math was not a problem for them; they didn't like Phys. Ed. The second camp, felt that there was too much math to remember for the yearend test. When asked to explain , they were asked "did they mean final exam or EQAO test". It was the EQAO Test that they remember dreading.

In my opinion, these EQAO Test comments again point to the failings of School Boards and the Ministry of Education in conducting this test. The EQAO Test should be an evaluation of the curriculum and its delivery to students and not the stress inducing exam it has become. Students should receive only a Pass or Fail notice and not a grade or grade range. Alternately, the EQAO mark should become the final grade that appears on their yearend report.

Notes on Randomness

Notes on biases affecting the randomness of student selection. The interviewer was required to make subjective assessments as to the age of students; at times very quickly since pedestrian traffic was heavy. Possible qualified students may have been missed while interviewing other students. The possibility of false qualified students exists, although this is considered to be unlikely. On June 18th, the qualified students were selected from the group (population) of students that are accustomed to leaving the school during lunch break and not from students inclined to remain indoors or on site. On June 26th, the selection process involved only those student motivated to come to the school to learn of their final grades.

The interviewer believes that the foregoing concerns listed did not unduly affect the randomness of selection process for qualified students. The reader is asked to consider the relative importance of whether higher or lower performing students are more or less likely to leave the school grounds during lunch break. Secondly, which students are more or less likely to come to the school for a early look at final marks.

Conclusions

The survey results indicate that a strong majority of students (67.86%) responded that they believed the paired Math and Phys. Ed. all year long had benefited them.

The sample size was 28 randomly selected students. This sample size exceeds to the minimum requirement for statistical significance as specified by the U.S. Military Standard - Acceptance Sampling protocol (U.S. Mil. Spec). The U.S. Mil. Spec. is an internationally recognized sampling protocol which is applicable to the acceptance or rejection (Yes or No) of randomly selected subjects or items. This protocol specifies a minimum sample size of the Square Root of the sample population plus one.

The current enrollment of Grade 12 students at Rick Hansen S.S. is 507 students. Therefore minimum samples size applicable to this survey equals 24 (i.e. $\sqrt{507} = 22.52 + 1 = 23.52$). The sample size of this survey of 28 exceeds the minimum of the U.S. Mil-Spec.

Stan Taylor, November 10, 2015