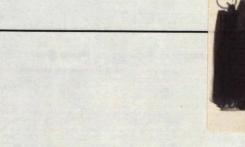
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# Industry, Science and Technology Canada Proprietary Report

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> Pepsi Street

PEPSI STREET BEAT WAVE IV

#### ISTC PROPRIETARY REPORT - PEPSI STREET BEAT WAVE IV

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Pepsi Street Beat is a national survey aimed exclusively at Canadians aged 12 to 19 years. Cosponsored by Pepsi-Cola Canada, YTV Canada, Inc., and the federal government departments of Health and Welfare, and Industry, Science and Technology, Pepsi Street Beat takes a comprehensive look at the lifestyles, attitudes, values and dreams of Canadian teenagers.

Pepsi Street Beat begins with a telephone survey of 1,500 teens across Canada. The sampling technique guarantees each teen in a household with a telephone an equal probability of being heard. The interviews for this, the fourth wave of Pepsi Street Beat, were conducted between May 20 and June 6, 1993. Extensive follow-up interviews were conducted by mail in the period of June and July, 1993. The sample size for the mail survey was 854 with confidence limits of ±3.35 percentage points, 19 times out of 20.

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## I. Introduction

Decima Research is pleased to present to Industry, Science and Technology Canada the results of their proprietary questions which were included on the mail portion of Pepsi Street Beat Wave IV — Decima's syndicated survey of Canadian teens.

## A. Pepsi Street Beat Overview

Pepsi Street Beat is a national survey aimed exclusively at Canadians aged 12 to 19 years. Co-sponsored by Pepsi-Cola Canada, YTV Canada, Inc., and the federal government departments of Health and Welfare Canada, and Industry, Science and Technology Canada, Pepsi Street Beat takes a comprehensive look at the lifestyles, attitudes, values and dreams of Canadian teenagers.

Pepsi Street Beat is a flexible study which can be tailored to meet the individual needs of its clients. With a portion of the survey being allotted to proprietary research, buyers have the option of developing their own questions or accessing information from the common data set. The use of tracking questions allows identification of important trends in the teen marketplace and changing behaviours as teens move toward adulthood.

## B. Pepsi Street Beat Methodology

Telephone interviews were conducted with 1,500 teens across Canada between May 20 and June 6, 1993. Using a random digit dialling process, the sampling technique guarantees each teen in a household with a telephone an equal probability of being heard.

Extensive follow-up interviews were conducted by mail in the period of June and July, 1993. The sample size for the mail survey was 854 with confidence limits of  $\pm 3.35$ , 19 times out of 20.

A complete and detailed explanation of Pepsi Street Beat sampling, field and tabulation procedures is outlined in the Technical Appendix — Survey Overview.

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# II. Teen Attitudes Towards Work, School & The Future

In order to place the specific questions regarding math and science in context, an overview of teen attitudes towards work, school, and the future is important.

## A. Problems, Stress and Worries

While teens continue to view drug and alcohol abuse as the major problem facing their generation, the proportion identifying this issue as the most important problem is down somewhat since last examined.

Table 1

Most Important Issue Facing Teens Today

	<u>1991</u>	<u> 1992</u>	<u> 1993</u>
	%	%	%
Drug abuse/Alcohol abuse/Smoking	39	40	34
AIDS/Safe sex/Teen pregnancy	8	15	13
School/Education/Drop-out rate	5	9	11
Unemployment/Economy/Taxes/Poverty	10	9	13
Peer pressure	7	6	8
The Environment	12	4	4
Violence/Gangs/Crime	2	3	4
Other	17	14	13

<sup>\*</sup> Unaided single mention

In this most recent wave of research, concern about unemployment has increased somewhat (from 9% in 1992 to 13%) and is now as likely to be identified as the top problem as issues related to sex. Furthermore, just over one-in-ten (11%) teens identify issues related to school and education as the dominant issue they face. Clearly, general concerns about education and eventual employment prospects are becoming of greater concern to teens.

Teens continue to report somewhat startling levels of pressure in their lives. In line with previous data, almost half (48%) of all teens report agreement with the view, "sometimes I feel so much pressure, I can't make it through the day." The majority of teens (61%) also report that they have at least "a fair amount" of stress in their daily lives (Table 2).

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Table 2
Reported Stress Level

	<u> 1993</u>
	%
A great deal	16
A fair amount	45
Not very much	34
None at all	3

Perhaps not surprisingly, stress levels are directly related to position in the educational system, with reported stress levels rising in direct relation to level within the educational system. Teens in elementary school levels are least inclined to report at least a fair amount of stress (51%), while those involved in post-secondary education are substantially more so inclined (73%). It should not be surprising, then, that the dominant source of stress identified by teens when asked what accounts for the stress in their lives is the broad issue of school and education. Almost half (44%) of teens report that the main cause of stress in their lives is attributable to school and the grades that they must achieve (Table 3).

Table 3
Causes Of Teen Stress\*

	<u>1993</u> %
School — Failing grades	44
Appearance — Face/Body	33
Relationships — Opposite sex	31
The Future	22
Money	16
Getting into university	15
Getting a job	13
Relationships — Friends	13

<sup>\*</sup> Column may not sum to 100% due to acceptance of three responses

Interestingly, while the plurality of teens (35%) continue to report that they turn to a best friend when they are worried and need to talk about their problems, the identification of a friend has declined since last measured in 1990 when more than four-in-ten (42%) identified such an individual (Table 4). A significant increase in self-identification is evident in this most recent sampling. Today, more than one-in-four teens report that they talk to "no one" and try to work out their problems on their own. The identification of one's self holds across all age cohorts, with 12 to 14 year olds (29%), 15 to 16 year olds (29%) and 17 to 19 year olds (25%) reporting similar responses.

Table 4
When You're Worried About Things That Stress You, Who
Do You Turn To First To Talk To About It?

	<u>1990</u> * %	<u>1993</u> %
Best friend	42	35
No one — I try to work it out on my own	18	28
Mother	. 16	15
Girlfriend/Boyfriend	12	10
Brother/Sister	5	6
Father	2	5
Other adult		1
Teacher/Guidance counsellor	2	0

<sup>\*</sup> Wording differs

### B. Education

In line with 1992 findings, teens in Canada report that, for the most part, they enjoy the school experience and are reasonably satisfied with the quality of education they are receiving. As Table 5 reveals, three-inten (31%) teens report that they like school "a lot" with an additional one-in-two (48%) reporting that they like it "a bit." A substantial majority (79%), continue to express at least some positive impression of their educational experience. There has been virtually no change in these responses since last examined in 1992.

Table 5 Overall, Would You Say That You Like(d) School		Table 6 Assessment Of The Quality C The Education System Today			
A lot	79 l a	31 լ	Excellent	7	7
A bit	2 } 81	<sub>48</sub> } 79	Good	58	53
Not much	12	14	Only fair	27	30
Not at all	7	8	Poor	6	10

However, there has been a slight decline in perceptions of the quality of the education system today (Table 6), although six-in-ten (60%) teens continue to possess a positive impression of the system in which they participate (compared to 65% in 1992).

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Having noted the positive findings, it is also important to note that a significant proportion of teens report either a negative school experience (22% reporting that they enjoy it "not much" or "not at all") or a negative assessment of the education system (40% describing it as "only fair" or "poor"). Furthermore, only seven percent of the teen population describes the education system as excellent.

As might be anticipated, the more likely a teen is to say that they like school, the more positive their assessment of the educational system. Seventy-nine percent of those who say they like school a lot consider the educational system good or excellent, while only 61 percent of those who say they like school a bit give that response. Clearly, there is not only a strong sense that room for improvement exists, there is also a tendency on the part of teens to blame the system for their dissatisfaction with their education.

As was noted last year, Canadian teens report highly ambitious educational goals for themselves. This ambitiousness holds in 1993 with more than eight-in-ten (82%) teens reporting that they plan to pursue a post-secondary education at either a college or university level (Table 7). In fact, almost two-thirds (64%) of teens anticipate completing at least one university degree (with 32% expecting to complete more than one university degree). Again, as noted in the 1992 report, some caution should be exercised in interpreting these data. It is unlikely that 32% of the population intends to complete a post-graduate degree at a university. It is likely that younger teens simply misunderstood the academic terminology. Nevertheless, the findings continue to be encouraging, with the overwhelming majority of the teen population expecting to complete post-secondary studies. These data suggest that today's teens are aware of the need for significant educational achievement for jobs in the future.

Table 7

Personal Educational Goals

	1992	1993
	%	%
Complete a university degree		32
Complete more than one university degree	_	32
Complete a college diploma	18	18
Complete high school	13	10
Complete technical school/apprenticeship training	7	8
Complete graduate studies	46	
Complete an undergraduate degree	14	_
Leave sometime before finishing high school	1	0

for more information on these issues see the Pepsi Street Beat Report: Citizen Teen

## C. Efficacy, Alienation, Trendsetters and Followers

In order to further the understanding of Street Beat data, a multi-variate analysis was used to allow various segmentations of the teen population. Reference to these segmentations will be made throughout the following analysis.

A factor analysis of attitudinal data reveals a strong correlation between responses to the issue propositions: I feel good about my future chances, I consider myself to be smart, I think it is important to plan your future and to know what you'll be doing ten years from now, and If you work hard and put your mind to it you can be anything you want. Based on this analysis, a Teen Efficacy segmentation was created (Figure 1).

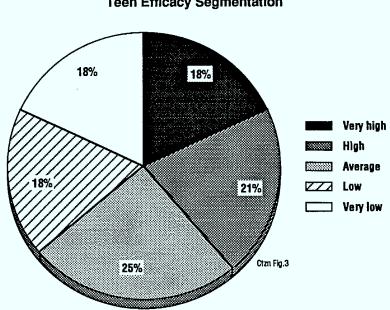


Figure 1
Teen Efficacy Segmentation

Over one-third (39%) of teens register as Self-confident Optimists on this scale, sure of themselves, in charge of their future (at least in their opinion). The Self-confident Optimists are more likely than average to identify drug/alcohol abuse/smoking as the top problem facing teens, and are less likely to identify either education/school pressures or finding a job/career/our future. They also tend to worry less about work and money than others on this scale.

As might be anticipated, teens registering highest on the Efficacy Scale are more positive than their counterparts about people their age have of getting the job they want. A dichotomy of attitudes towards school exists between either ends of this scale. Those highest on the scale are more likely to say they enjoy school, to be most positive in their assessments of the quality of the education system, and are most likely to anticipate completing more than one university degree.

A strong correlation also exists between the following issue propositions: My parent don't understand me, I want to raise my children differently from the way I have been raised. No on ever asks teens what they think, or if they do, they don't really listen to the answers, and Sometimes you just need to break the rules.

The Alienation Segmentation created based on this analysis shows one-fifth of the teen population registering about average scores and one-quarter registering below average.

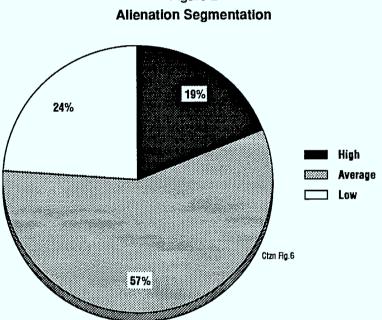


Figure 2

The least alienated teens are among the most likely to identify drug/alcohol abuse/smoking or educationrelated issues as the top problem facing teens today, while the Alienated Teen puts a higher than average emphasis on both AIDS/sex/teen pregnancy/STD and peer pressure as the top problems. Alienated teens also report a much higher level of stress in their lives than their less alienated counterparts. Alienated Teens worry about their appearance, relationships with the opposite sex, money and home issues more than other teens. The least alienated worry more about school-related and future issues.

Alienated teens are the most likely to turn to a best friend or, in fact, no one to help them deal with things they worry about, and are least likely to turn to a parent. They are among the least likely to say they like school and, predictably, are among the most negative in their evaluation of the quality of the education system. They are also less likely than average to anticipate completing a university degree.

Finally, in order to identify those teens who set the pace for their peers, a Tastemaker Segmentation has been created. This segmentation results in the breakdown of the teen population as illustrated in Figure 3 and a profile of these segments follows.

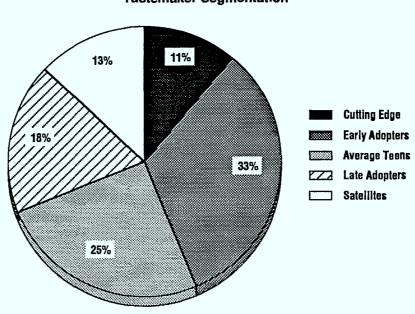


Figure 3
Tastemaker Segmentation

## **Cutting Edge (11%)**

- ➤ slightly older (46% 17 to 19 years compared to 37% nationally)
- ➤ more likely than average to identify jobs, career, future prospects as the top problem facing teens today, less likely than average to identify drug and alcohol abuse and smoking
- things worry about most (compared to national average):

•	Relationships with the opposite sex	40%/31%
•	School—grades/failing	33%/44%
•	Appearance — face/body	33%/33%
•	Work getting a job	24%/13%
•	The future	16%/22%
•	Money — having enough	7%/16%

- least likely to agree that they feel good about their future chances
- more inclined than average to describe themselves as smart
- most likely to agree that sometimes you need to break the rules
- > most likely to say that they want to raise their children differently than they were raised
- most likely to say that their parents don't understand them

#### **Cutting Edge (11%) continued**

- > most likely to register as Alienated Teens
- most likely to agree that it wouldn't be a problem if they found out their best friend was gay
- most likely to agree that they usually like things long before they become popular with everyone else
- > most likely to agree that once something becomes really popular, they are usually not into it any more
- least likely to agree that they don't want to look different from their friends
- least likely to agree that they don't like to stand out in a crowd
- most negative in their assessments of the quality of the education system

#### Early Adopters (33%)

- slightly older (41% 17 to 19 years compared to 37% nationally)
- more likely than average to identify jobs, career, future prospects as the top problem facing teens today, less likely than average to identify drug and alcohol abuse and smoking
- above average agreement that sometimes you need to break the rules
- ➤ register the highest scores on the *Teen Efficacy Scale*
- ➤ above average scores on the *Alienation Segmentation*
- report the highest level of stress in their lives of any of the Tastemaker Segments

### **Average Teens (25%)**

- most likely to neither agree nor disagree that it is important to plan for your future
- things worry about most (compared to national average)

•	School — grades/failing	40%/44%
•	Relationships with the opposite sex	34%/31%
•	Appearance — face/body	30%/33%
•	The future	26%/22%
•	Money — having enough	20%/16%
•	Work getting a job	7%/13%

- among the lowest scorers on the Teen Efficacy Segmentation
- most likely to be planning to complete more than one university degree
- least avid readers

#### Late Adopters (18%)

- ➤ the youngest segment (30% 12 to 13 years compared to 20% nationally)
- ➤ boys 55%/girls 45%
- ➤ most likely to identify drug and alcohol abuse and smoking as the top problem facing teens today, least likely to identify jobs, career, future prospects
- most likely to agree that they feel good about their future chances
- most likely to say that they consider themselves to be smart
- below average agreement that sometimes you need to break the rules
- > least likely to say that they want to raise their children differently than they were raised
- least likely to say that their parents don't understand them
- ➤ below average scores on the Alienation Segmentation
- most likely to agree that they don't like to stand out in a crowd

### Satellites (13%)

- ➤ girls 54%/boys 46%
- most likely to identify drug and alcohol abuse and smoking as the top problem facing teens today, least likely to identify jobs, career, future prospects
- things worry about most (compared to national average)

•	School — grades/failing	55%/44%
•	Appearance — face/body	36%/33%
•	Relationships with the opposite sex	24%/31%
•	The future	24%/22%
•	Money — having enough	16%/16%
•	Work getting a job	14%/13%

- least likely to agree that sometimes you need to break the rules
- least likely to register as Alienated Teens
- ➤ among the lowest scorers on the Teen Efficacy Segmentation
- least likely to consider themselves popular
- most likely to disagree that it wouldn't be a problem if they found out their best friend was gay
- most likely to agree that they don't want to look different from their friends

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### Satellites (13%) continued

- ➤ least likely to say that people often come to them for advice on what's new in music, fashion, etc.
- least likely to agree that they usually like things long before they become popular with everyone else
- ➤ least likely to agree that once something becomes really popular, they are usually not into it any more
- most positive in their assessments of the quality of the education system

# III. Parent Participation in Science & Math Studies

➤ Teens do not perceive a strong interest ("very interested") in their parents for science or math, although overall interest is higher for math (56%) than science (48%). Indeed, a significant percentage do not know their parents interest.

Table 8

Parental Interest In Science and Math

	<u>Science</u>	<u>Math</u>
	%	%
Very interested	13 35} 48	<sup>17</sup> <sub>39</sub> } 56
Somewhat interested	35 J 48	39 J 56
Not very interested	25	26
Not interested at all	8	6
Don't know	19	12

- ➤ Perceived parental interest in science is higher in the Prairies (50%) and in Ontario outside of Metropolitan Toronto (65%), and among teens 12 to 14 years of age (48%). Intensity of interest is highest among those with mothers who are employed in medium level service occupations (17%) or who are teachers (27%), or fathers who are professionals (20%) or teachers (32%).
- ➤ Metro Toronto (43%) and Atlantic Canada (39%) teens and those 17 to 19 years of age (48%) are less likely to believe that their parents are interested in science.
- ➤ Perceived parental interest in math is higher in Metro Toronto (65%), and among those who are 12 to 14 years of age (60%). Teens with parents who are professionals (mother 36%, father 23%) and those whose fathers are medium level office workers (23%) record the highest level of parent interest in math ("very interested").
- ➤ Quebec teens (50%), and, again, those who are older (17 to 19) or in post-secondary education (46%) say their parents are less interested in math.
- ➤ Teens who are higher on the Efficacy Scale (63%) or lower on the Alienation Scale (65%) report a higher level of interest from their parents in math than those at the opposite ends of the scales (46% and 55%). A similar pattern occurs on the Alienation Scale for parents' interest in science.
- ➤ Younger teens are least aware of their parents' interest.
- ➤ There are no significant differences between boys and girls.

Table 9

Parental Assistance on Specific School Subjects
(Aided — Multi-mention)

	Talk with <u>Parents</u> %	Help from <u>Parents</u> %	Rate of <u>Help</u> * %
Math	66	46	70
English	52	<b>3</b> 5	69
Science	37	22	59
Geography	23	14	58
Social Sciences	31	16	53
History	27	12	45
Chemistry	14	6	42
Physics	16	6	38
Biology	18	6	37
Never	21	38	_

<sup>\*</sup> The rate is calculated using the number who talk with their parents as the base.

- ➤ The majority of teens talk with (78%) and receive help from (61%) their parents. This is higher among those who are taking these subjects.
- ➤ Math and science are in the top three courses on the "rate of help" received from parents, although there is a significant gap between the two subjects in talking to parents and receiving help from them. This ordering coincides with the interest levels in these areas ascribed to parents.
- ➤ Table 10 presents differences in talking with and seeking help from parents by teen demographics.

Table 10

Demographic Variations In Teens Talking with and Seeking Help from Parents

	<u>Talk</u> %	Help %		Talk %	Help %
Education			Gender		
Elementary	87	82	Boys	74	56
Secondary	82	67	Girls	81	67
Post-secondary	68	35			
Language	•		Tastemaker Segment		
English	78	65	Cutting Edge	68	50
French	73	46	Late Adopter	88	71

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- ➤ Teens lower on the Alienation Scale are more likely to talk with their parents (88%) and receive help (75%) than those who are higher (66%/48%); similar trends are found on the Efficacy Scale.
- ➤ English teens are more likely to talk to their parents than French about science (41%/24%) and social sciences (35%/15%), but less about physics (14%/22%).

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# IV. Perceptions of the Importance of Science & Math to Future Success

➤ A higher percentage of teens believe that math will be important to their future success (86%) than science (75%), although the vast majority believe both are important.

Table 11

Perceived Importance of Science and Math to Future Success

	Science	Math
	%	%
Very important	39 36 } 75	<sup>59</sup> } 86
Somewhat important	36 J 15	27 ) 66
Not very important	20	7
Not important at all	6	2

Note: Percentages do not sum to 100% due to the exclusion of "no opinion."

- ➤ Perceived importance of both science and math decreases as education level increases.
- ➤ With the exception of teens in the ages 15 to 16 where girls are more likely than boys to say that science and math are important, in the older and younger age groups, boys are more likely than girls to say that they are both important to future success.
- ➤ Late Adopters (46%) are more likely to say that science is important, the Cutting Edge less so (32%); the same applies to math for the Cutting Edge.
- ➤ Teens lower on the Alienation Scale (45%) are more likely to say science (45%) and math (65%) are very important compared to those high on this scale (33% and 55%). Similarly those high on the Efficacy Scale are more likely to say science (49%) and math (66%) are very important compared to those low on the scale (25% and 49%).
- ➤ For most teens, perceptions of the importance of science is related to the importance of math.

Table 12

Correlation Between Perceived Importance of Science and Math

#### Importance of Studying Math Importance of Very Somewhat Not Very Not At All Studying Science % % Very important 53 19 5 0 Somewhat important 32 44 23 15 Not very important 12 29 55 31 Not at all important 8 17 53

Note: Percentages do not sum to 100% due to the exclusion of "no opinion."

➤ Parental role continues to be a key influence on teen attitudes. Assessments of the importance of math and science is correlated with parents' interest.

Table 13

Correlation Between Importance and Parent Interest

# Teen Perceptions Science Important Math Important nt interest In... Science Math

Parent interest In	Science	Math
	%	%
Very interested	86	72
Somewhat interested	80	68
Not very interested	69	65
Not interested at all	63	53

➤ The higher ascribed importance of math over science is reflected again in the attitudinal statements examined (Table 14). Eighty-eight percent of teens agree that most jobs will require math, with almost half strongly agreeing. Only two-thirds believe jobs will require science, with only one-quarter strongly agreeing.

Table 14

Role of Math and Science to Success

	Strongly <u>Agree</u> %	Agree %	Neutral %	<u>Disagree</u> %	Strongly <u>Disagree</u> %
Most jobs in the future will require a basic knowledge of math.	48	40	8	2	1
Most jobs in the future will require a basic knowledge of science.	26	40	23	9	2
I will be able to get by O.K. without knowing much about math or science	4	8	14	38	37

Note: Percentages do not sum to 100% due to rounding and the exclusion of "no opinion."

- Very few teens believe they will be able to get by without math or science.
- ➤ Assessments of importance to future success is correlated with agreement on the need for jobs. That is, teens who believe that science is important are more likely to believe knowledge of science will be required for future jobs than math, and the same for math.
- ➤ Perceptions of parental interest in science and math are also related to assessments of whether these subjects will be required for future jobs. That is, the more interest teens ascribe to their parents, the more likely they are to see these subjects as job requirements.
- ➤ Agreement that science will be required is strongest in Ontario, particularly outside Metropolitan Toronto (72%), and among Late Adopters (73%), and is less so among Quebec teens (46%).
- ➤ Agreement that math will be required is also strongest in Ontario, particularly outside Metropolitan Toronto (93%) and Atlantic Canada (92%), among Late Adopters (91%) and younger teens 12 to 14 years of age (94%). Among boys and girls 15 or older, boys are more likely to "strongly" agree than girls. Quebec teens are less likely to agree (80%).

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- ➤ Less likely to "strongly disagree" that they will be able to get by O.K. without science or math are Prairie (44%) and Atlantic Canada (44%) teens, as well as those who are younger (12 to 14, 49%), particularly boys (54%), and Late Adopters (46%). Older girls are least likely to disagree in total (60%), as are Quebec teens (29% "strongly disagree").
- ➤ Teens who are higher on the Efficacy Scale are more likely than those who are lower to "strongly agree" with the requirement for math and science.

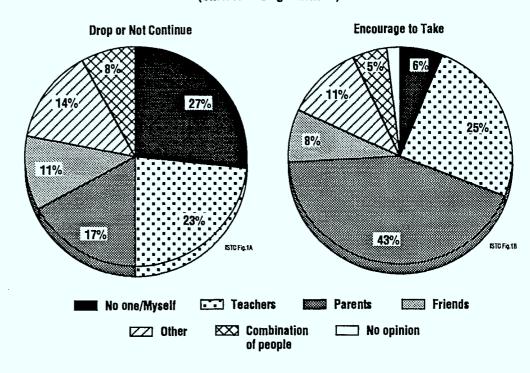
# V. Influences on Taking Math & Science Courses

➤ Eighty-five percent of teens are taking science or math courses. The influences on them for continuing or dropping these subjects, however, are different. However, the sample size for obtaining clear indications of why students drop these courses is small (124 cases).

Figure 4

Volunteered Influence on Decisions to Drop or
Take Math and Science Courses

(Unaided — Single Mention)



- ➤ Aside from making a personal decision to drop courses, teens are most likely to cite teachers as influencing the decision to drop out.
- ➤ In contrast, parents are the most significant influence for encouraging, helping or supporting their children who take math or science courses. Teens who credit their parents for encouraging them are also more likely to be the teens who perceive that their parents have an interest in the subjects, and who believe math and science are important for their future success.
- ➤ Older teens are more likely to have made the decision to drop out on their own (30%), younger teens are more likely to cite their parents (29%).

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- ➤ Teens who are low on the Efficacy (28%) or high in the Alienation (29%) scales are more likely to have made the decision on their own than teens at the opposite ends (16%).
- ➤ Among those who are taking math/science courses, teens 12 to 14 (53%), Late Adopters (51%), and those who reside in Quebec (53%) are more likely to cite their parents as influencing them to do so; those 17 to 19 are more likely to name "others" (19%), as are the Cutting Edge segment (20%).
- ➤ Teens who are taking these courses and who rank lower on the Alienation Scale are more likely to cite their parents as a help (59%), while those high on the scale are more likely to name their friends (11%) or themselves (12%).

Table 15

Main Reason for Dropping or Not Continuing the Courses

	Science (n=124)	<u>Math</u> (n=124)		Teaching Attributes*
	%	%		%
Not doing well in the subject	28	22	Didn't explain/	
Teacher/teaching method	16	21	Went too fast	31
Not necessary for my career	23	15	Their attitudes	26
Not enjoy the subject	19	13	Other	33
No opinion	14	28	No opinion	11

<sup>\*</sup> Unaided — single mention

- ➤ The reasons for dropping science and math are different. "Not doing well" is highest in both, but higher for the science courses. The relevancy of science for their career is a higher factor in dropping science courses than for math. Teens who dropped math are more split between "not doing well", the "teacher" and "no opinion."
- Among those who named the teacher for either science or math as the main reason for dropping out, the two leading problems with the teachers are that the teachers did not explain the topic well enough, and the teacher's attitude.
- ➤ Encouragement and help are the two most frequently volunteered motivators for teens to take science or math (Table 16). These responses are similar regardless of the person who helped or encouraged them the most.
- ➤ Older teens (32%), those in Quebec (45%) and Late Adopters (35%) cite encouragement more than the other groups. Younger teens cite receiving help more frequently (27%).

Table 16

Volunteered Action of Person That Was Most Helpful In
Encouraging Teens to Take the Courses

(Unaided — Single Mention)

%
30
22
15
11
22

<sup>\* (</sup>n=631)

Table 17
Impact of Changes in Science/Math Courses on Enjoyment of the Courses

	Enjoy a <u>lot more</u> %	Enjoy a <u>little more</u> %	Make no difference %	Enjoy a <u>little less</u> %	Enjoy a lot less %
More experiments	40	35	18	4	1
"Mentor programs" where you go to work in a job using science or math for a day	41	31	19	4	3
More helpful in day-to-day life	31	41	24	1	0
More hands-on work	36	33	19	8	2
Guest speakers who use science or math in their work	21	38	28	8	3
Learning something new everyday	24	38	26	8	2
Having your parents get more involved in helping you with your course work	8	19	49	13	10
Having a female teacher if you're a girl and having a male teacher if you're a boy	4	5	70	7	12
Taking your science and math classes with only girls if you're a girl and only boys if you're a boy	. 4	3	31	18	41

#### ISTC PROPRIETARY REPORT - PEPSI STREET BEAT WAVE IV

- ➤ The four activities which are most likely to increase enjoyment of math and science courses are using more experiments (75%), a mentor program (72%), the course being more applicable to daily life (72%), and doing more hands-on work (69%).
- ➤ At the opposite end, segregated classes appear to have little appeal, while the gender of the teacher and parent involvement are seen as making little difference.
- ➤ There is a weak relationship between perceived importance of science for future success to each of these activities, with the strongest being the mentor program and learning something new each day. No similar relationship is apparent with regard to the importance of math.
- ➤ Perceived levels of parental interest in math and science are also not related to these activities, including the involvement of parents in the course work.
- ➤ There are some demographic differences in opinion, but they tend not to be consistent across the activities (detailed differences appear in Tables 19-26 of the Technical Appendix Summary Tables). Ones worth noting for the top activities are:
  - More experiments more impact on enjoyment of courses among Atlantic Canada teens (87%), younger teens, particularly boys (57%), and less in Quebec (68%);
  - Mentor programs more impact on enjoyment among girls, particularly those 15 to 16 years (72%) and 17 to 19 (81%), and teens in post-secondary education (77%);
  - More helpful in daily life more impact on enjoyment among Atlantic Canada teens (83%); and
  - More hands-on work more impact on enjoyment among Ontario teens (74%) and Atlantic Canada teens (82%), and less in Quebec (53%).

# VI. Key Findings & Conclusions

- Perceived interest of the parents appears to be a key factor in attitudes toward science and math, particularly on the attributed importance to their future success and the perceived requirement of these subjects for most jobs.
- Actual participation of parents is also critical. As noted below, teens who
  never talk to their parents about math or science, or who receive no help are
  less likely to have positive views about these courses. Teens who have
  actively involved parents are more predisposed.

Table 18

Role of Parents In Attitudes Toward Math and Science Courses

			Never
		Never Talk	Get Parent(s)
	<u>Average</u>	To Parent(s)	To Help
	%	%	%
Science — very important	39	24	32
Math — very important	59	45	49
Job requiring science — agree	66	56	60
Job requiring math — strongly agree	48	35	38
O.K without science/math — agree	12	18	17
Influenced to drop courses — no one	27	49	36
Who helps/encourages most — parent(s)	43	21	32
Enjoy having parent(s) involved	27	18	19

- While it is apparent that parental interest has an influence on teens, teens are not convinced that parental help in course work will make the subjects more enjoyable.
- Teens clearly understand the value of math in particular, and science to a lesser extent, for their future job-hunting success, even among those whose parents are not interested in these subjects.
- Motivators to increase teen enjoyment of these courses centre on making it "real" to them, by such methods as conducting experiments and illustrating the application of these subjects to jobs.

ISTC PROPRIETARY REPORT - PEPSI STREET BEAT WAVE IV

# **Technical Appendices**

ISTC PROPRIETARY REPORT --- PEPSI STREET BEAT WAVE IV

# Survey Overview

## Sample Selection and Weighting

Using a random digit dialling process, a total of 1,500 telephone interviews, proportional to national population and split equally among males and females, were completed among Canadian residents aged 12 to 19 years.

Upon completion of the telephone survey, 1,350 consenting respondents were mailed an in-depth mailback questionnaire. A total of 854 completed mail questionnaires were returned.

The mailback questionnaires were weighted by age within gender within province to accurately reflect the national population of teens aged 12 to 19 years. The actual and weighted number of completed mailback interviews are presented in the following table.

Table A Distribution of Mall Interviews by Age Within Gender Within Province

		Stats Can Universe of Actual Mail Canadians 12 - 19 Yrs* Interviews Completed				Weight	Weighted Sample <sup>†</sup>		
ВС	12 to 14	F	61450	2%	15	1.8%	1.2000	18	2%
ВС	12 to 14	М	65100	2%	15	1.8%	1.2667	19	2%
Alta	12 to 14	F	53205	2%	19	2.2%	0.7895	15	2%
Alta	12 to 14	M	56 <b>23</b> 5	2%	16	1.9%	1.0000	16	2%
Sask	12 to 14	F	22405	1%	6	0.7%	1.1667	7	1%
Sask	12 to 14	М	23790	1%	5	0.6%	1.4000	7	1%
Man	12 to 14	F	22655	1%	10	1.2%	0.7000	7	1%
Man	12 to 14	M	23425	1%	11	1.3%	0.6364	7	1%
Ont	12 to 14	F	190420	6%	51	6.0%	1.0784	<b>5</b> 5	6%
Ont	12 to 14	M	200600	7%	45	5. <b>3</b> %	1.2900	58	7%
Que	12 to 14	F	139725	5%	44	5.2%	0.9091	40	5%
Que	12 to 14	М	: 147045	5%	30	3.5%	1.4000	42	5%
NB	12 to 14	F	15760	1%	2	0.2%	2.0000	4	0.5%
NB	12 to 14	М	16480	1%	3	0.4%	1.6667	5	1%
NS	12 to 14	F	18145	1%	5	0.6%	1.0000	5	1%
NS	12 to 14	M	18845	1%	4	0.5%	1.2500	5	1%
PEI	12 to 14	F	2955	0.1%	1	0.1%	1.0000	1	0.1%
PEI	12 to 14	M	3080	0.1%	0	0.0%			
NFLD	12 to 14	F	14180	0.5%	2	0.2%	2.0000	4	0.5%
NFLD	12 to 14	М	14860	0.5%	2	0.2%	2.0000	4	0.5%
ВС	15 to 16	F	41465	1%	13	1.5%	0.9231	12	1%
ВС	15 to 16	М	43735	1%	10	1.2%	1.3000	13	2%
Alta	15 to 16	F	34990	1%	14	1.6%	0.7143	10	1%
Alta	15 to 16	M	36820	1%	12	1.4%	0.9167	11	1%
Sask	15 to 16	F	14985	1%	7	0.8%	0.5714	4	0.5%
Sask	15 to 16	М	15445	1%	7	0.8%	0.5714	4	0.5%
Man	15 to 16	F	15565	1%	7	0.8%	0.5714	4	0.5%
Man	15 to 16	М	16765	1%	5	0.6%	1.0000	5	1%
Ont	15 to 16	F	131445	4%	51	6.0%	0.7451	38	4%
Ont	15 to 16	М	138730	5%	37	4.3%	1.0811	40	5%
Que	15 to 16	F	91335	3%	37	4.3%	0.7027	26	3%
Que	15 to 16	М	96840	3%	27	3.2%	1.0370	28	3%

Teen population of Canada. Source: Table 4: Population by Single Years of Age and Sex, for Canada, Provinces, Territories and Census Metropolitan Areas, The Nation, Statistics Canada, Cat. 93-310
The data were weighted by province to reflect the incidence of youth age 12-19 years across the nation.

Table A (cont'd) Distribution of Mail interviews by Age Within Gender Within Province

				Universe of 12 - 19 Yrs*		ual Mail	NA/~!~h4	Mai-ha-	d 01-+
			Vanadians N	%	N Inferview	s Completed %	Weight Factor	vveignte N	d Sample <sup>†</sup> %
NB	15 to 16	F	11265	0.4%	4	0.5%	0.7500	3	0.4%
NB ·	15 to 16	М	11740	0.4%	5	0.6%	0.6000	3	0.4%
NS	15 to 16	F	12655	0.4%	6	0.7%	0.5000	3	0.4%
NS	15 to 16	M	13650	0.5%	4	0.5%	1.0000	4	0.5%
PEI	15 to 16	F	1900	0.1%	1	0.1%	1.0000	1	0.1%
PEI	15 to 16	М	2075	0.1%	1	0.1%	1.0000	1	0.1%
NFLD	15 to 16	F	10195	0.3%	4	0.5%	0.7500	·3	0.4%
NFLD	15 to 16	М	11330	0.4%	2	0.2%	1.5000	3	0.4%
ВС	17 to 19	F	62085	2%	25	2.9%	0.7200	18	2%
BC	17 to 19	М	64435	2%	11	1.3%	1.7273	19	2%
Alta	17 to 19	F	52035	2%	14	1.6%	1.0714	15	2%
Alta	17 to 19	М	54080	2%	9	1.1%	1.6667	15	2%
Sask	17 to 19	F	20955	1%	8	0.9%	0.7500	6	1%
Sask	17 to 19	М	21765	1%	6	0.7%	1.0000	6	1%
Man	17 to 19	F	23190	1%	9	1.1%	0.7778	7	1%
Man	17 to 19	M	24690	1%	4	0.5%	1.7500	7	1%
Ont	17 to 19	F	198610	7%	68	8.0%	0.8382	57	7%
Ont	17 to 19	M	210280	7%	50	5.9%	1.2200	61	7%
Que	17 to 19	F	128955	4%	44	5.2%	0.8409	37	4%
Que	17 to 19	М	134105	5%	30	3.5%	1.2667	38	4%
NB	17 to 19	F	16855	1%	7	0.8%	0.7143	5	1%
NB	17 to 19	М	1 <b>77</b> 35	1%	3	0.4%	1.6667	5	1%
NS	17 to 19	F	19890	1%	5	0.6%	1.2000	6	1%
NS	17 to 19	М	20800	1%	4	0.5%	1.5000	6	1%
PEI	17 to 19	F	2910	0.1%	0	0.0%			
PEI	17 to 19	M	3130	0.1%	1	0.1%	1.0000	1	0.1%
NFLD	17 to 19	F	15770	1%	8	0.9%	0.6250	5	1%
NFLD	17 to 19	М	16810	1%	8	0.9%	0.6250	5	1%
Total			2972375	100%	854	100%		854	100%

Teen population of Canada. Source: Table 4: Population by Single Years of Age and Sex, for Canada, Provinces, Territories and Census Metropolitan Areas, The Nation, Statistics Canada, Cat. 93-310
 The data were weighted by province to reflect the incidence of youth age 12-19 years across the nation.

## 2. Field Procedures

The telephone interviews took place between May 20 and June 6, 1993. Weekday interviewing was conducted between the hours of 5:30 and 10:00 p.m. Weekend interviewing was conducted between the hours of 10:00 a.m. and 5:00 p.m. The questionnaire contained 26 questions and took approximately 5 minutes to complete. Fifteen percent (15%) of all interviews were monitored while in progress, for procedure and content, from an extension monitor. All interviews were carefully edited as soon as they were completed to ensure that no questions were omitted and that skip-patterns were followed correctly.

Experienced telephone interviewers were used to collect the data. A briefing was held by the Field Supervisor, and the Research Analyst was present to answer questions or clarify procedures. The Field Supervisor first read the questionnaire to the interviewers, thereby ensuring that pronunciation would be correct and uniform, and second, interviewer-respondent role-playing was used to illustrate skip and rotation patterns. The interviewers then had an opportunity to ask questions.

On the first evening in the field, the Research Analyst listened to the interviewers on an extension monitor. The monitor prevents the interviewer and respondent from knowing they are being listened to. This ensured that the skip and rotation patterns were followed correctly and that there were no questions causing interviewers any particular difficulty. When an error was caught, the interviewer was briefed again and the respondent was called back in order to correct the questionnaire.

The mailback questionnaires were sent out beginning June 7, 1993. The questionnaires contained approximately 340 questions and took approximately 60 minutes to complete.

To enhance response rates for the mail questionnaire, a reminder postcard was sent to respondents two weeks after the initial mailing of the questionnaires. Respondents who completed a mail questionnaire received a five dollar cheque and were eligible to win one of thirty Levi's jean jackets.

## 3. Coding

The questionnaires were coded and the data were entered by experienced Decima personnel. The following standard procedures were followed:

- An initial briefing;
- Supervision of trained staff; and
- Verification of 15% of each coder's work.

Using the first 25% of completed questionnaires in each stratum, codes were constructed for the open-end questions by sorting and writing out the responses into independent categories. The Research Analyst checked all categories for completeness and consistency.

## Data Processing

The entry and processing of the data were carried out on-site using Decima's VAX computer. Decima's interactive software system, designed specifically for survey analysis, has a robust data entry facility which permits cleaning of the data, including out-of-range values and skip-pattern errors, as well as other logic errors. The fully cleaned data were then summarized into aggregate tables. Analysis of the data will include cross-tabulation tables, measures of association, and multivariate analysis.

## Confidence Limits and Validation

The weighted sample for the mail survey (854) produces results which are accurate for the population within  $\pm 3.35$  percentage points, 19 times out of 20.

The sample is only representative of residents in the provinces who have direct dialling telephone services. Therefore, homes that are accessible only by a telephone servicing a large number of people and those who have only radio-telephone service or no telephone service at all, are automatically excluded from the sample.

While the most sophisticated procedures have been used to collect and analyze the information processed herein, it must be remembered that surveys are not predictions. They are designed to measure public opinion within identifiable statistical limits of accuracy at specific points in time. This survey is in no way a prediction of opinion or behaviour at any future point in time.

# Wave IV Survey

1.	Wha job?	it is your mother's/female guardian's main	5.	abou	ou ever talk to your parent(s)/guardian(s) t your school work in the following subjects? CK AS <u>MANY</u> AS APPLY)
	□ ∞	She doesn't work outside the home		<b>0</b> 0	Never talk to my parent(s)/guardian(s) about school work
				<b>O</b> 1	English
2.	Wha	it is your father's/male guardian's main job?		O 2	History
	<del></del>	2		Оз	Math
	<b>□</b> ∞	He doesn't work outside the home		O 4	Science
				O 5	Biology
3.		ır as you know, how interested are your	•	O٥	Chemistry
	pare	nts in science?		O 7	Physics
	<b>1</b>	Very interested		O 8	Geography
	<b>□</b> 2	Somewhat interested		O۶	Social Sciences/Studies
	<b>3</b>	Not very interested			
	□ 4	Not interested at all	6.	Do y	our parent(s)/guardian(s) ever help you with
	<b>□</b> 5	Don't know		your	school work in the following subjects? (CHECK <u>IANY</u> AS APPLY)
4.	As fa	ır as you know, how interested are your		o 🖸	No, never help me with my school work
		nts in math?		Οı	English
	O ı	Very interested		O 2	History
	□ 2	Somewhat interested		Оз	Math
	<b>3</b>	Not very interested		O 4	Science
	<b>4</b>	Not interested at all		O 5	Biology
	<b>□</b> 5	Don't know		٥O	Chemistry
				O 7	Physics
				O 8	Geography
				$\Omega$	Social Sciences/Studies

7.	studie	important do you think studying or having ed science in high school will be to <u>your</u> success?	stu			nink studying ool will be to	
	<b>□</b> 1	Very important		ı Very iı	mportant		
	<b>□</b> 2	Somewhat important	0	2 Somev	what import	ant	
	<b>□</b> 3	Not very important		3 Not ve	ery importar	nt	
	□ ₄	Not important at all		₄ Not im	nportant at a	الد	
	ase ind tement			ngly disagi	ree or are n	eutral about 1	
		•	Strongly <u>Agree</u>	<u>Agree</u>	<u>Neutral</u>	<u>Disagree</u>	Strongly <u>Disagree</u>
9.		jobs in the future will require sic knowledge of <u>science</u> .	<b>1</b>	<b>□</b> 2	<b>□</b> 1 3	□ 4	□ 5
10		jobs in the future will require sic knowledge of <u>math</u> .	<b>1</b>	<b>□</b> 2	<b></b> 3	. □ 4	□ 5
11		be able to get by O.K. without ing much about math or science.	<b>1</b>	<b>□</b> 2	<b>3</b>	□ 4	□ 5
		DROPPED OR DECIDED NOT TO CONTINUL; ANSWER Q12 - Q15:	UE TAKIN	NG SCIEN	CE OR MA	TH COURSE	S IN
12	the n	er than yourself, who would you say has had nost influence on your decision to drop or not				son you deci our <u>math</u> cou	ded to drop or rse(s)?
	to co scho	ontinue taking science and/or math courses in		1 The te	eacher/teac	hing method	
	30110	OIT	-				
			-	l <sub>2</sub> Not d	loing well in	that subject	
		2	1		loing well in injoying the	•	
		2		∄3 Note	njoying the	•	lans
13	not t	at was the <u>main</u> reason you decided to drop or o continue taking your <u>science</u> course(s)?	IF AI	13 Note 14 Note NSWERED	enjoying the ecessary fo	subject r my career p	lans EITHER Q13
13	not t	nt was the <u>main</u> reason you decided to drop or o continue taking your <u>science</u> course(s)? The teacher/teaching method	IF AI	13 Note 14 Note NSWERED 114:	enjoying the necessary fo	subject r my career p	EITHER Q13
13	not t	at was the <u>main</u> reason you decided to drop or o continue taking your <u>science</u> course(s)?	IF AI OR (	13 Not e 14 Not n  NSWERED  214:  Vhat was i	enjoying the eccessary for "THE TEAT to about the formal expenses of	subject r my career p	EITHER Q13

#### IF TAKING ANY SCIENCE OR MATH COURSES IN SCHOOL NOW; ANSWER Q16 - Q18:

16. Other than yourself, who would you say has a the most to encourage, help or support you in science and/or math courses in school?		What was it to most helpful?	hat person(s) c	did that you	felt was the
	2				2
18. What effect would making the following chang you enjoy those courses?	ges in your so	cience and/or	math courses	have on hov	w much
	Enįoy a lot more	Enjoy a <u>little more</u>	Make no <u>difference</u>	Enjoy a <u>little less</u>	Enjoy a <u>lot less</u>
More experiments	🛄 ı	<b>□</b> 2	□ 3	□ 4	<b>□</b> 5
More hands-on work	u ı	<b></b> 2	□ з	□ 4	<b>□</b> 5
More helpful in day-to-day life	🛄 ı	<b>□</b> 2	□ 3	□ 4	<b>□</b> 5
Taking your science and math classes with only girls if you're a girl and only boys if you're a boy	<b>-</b> 1	<b>_</b> 2	<b></b> 3	□ 4	<b>□</b> 5
Learning something new everyday	<b></b> 1	<b></b> 2	<b>□</b> 3	□ 4	<b>□</b> 5
Having a female teacher if you're a girl and having a male teacher if you're a boy	<b>1</b>	<b>1</b> 2	<b></b> 3	□ 4	<b>□</b> 5
Having your parents get more involved in helping you with your course work	<b>1</b>	<b>□</b> 2	<b></b> 3	<b>□</b> 4	<b>□</b> 5
Guest speakers who use science or math in their work	<b>1</b>	<b>□</b> 2	<b></b> 3	□ 4	<b>□</b> 5
"Mentor programs" where you go to work in a job using science or math for a day	. 🚨 1	<b></b> 2	<b></b> 3	<b></b> 4	<b>□</b> 5

# Summary Tables

Table 1

Question read: What is your mother's/female guardian's main job?

·.	LOW LEVEL SERVICE	LOW LEVEL OFFICE WORKER	MEDIUM LEVEL SERVICE	TEACHER	PROFESSIONAL/ MANAGEMENT/ EXEC	MEDIUM LEVEL OFFICE WORKER	PRODUCT WORKER	OTHER	DOESNT WORK OUTSIDE HOME	NO OPINION
Average (n=854)	14	13	9	9	6	5	4	5	29	6
GENDER										
MALE (n=438)	14	14	6	9	6	6	4	4	30	7
FEMALE (n=415)	13	12	13	8	6	5	4	6	29	4
AGE										
10-11 YRS (n=0)	0	0	0	0	0	0	0	0	0	0
12-14 YRS (n=318)	12	16	8	9	7	4	2	7	28	8
15-16 YRS (n=217)	14	10	10	10	6	7	5	3	32	4
17-19 YRS (n=319)	15	12	10	8	6	5	6	5	29	5
AGE BY GENDER								•		
MALES 10-11 YRS (n=0)	0	0	0	0	0	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	0	0	0	0	0	0	ō.	Ō	ō	ō
MALES 12-14 YRS (n=164)	13	16	5	9	7	5	2	6	27	9
FEMALES 12-14 YRS (n=156)	11	15	12	8	6	3	3	8	28	6
MALES 15-16 YRS (n=112)	15	7	8	8	7	7	5	2	36	4
FEMALES 15-16 YRS (n=106)	14	12	11	11	6	7	4	4	27	4
MALES 17-19 YRS (n=164) FEMALES 17-19 YRS (n=156)	14 15	16 8	5 14	10 6	5	5	6	4	28	6
1 EMPLES 17-19 FHS (II=150)	13	0	14	0	7	4	5	5	31	3
LEVEL OF SCHOOL THIS FALL										
ELEMENTARY (n=102)	13	16	5	13	3	3	2	6	28	12
SECONDARY (n=543)	15	13	10	7	7	6	4	5	28	5
POST-SECONDARY (n=173)	12	13	10	11	5	4	6	3	32	3
COMMUNITY SIZE										
1,000,000 AND OVER (n=183)	10	15	7	8	. 8	8	5	4	27	7
100,000-999,999 (n=219)	17	10	11	8	6	5	4	5	28	5
10,000-99,999 (n=194)	10	19	10	8	6	2	4	4	31	6
UNDER 10,000/RURAL (n=254)	16	10	9	10	5	5	3	6	31	5
REGION										
BRITISH COLUMBIA (n=100)	13	12	9	10	7	8	4	8	23	6
PRAIRIES (n=152)	12	12	7	11	7	3	3	4	34	7
ONTARIO (n=309)	15	14	10	9	5	8	5	6	21	7
QUEBEC (n=210)	14	12	10	5	7	3	5	3	39	2
ATLANTIC (n=83)	13	13	10	12	6	1	1	5	35	4
LANGUAGE										
ENGLISH (n=661)	14	13	9	10	6	6	4	6	27	7
FRENCH (n=192)	13	14	10	5	7	2	5	3	39	2
TASTEMAKER SEGMENTS										
CUTTING EDGE (n=90)	18	12	7	10	7	2	6	6	29	4
EARLY ADOPTERS (n=280)	16	13	9	9	, 7	5	4	4	29 27	5
AVERAGE TEENS (n=211)	16	12	8	9	9	6	4	4	26	6
LATE ADOPTERS (n=154)	6	15	12	9	3	6	3	10	33	3
SATELLITES (n=116)	10	13	12	6	3	4	4	2	38	7

Table 2

Question read: What is your father's/male guardian's main job?

**;**;

	MEDIUM LEVEL PRODUCT WORKER	PROFESSIONAL/ MANAGEMENT/ EXEC	MEDIUM LEVEL SERVICE	MEDIUM LEVEL OFFICE WORKER	LOW LEVEL SERVICE WORKER	AGRICULTURAL	TEACHER	OTHER	DOESNT WORK OUTSIDE HOME	NO OPINION
Average (n=854)	25	16	7	7	6	5	5	13	6	11
GENDER MALE (n=439)	21	16	8	8	6	4	4	13	6	13
FEMALE (n=415)	29	15	6	6	6	6	6	12	6	9
AGE										
10-11 YRS (n=0)	0	0	0	0	0	0	0	0	0	0
12-14 YRS (n=318)	23	17	11	9	5	4	4	14	3	11
15-16 YRS (n⇒216)	26	12	6	6	8	6	6	11	9	11
17-19 YRS (n=319)	27	17	4	6	5	6	5	13	7	11
AGE BY GENDER	0	0	0	0	0	0	0	0	0	0
MALES 10-11 YRS (n=0)	0	0	0	0	0	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	18	17	11	11	7	3	3	14	2	14
MALES 12-14 YRS (n=162)	28	17	10	6	4	4	4	13	4	9
FEMALES 12-14 YRS (n=156)	20	12	8	9	9	5	4	12	9	13
MALES 15-16 YRS (n=113) FEMALES 15-16 YRS (n=106)	31	11	4	4	8	8	8	10	8	8
MALES 17-19 YRS (n=162)	26	18	6	5	3	5	4	14	7	12
FEMALES 17-19 YRS (n=156)	28	16	3	6	6	6	6	13	7	9
LEVEL OF SCHOOL THIS FALL										
ELEMENTARY (n=103)	20	16	11	9	7	2	4	13	3	17
SECONDARY (n=544)	25	16	7	7	6	5	4	12	6	11
POST-SECONDARY (n=171)	26	17	4	7	6	6	7	13	6	8
COMMUNITY SIZE				_	_		_	40		40
1,000,000 AND OVER (n=183)	23	22	4	7	7	0	6	13	5	12
100,000-999,999 (n=221)	23	19	7	8	5	0	5	14	6	13
10,000-99,999 (n=195) UNDER 10,000/RURAL (n=255)	25 28	12 10	9 8	9 5	5 7	4 14	6 3	14 10	6 6	12 8
			_		·					
REGION	29	18	5	7	3	3	4	13	2	15
BRITISH COLUMBIA (n=98)	29 28	10	8	11	5	10	4	8	8	8
PRAIRIES (n=154)	20 21	18	6	6	5	3	6	14	5	15
ONTARIO (n=310) QUEBEC (n=212)	28	15	8	6	8	3 .	5	14	7	6
ATLANTIC (n=82)	23	13	7	5	7	10	1	12	10	11
LANGUAGE										
ENGLISH (n=662)	24	16	7	7	5	5	5	12	6	12
FRENCH (n=191)	30	13	8	6	9	4	5	14	6	6
, ,	-	,0	J	~	J	•	-	, ,	-	-
TASTEMAKER SEGMENTS	00	0.4					-	10	•	
CUTTING EDGE (n=90)	23	21	7	4	6	1	7	13	9	9
EARLY ADOPTERS (n=281)	24	19	8	7	6	4	4	13	6	8
AVERAGE TEENS (n=210)	26	11	4	7 9	5 7	6 6	4 4	13 12	7 2	16 10
LATE ADOPTERS (n=154)	20	19 9	11 6	9 7	, 5	ь 7	7	12	8	10 9
SATELLITES (n=117)	32	Э	D	′	5	,	,	11	0	9

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Table 3

\*\*Question read: As far as you know, how interested are your parents in science?

	VERY INTERESTED	SOMEWHAT INTERESTED	NOT VERY INTERESTED	NOT INTERESTED AT ALL	DON'T KNOW	NO OPINION
Average (n=854)	13	35	25	8	19	0
GENDER MALE (n=438) FEMALE (n=416)	13 13	35 ' 36	24 27	8 7	21 17	0 0
AGE 10-11 YRS (n=0) 12-14 YRS (n=319) 15-16 YRS (n=216) 17-19 YRS (n=319)	0 16 13 8	0 32 33 40	0 23 28 27	0 4 8 11	0 25 17 14	0 0 0 0
AGE BY GENDER MALES 10-11 YRS (n=0) FEMALES 10-11 YRS (n=0) MALES 12-14 YRS (n=162) FEMALES 12-14 YRS (n=157) MALES 15-16 YRS (n=112) FEMALES 15-16 YRS (n=105) MALES 17-19 YRS (n=164) FEMALES 17-19 YRS (n=156)	0 0 18 15 13 13 6	0 31 33 32 34 40	0 0 19 27 25 31 29	0 0 5 3 10 6 9	0 0 27 22 20 14 15	0 0 1 0 0 1
LEVEL OF SCHOOL THIS FALL ELEMENTARY (n=103) SECONDARY (n=544) POST-SECONDARY (n=173)	12 14 10	36 32 45	16 27 23	1 9 10	36 18 12	0 1 0
COMMUNITY SIZE 1,000,000 AND OVER (n=183) 100,000-999,999 (n=220) 10,000-99,999 (n=196) UNDER 10,000/RURAL (n=254)	12 17 9 11	40 34 33 34	23 24 25 29	10 6 7 7	14 19 24 18	0 0 1 0
REGION BRITISH COLUMBIA (n=99) PRAIRIES (n=153) ONTARIO (n=309) QUEBEC (n=212) ATLANTIC (n=81)	13 14 14 10 9	41 36 35 33 31	24 25 25 25 25 32	9 3 7 11	12 22 19 19	0 0 0 1
LANGUAGE ENGLISH (n=662) FRENCH (n=193)	13 12	36 33	26 24	6 11	19 19	0 1
TASTEMAKER SEGMENTS CUTTING EDGE (n=90) EARLY ADOPTERS (n=282) AVERAGE TEENS (n=211) LATE ADOPTERS (n=153) SATELLITES (n=115)	16 12 13 11 12	23 35 38 38 38	29 25 25 27 23	14 10 4 4	18 18 19 20 17	0 0 1 0

Table 4

Question read: As far as you know, how interested are your parents in math?

	VERY INTERESTED	SOMEWHAT INTERESTED	NOT VERY INTERESTED	NOT INTERESTED AT ALL	ронт кноw	NO OPINION
Average (n=854)	17	39	26	6	12	0
GENDER						
MALE (n=438)	16	37	27	7	13	0
FEMALE (n=417)	18	40	24	5	12	0
AGE						
10-11 YRS (n⊨0)	0	0	0	0	0	0
12-14 YRS (n=319)	27	37	17	3	16	0
15-16 YRS (n=216)	16	38	27	6	12	0
17-19 YRS (n=319)	9	40	33	9	9	0
AGE BY GENDER						
MALES 10-11 YRS (n=0)	0	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	0	0	0	0	0	0
MALES 12-14 YRS (n=162)	30	33	17	3	16	1
FEMALES 12-14 YRS (n=155)	23	42	16	3	15	0
MALES 15-16 YRS (n=111)	14	39	27	6	14	0
FEMALES 15-16 YRS (n=104)	18	38	28	6	10	1
MALES 17-19 YRS (n=164)	4	40	36	12	9	0
FEMALES 17-19 YRS (n=155)	14	40	30	7	9	0
LEVEL OF SCHOOL THIS FALL						
ELEMENTARY (n=102)	27	33	18	1	21	0
SECONDARY (n=543)	17	40	24	6	12	0
POST-SECONDARY (n=173)	9	38	35	11	8	0
COMMUNITY SIZE						
1,000,000 AND OVER (n=183)	21	33	30	9	7	0
100,000-999,999 (n=221)	20	38	24	7	11	0
10,000-99,999 (n=194)	14	41	20	7	17	1
UNDER 10,000/RURAL (n=255)	14	41 -	28	3	13	0
REGION						
BRITISH COLUMBIA (n=99)	19	36	26	8	10	0
PRAIRIES (n=153)	18	38	27	3	15	Ō
ONTARIO (n=309)	19	41	24	6	10	0
QUEBEC (n=212)	15	36	26	10	12	1
ATLANTIC (n=82)	12	40	26	5	17	0
LANGUAGE						
ENGLISH (n=662)	18	39	25	5	12	0
FRENCH (n=193)	13	36	26	11	12	1
TASTEMAKER SEGMENTS						
CUTTING EDGE (n=90)	16	28	30	13	13	0
EARLY ADOPTERS (n=281)	17	40	30 25	8	13	0
AVERAGE TEENS (n=210)	16	40	28	3	13	1
LATE ADOPTERS (n=155)	17	43	24	4	12	Ö
SATELLITES (n=115)	20	36	23	8	13	0
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Table 5

Question read: Do you ever talk to your parent(s)/guardian(s) about your school work in the following subjects? (Check as many as apply)

	NEVER TALK TO MY									20011	
	PARENTS	ENGLISH	HISTORY	MATH	SCIENCE	BIOLOGY	CHEMISTRY	PHYSICS	GEOGRAPHY	SOCIAL SCIENCES	NO OPINION
Average (n=854)	21	52	27	66	37	18	14	16	23	31	1
GENDER											
MALE (n=438) FEMALE (n=416)	25 17	49 55	23 32	63 69	36 39	16 19	13 15	17 15	22 25	29 33	1
			,				,-				,
AGE 10-11 YRS (n=0)	0	0	0	0	0	0	0	0	0	0	0
12-14 YRS (n=319)	13	62	32	80	50	11	8	14	32	40	1
15-16 YRS (n=216)	18	53	35	66	42	23	19	20	25	27	1
17-19 YRS (n=319)	32	40	18	51	22	20	18	15	14	25	2
AGE BY GENDER											
MALES 10-11 YRS (n=0)	0	0	0	0	0	0	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	0	0	0	0	0	0	0	0	0	0	0
MALES 12-14 YRS (n=163)	15	60	26	76	48	10	6	14	31	39	0
FEMALES 12-14 YRS (n=156)	9 21	64 52	37 33	84	52	11	10	15	33	40	1
MALES 15-16 YRS (n=112) FEMALES 15-16 YRS (n=104)	15	52 55	33 37	60 73	40 43	21 25	18 19	21 19	29 22	24 30	2 1
MALES 17-19 YRS (n=163)	37	36	13	51	20	18	18	18	9	21	1
FEMALES 17-19 YRS (n=156)	26	45	24	51	24	23	17	12	18	29	2
LEVEL OF SCHOOL THIS FALL											
ELEMENTARY (n=103)	14	56	35	80	53	8	8	13	35	45	0
SECONDARY (n=543)	18	57	28	69	41	20	15	17	24	28	1
POST-SECONDARY (n=173)	31	36	22	51	18	18	18	17	17	29	1
COMMUNITY SIZE											
1,000,000 AND OVER (n=183)	27	46	27	64	32	15	11	17	23	26	1
100,000-999,999 (n=221)	18	53	29	68	43	18	16	16	20	35	1
10,000-99,999 (n=195)	22	53	26	63	36	18	13	17	26	30	1
UNDER 10,000/RURAL (n=255)	19	53	27	67	38	18	15	15	24	32	1
REGION	00	50	0.4			40					
BRITISH COLUMBIA (n=99)	29	52	21	58	38	18	11	11	14	47	1
PRAIRIES (n=153) ONTARIO (n=309)	19 19	49 54	20 31	67	44	19	20	14	14	51	2
QUEBEC (n=211)	25	5 <del>4</del> 49	29	68 64	42 25	15 18	14 10	15 22	29	25	1
ATLANTIC (n=82)	16	56	30	71	38	21	17	15	27 23	17 34	1 0
LANGUAGE											
ENGLISH (n=662)	20	53	28	66	41 .	18	15	14	23	35	1
FRENCH (n=192)	26	48	26	64	24	17	10	22	25	15	2
TASTEMAKER SEGMENTS											
CUTTING EDGE (n=90)	32	41	23	51	30	20	8	8	22	19	0
EARLY ADOPTERS (n=281)	20	51	26	65	35	16	14	20	21	29	1
AVERAGE TEENS (n=210)	25	52	25	63	37	19	14	16	23	31	3
LATE ADOPTERS (n=154)	12	58	33	77	47	18	18	13	26	39	1
SATELLITES (n=116)	19	- 53	29	67	38	18	16	16	27	34	1

Table 6

Question read: Do your parent(s)/guardian(s) ever help you with your school work in the following subjects? (Check as many as apply)

	NO, NEVER HELP ME	ENGLISH	HISTORY	матн	SCIENCE	BIOLOGY	CHEMISTRY	PHYSICS	GEOGRAPHY	SOCIAL SCIENCES	NO OPINION
Average (n=854)	38	35	12	46	22	6	6	6	13	16	1
GENDER											
MALE (n=438)	43	34	9	40	20	5	4	6	12	15	1
FEMALE (n=416)	33	38	16	52	25	8	8	6	15	18	0
AGE											
10-11 YRS (n=0)	0	0	0	0	0	0	0	0	0	0	0
12-14 YRS (n=319)	19	47	17	68	39	6	6	9	23	26	0
15-16 YRS (n=216)	39	28	13	40	18	7	6	6	11	10	1
17-19 YRS (n=319)	57	28	8	28	8	7	6	4	6	11	1
AGE BY GENDER											
MALES 10-11 YRS (n=0)	0	0	0	0	. 0	0	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	0	0	0	0	.0	0	0	0	0	0	0
MALES 12-14 YRS (n=163)	22	48	13	61	36	4	4	8	20	25	0
FEMALES 12-14 YRS (n=156)	15	47	21	76	42	8	8	10	25	27	1
MALES 15-16 YRS (n=112)	44	28	11	34	14	8	5	6	13	10	2
FEMALES 15-16 YRS (n=104)	34	29	15	46	21	7	8 5	6	9	10 9	0
MALES 17-19 YRS (n=163)	63	23	4 10	23 33	7 10	4 9	5 7	5 3	4 9	14	1 0
FEMALES 17-19 YRS (n=156)	50	33	10	33	10	9	,	3	9	14	U
LEVEL OF SCHOOL THIS FALL											
ELEMENTARY (n=103)	18	43	21	77	41	5	7	7	28	29	0
SECONDARY (n=543)	33	37	12	48	24	7	6	7	13	15	1
POST-SECONDARY (n=173)	65	24	8	23	5	6	5	5	6	10	0
COMMUNITY SIZE											
1,000,000 AND OVER (n=183)	44	28	11	44	17	5	5	9	13	11	1
100,000-999,999 (n=221)	31	39	14	52	25	6	8	7	14	19	1
10,000-99,999 (n=195)	43	31	13	44	21	5	5	4	16	16	1
UNDER 10,000/RURAL (n=255)	36	41	11	45	24	10	5	5	11	18	0
REGION											
BRITISH COLUMBIA (n=99)	37	34	10	46	24	9	7	7	11	21	1
PRAIRIES (n=153)	30	41	11	49	32	6	7	6	12	34	0
ONTARIO (n=309)	33	34	17	51	23	6	8	6	18	11	1
QUEBEC (n=211)	53	31	8	36	9	4	2	7	11	6	0
ATLANTIC (n=82)	33	43	11	49	30	10	6	4	7	24	0
LANGUAGE											
ENGLISH (n=662)	34	36	14	49	26	7	7	6	14	20	1
FRENCH (n=192)	53	32	9	36	9	5	3	7	10	5	1
TASTEMAKER SEGMENTS/C											
CUTTING EDGE (n=90)	50	23	7	36	18	6	7	7	9	8	0
EARLY ADOPTERS (n=281)	42	30	11	42	17	5	5	6	11	15	1
AVERAGE TEENS (n=210)	38	38	15	48	24	8	6	6	12	16	1
LATE ADOPTERS (n=154)	29	45	17	53	28	8	8	4	18	22	0
SATELLITES (n≔116)	32	41	10	54	27	5	5	9	19	18	0

Table 7

Question read: How important do you think studying or having studied science in high school will be to your future success?

	VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT VERY IMPORTANT	NOT IMPORTANT AT ALL	NO OPINION
Average (n=854)	39	36	20	6	0
GENDER MALE (n=438)	39	36	19	5	0
FEMALE (n=416)	39	36	20	6	U
AGE			0	0	0
10-11 YRS (n=0)	0 41	0 41	13	4	0
12-14 YRS (n=319)	41	31	18	5	Ö
15-16 YRS (n=216)	31	34	27	8	Ö
17-19 YRS (n=318)	31	34	21	0	U
AGE BY GENDER	•	٥	0	0	0
MALES 10-11 YRS (n=0)	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	0	0	13	4	1
MALES 12-14 YRS (n=163)	45	37 45	14	4	ò
FEMALES 12-14 YRS (n=157)	37	45 33	19	6	Ö
MALES 15-16 YRS (n=112)	42	28	17	3	0
FEMALES 15-16 YRS (n=104)	52	26 37	26	6	0
MALES 17-19 YRS (n=163) FEMALES 17-19 YRS (n=156)	31 32	31	28	9	Ö
LEVEL OF SCHOOL THIS FALL	40	40	9	2	1
ELEMENTARY (n=103)	49	40			
SECONDARY (n=543)	39	36	19	5 7	0
POST-SECONDARY (n=172)	34	31	27		U
COMMUNITY SIZE					
1,000,000 AND OVER (n=184)	34	37	22	8	0
100,000-999,999 (n=221)	45	29	18	7	0
10,000-99,999 (n=196)	40	35	20	5	0
UNDER 10,000/RURAL (n=255)	37	41	19	4	0
REGION	÷				
BRITISH COLUMBIA (n=99)	39	34	21	5	0
PRAIRIES (n=152)	45	34	19	2	0
ONTARIO (n=308)	41	37	18	4	0
QUEBEC (n=211)	26	39	24	11	0
ATLANTIC (n=81)	54	27	15	4	0
LANGUAGE					
ENGLISH (n=661)	43	35	18	4	0
FRENCH (n=193)	24	39	24	12	0
	'	3.			_
TASTEMAKER SEGMENTS					
CUTTING EDGE (n=91)	32	31	23	14	0
EARLY ADOPTERS (n=280)	40	31	23	6	0
AVERAGE TEENS (n=210)	35	44	19	2	0
LATE ADOPTERS (n=155)	46	39	11	3	1
SATELLITES (n=115)	39	33	22	6	0

Table 8

Question read: How important do you think studying or having studied math in high school will be to your future success?

	VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT VERY IMPORTANT	NOT IMPORTANT AT ALL	NO OPINION
Average (n=854)	59	27	7	2	6
GENDER					
MALE (n=439)	61	26	6	1	5
FEMALE (n=416)	56	28	8	2	6
AGE					
10-11 YRS (n=0)	0	0	0	0	0
12-14 YRS (n=320)	68	19	3	1	9
15-16 YRS (n=216)	62	28	4	2	4
17-19 YRS (n=319)	48	34	13	2	3
AGE BY GENDER	•				
MALES 10-11 YRS (n=0)	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	0	0	0	0	0
MALES 12-14 YRS (n=163)	70	17	5	2	6
FEMALES 12-14 YRS (n=155)	66	22	1	0	12
MALES 15-16 YRS (n=112)	60	29	5	1∙	4
FEMALES 15-16 YRS (n=103)	63	26	3	4	4
MALES 17-19 YRS (n=163)	53	34	9	0	5
FEMALES 17-19 YRS (n=157)	43	35	17	3	2
LEVEL OF SCHOOL THIS FALL					
ELEMENTARY (n=103)	73	14	3	0	11
SECONDARY (n=543)	60	26	6	2	6
POST-SECONDARY (n=174)	49	37	11	2	1
COMMUNITY SIZE					
1,000,000 AND OVER (n=183)	57	26	7	3	7
100,000-999,999 (n=220)	62	22	10	3	4
10,000-99,999 (n=195)	55	32	6	1	7
UNDER 10,000/RURAL (n=255)	60	29	5	0	5
REGION					
BRITISH COLUMBIA (n=99)	54	28	9	1	8
PRAIRIES (n=154)	55	29	10	1	5
ONTARIO (n=309)	63	23	6	2	6
QUEBEC (n=211)	56	30	4	3	7
ATLANTIC (n=83)	63	29	7	0	1
LANGUAGE					
ENGLISH (n=661)	60	26	8	1	5
FRENCH (n=192)	55	32	4	3	7
TASTEMAKER SEGMENTS					
CUTTING EDGE (n=91)	45	34	12	2	7
EARLY ADOPTERS (n=281)	57	28	9	2	5
AVERAGE TEENS (n=210)	60	28	5	2	6
LATE ADOPTERS (n=156)	65	22	4	1	7
SATELLITES (n=115)	65	24	5	1	4
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Table 9

Question read:: Please indicate whether you strongly agree, agree, disagree, strongly disagree or are neutral about the following statements.

— Most jobs in the future will require a basic knowledge of science.

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	NO OPHNION
Average (n=854)	26	40	23	9	2	0
GENDER						
MALE (n=438)	26	37	. 24	10	2	0
FEMALE (n=417)	25	42	23	9	1	0
AGE						
10-11 YRS (n=0)	0	0	0	0	0	0
12-14 YRS (n=318)	29	37	24	8	2	0
15-16 YRS (n=216)	30 20	40 43	23 22	6 13	1 2	0
17-19 YRS (n=318)	20	43	22	13	2	U
AGE BY GENDER						
MALES 10-11 YRS (n=0)	0	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	0	0	0	0	0	0
MALES 12-14 YRS (n=163)	33	31	26	7	2	0
FEMALES 12-14 YRS (n=156)	25	43	22 26	10 6	1 2	0 0
MALES 15-16 YRS (n=112)	30 30	36 45	26 21	4	1	0
FEMALES 15-16 YRS (n=105) MALES 17-19 YRS (n=164)	18	45 45	20	15	2	Ö
FEMALES 17-19 YRS (n=156)	22	40	24	11	2	Ö
· ·						
LEVEL OF SCHOOL THIS FALL	0.4	477	00	•	^	•
ELEMENTARY (n=103)	24	47	23	6 9	0 1	0
SECONDARY (n=544) POST-SECONDARY (n=174)	28 21	38 43	24 20	14	3	0
POST-SECONDANT (II=174)	£1	40	20	17	J	Ů
COMMUNITY SIZE						
1,000,000 AND OVER (n=182)	25	38	26	9	2	0
100,000-999,999 (n=221)	29	43	16	10	2	0
10,000-99,999 (n=195)	22	42	22	12	2	0
UNDER 10,000/RURAL (n=255)	26	38	29	7	0	0
REGION			•			
BRITISH COLUMBIA (n=100)	32	36	22	10	0	0
PRAIRIES (n=152)	28	42	20	9	1	0
ONTARIO (n=309)	29	44	18	8	1	0
QUEBEC (n=211)	14	32	36	13	5	0
ATLANTIC (n=81)	32	44	17	6	0	0
LANGUAGE						
ENGLISH (n=662)	29	42	20	8	1	0
FRENCH (n=192)	14	32	35	14	5	0
TASTEMAKER SEGMENTS						
CUTTING EDGE (n=90)	30	37	18	10	6	0
EARLY ADOPTERS (n=282)	27	37	23	12	1	0
AVERAGE TEENS (n=209)	21	46	23	9	0	0
LATE ADOPTERS (n=153)	33	40	22	4	1	0
SATELLITES (n=115)	19	40	27	11	3	0

Table 10

Question read: Please indicate whether you strongly agree, agree, disagree, strongly disagree or are neutral about the following statements.

— Most jobs in the future will require a basic knowledge of math.

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	NO OPINION
Average (n=854)	48	40	8	2	1	0
GENDER MALE (n=437) FEMALE (n=417)	50 ; 46	39 42	7 9	2 2	1	0 0
AGE 10-11 YRS (n=0) 12-14 YRS (n=319) 15-16 YRS (n=216) 17-19 YRS (n=319)	0 61 50 35	0 33 38 50	0 5 8 11	0 1 2 4	0 1 1	0 0 0
AGE BY GENDER MALES 10-11 YRS (n=0) FEMALES 10-11 YRS (n=10) MALES 12-14 YRS (n=163) FEMALES 12-14 YRS (n=156) MALES 15-16 YRS (n=112) FEMALES 15-16 YRS (n=103) MALES 17-19 YRS (n=163) FEMALES 17-19 YRS (n=155)	0 60 61 53 48 39	0 0 33 32 34 44 48 51	0 0 4 6 10 7 10	0 0 2 1 3 1 2 5	0 0 2 0 1 1 1	0 0 0 0 0
LEVEL OF SCHOOL THIS FALL ELEMENTARY (n=102) SECONDARY (n=544) POST-SECONDARY (n=172) COMMUNITY SIZE	64 51 34	28 39 51	6 8 11	2 2 3	0 1 2	0 0 0
1,000,000 AND OVER (n=184) 100,000-999,999 (n=221) 10,000-99,999 (n=196) UNDER 10,000/RURAL (n=255)	46 48 50 49	42 44 34 41	7 5 11 9	3 2 4 1	2 1 2 0	0 0 0
REGION BRITISH COLUMBIA (n=98) PRAIRIES (n=153) ONTARIO (n=310) QUEBEC (n=211) ATLANTIC (n=82)	46 49 54 35 65	40 43 39 45 27	10 8 5 12 9	4 0 2 5 0	0 0 0 3 0	0 0 0 0
LANGUAGE ENGLISH (n=662) FRENCH (n=192)	53 33	38 47	7 11	2 5	0 4	0 0
TASTEMAKER SEGMENTS CUTTING EDGE (n=90) EARLY ADOPTERS (n=280) AVERAGE TEENS (n=209) LATE ADOPTERS (n=154) SATELLITES (n=115)	49 50 44 56 42	39 40 44 35 47	4 8 9 7 8	6 3 3 0 2	2 0 0 1 2	0 0 0 0

Table 11

Question read: Please indicate whether you strongly agree, agree, disagree, strongly disagree or are neutral about the following statements.

— I will be able to get by O.K. without knowing much about math or science.

·	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	NO OPINION
Average (n=854)	4	8	13	39	37	0
GENDER						
MALE (n=438)	4	6	11	40	38	0
FEMALE (n=416)	3	10	16	37	35	0
AGE						
10-11 YRS (n=0)	0	0	0	0	0	0
12-14 YRS (n=320)	3	4	10	33	49	0
15-16 YRS (n=215)	4	8	14	40	34	0
17-19 YRS (n=319)	3	11	16	43	26	0
AGE BY GENDER						
MALES 10-11 YRS (n=0)	0	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	0	0	0	0	0	0
MALES 12-14 YRS (n=164)	4	5	7	30	54	0
FEMALES 12-14 YRS (n=157)	3	4	13	36	45 05	0
MALES 15-16 YRS (n=112)	6 1	9 7	12	38	35 or	0
FEMALES 15-16 YRS (n=104) MALES 17-19 YRS (n=163)	2	6	17 15	40 52	35 26	0
FEMALES 17-19 YRS (n=157)	4	17	18	35	25 25	0 0
LEVEL OF SCHOOL THIS FALL						
ELEMENTARY (n=102)	2	6	8	31	53	0
SECONDARY (n=544)	3	6	13	39	38	ō
POST-SECONDARY (n=172)	4	14	16	42	24	0
COMMUNITY SIZE						
1,000,000 AND OVER (n=184)	3	10	14	36	36	0
100,000-999,999 (n=222)	4	8	13	42	34	0
10,000-99,999 (n=195)	6	9	12	36	37	0
UNDER 10,000/RURAL (n=255)	2	5	15	38	39	0
REGION						
BRITISH COLUMBIA (n=99)	1	12	13	42	31	0
PRAIRIES (n=154)	1	6	12	38	44	0
ONTARIO (n=310)	3	7	12	39	38	0
QUEBEC (n=210)	9	10	16	36	29	0
ATLANTIC (n=82)	2	0	16	38	44	0
LANGUAGE						
ENGLISH (n=661)	2	7	13	39	39	0
FRENCH (n=192)	10	10	16	36	29	0
TASTEMAKER SEGMENTS						
CUTTING EDGE (n=91)	7	9	20	26	38	0
EARLY ADOPTERS (n=280)	3	9	16	38	34	0
AVERAGE TEENS (n=210)	3	9	16	40	32	0
LATE ADOPTERS (n=154)	3	5	3	44	46	0
SATELLITES (n=116)	5	5	11	41	38	0

Table 12

Question read: If ever dropped or decided not to continue taking science or math courses in school:

— Other than yourself, who would you say has had the most influence on your decision to drop or not to continue taking science and/or math courses in school?

	NO ONE/ MYSELF	TEACHERS	FRIENDS	PARENTS	BROTHER/ SISTER	COUNSELLORS	STUDENTS	CHILD	OTHER	DON'T KNOW	NO OPINION
Average (n=124)	27	23	11	17	1	2	2	1	9	0	8
GENDER MALE (n=51) FEMALE (n=74)	27 26	22 24	14 9	20 15	0 1	0 3	0 4	0 1	6 11	0	12 5
AGE 10-11 YRS (n=0) 12-14 YRS (n=17) 15-16 YRS (n=17) 17-19 YRS (n=89)	0 12 24 30	0 6 29 25	0 6 6 12	0 29 29 12	0 6 0	0 0 0 2	0 0 0 3	0 0 0 1	0 24 0 8	0 0 0	0 18 12 6
AGE BY GENDER MALES 10-11 YRS (n=0) FEMALES 10-11 YRS (n=0) MALES 12-14 YRS (n=11) FEMALES 12-14 YRS (n=6) MALES 15-16 YRS (n=5) FEMALES 15-16 YRS (n=11) MALES 17-19 YRS (n=33) FEMALES 17-19 YRS (n=56)	0 9 17 40 9 30	0 9 0 20 36 24 25	0 0 0 17 20 0 18 11	0 0 27 33 0 45 21	0 0 0 17 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 27 17 0 0	0 0 0 0 0	0 0 27 0 20 9 6 5
LEVEL OF SCHOOL THIS FALL ELEMENTARY (n=6) SECONDARY (n=61) POST-SECONDARY (n=45)	33 23 29	0 26 18	0 7 22	0 28 9	17 0 0	0 0 4	0 2 4	0 2 0	17 7 9	0 0 0	33 7 4
COMMUNITY SIZE 1,000,000 AND OVER (n=29) 100,000-999,999 (n=40) 10,000-99,999 (n=26) UNDER 10,000/RURAL (n=30)	31 20 35 27	28 20 23 23	14 5 15 13	14 20 19 10	0 3 0	3 0 0 3	3 3 0 3	3 0 0	3 15 4 10	0 0 0	0 15 4 10
REGION BRITISH COLUMBIA (n=14) PRAIRIES (n=18) ONTARIO (n=61) QUEBEC (n=27) ATLANTIC (n=4)	29 22 21 37 25	43 33 18 22 0	7 11 8 22 0	7 6 31 0	0 0 2 0	0 6 2 0	0 11 2 0	7 0 0 0	7 0 7 19 25	0 0 0 0	0 11 10 0 50
LANGUAGE ENGLISH (n=100) FRENCH (n=25)	23 40	25 16	9 20	20 4	1 0	2 0	3 0	1 0	6 20	0 0	10 0
TASTEMAKER SEGMENTS CUTTING EDGE (n=21) EARLY ADOPTERS (n=45) AVERAGE TEENS (n=27) LATE ADOPTERS (n=14) SATELLITES (n=16)	29 29 22 21 25	38 18 37 0 19	5 11 11 14 13	14 22 19 14 6	0 2 0 0	5 0 4 0	5 2 0 0 6	5 0 0 0	0 4 7 43 6	0 0 0 0	0 11 0 7 25

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Table 13

\*\*Question read:\* If ever dropped or decided not to continue taking science or math courses in school:

--- What was the main reason you decided to drop or not to continue taking your science course(s)?

	THE TEACHER	NOT DOING WELLIN THAT SUBJECT	NOT ENJOYING THE SUBJECT	NOT NECESSARY FORMY CAREER	NO OPINION
Average (n=124)	16	28	19	23	14
GENDER MALE (n=50) FEMALE (n=74)	20 14	32 26	12 24	18 26	18 11
AGE 10-11 YRS (n=0) 12-14 YRS (n=16) 15-16 YRS (n=18) 17-19 YRS (n=88)	0 19 33 13	0 19 28 30	0 25 6 20	0 6 17 27	0 31 17 10
AGE BY GENDER MALES 10-11 YRS (n=0) FEMALES 10-11 YRS (n=0) MALES 12-14 YRS (n=11) FEMALES 12-14 YRS (n=6) MALES 15-16 YRS (n=5) FEMALES 15-16 YRS (n=12) MALES 17-19 YRS (n=33) FEMALES 17-19 YRS (n=57)	0 0 27 17 40 25 15	0 9 33 40 25 36 25	0 0 36 0 0 8 6 30	0 0 0 17 0 25 27	0 0 27 33 20 17 15
LEVEL OF SCHOOL THIS FALL ELEMENTARY (n=6) SECONDARY (n=60) POST-SECONDARY (n=45)	33 18 9	0 30 27	17 18 18	0 23 31	50 10 16
COMMUNITY SIZE 1,000,000 AND OVER (n=29) 100,000-999,999 (n=40) 10,000-99,999 (n=26) UNDER 10,000/RURAL (n=29)	21 15 23 7	34 28 15 34	14 25 15 21	24 23 31 14	7 10 15 24
REGION BRITISH COLUMBIA (n=13) PRAIRIES (n=19) ONTARIO (n=62) QUEBEC (n=27) ATLANTIC (n=4)	15 11 18 15 25	23 58 26 19 0	15 11 15 37 50	23 11 26 22 25	23 11 16 7 0
LANGUAGE ENGLISH (n=98) FRENCH (n=25)	16 16	31 16	15 36	22 24	15 8
TASTEMAKER SEGMENTS CUTTING EDGE (n=20) EARLY ADOPTERS (n=46) AVERAGE TEENS (n=27) LATE ADOPTERS (n=15) SATELLITES (n=17)	15 20 11 27 6	35 26 37 20 24	15 15 22 13 35	25 26 15 27 18	10 13 15 13 18

Table 14

Question read: If ever dropped or decided not to continue taking science or math courses in school:

— What were the main reasons you decided to drop or not to continue taking your math course(s)?

	THE TEACHER	NOT DOING WELL IN THAT SUBJECT	NOT ENJOYING THE SUBJECT	NOT NECESSARY FOR MY CAREER	NO OPINION
Average (n=124)	22	23	13	15	28
GENDER MALE (n=50) FEMALE (n=75)	26 19	20 24	8 16	14 16	32 25
AGE 10-11 YRS (n=0) 12-14 YRS (n=17) 15-16 YRS (n=18) 17-19 YRS (n=88)	0 24 39 18	0 35 22 20	0 6 6 16	0 0 6 19	0 35 28 26
AGE BY GENDER MALES 10-11 YRS (n=0) FEMALES 10-11 YRS (n=0) MALES 12-14 YRS (n=11) FEMALES 12-14 YRS (n=6) MALES 15-16 YRS (n=5) FEMALES 15-16 YRS (n=12) MALES 17-19 YRS (n=34) FEMALES 17-19 YRS (n=57)	0 0 27 17 60 25 21	0 0 36 33 20 25 15 23	0 0 9 0 0 8 9	0 0 0 0 0 8 21	0 0 27 50 20 33 35 21
LEVEL OF SCHOOL THIS FALL ELEMENTARY (n=6) SECONDARY (n=60) POST-SECONDARY (n=45)	33 20 16	17 23 20	0 13 18	0 7 31	50 37 16
COMMUNITY SIZE 1,000,000 AND OVER (n=29) 100,000-999,999 (n=40) 10,000-99,999 (n=26) UNDER 10,000/RURAL (n=29)	21 15 27 28	21 28 19 21	14 10 12 17	14 15 27 7	31 33 15 28
REGION BRITISH COLUMBIA (n=13) PRAIRIES (n=18) ONTARIO (n=62) QUEBEC (n=27) ATLANTIC (n=4)	23 28 15 33 25	31 33 24 11 0	8 11 8 30 0	31 11 11 19 25	8 17 42 7 50
LANGUAGE ENGLISH (n=100) FRENCH (n=25)	18 32	25 12	9 32	15 16	33 8
TASTEMAKER SEGMENTS CUTTING EDGE (n=20) EARLY ADOPTERS (n=46) AVERAGE TEENS (n=26) LATE ADOPTERS (n=14) SATELLITES (n=16)	20 17 35 14 13	25 22 23 21 25	15 17 8 7 13	30 7 12 21 19	10 37 23 36 31

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Table 15

Question read: If ever dropped or decided not to continue taking science or math courses in school with one of the main reasons being "the teacher".

— What was it about the teacher or the teaching method they used that you didn't like?

·	DIDN'T EXPLAIN FULLY/ TOO FAST	THEIR ATTITUDE	OTHER	DON'T KNOW	NO OPINION
Average (n=33)	30	27	33	0	12
GENDER MALE (n=18) FEMALE (n=16)	33 25	22 31	28 38	0 0	17 6
AGE 10-11 YRS (n=0) 12-14 YRS (n=4) 15-16 YRS (n=7) 17-19 YRS (n=21)	0 25 43 29	0 25 14 29	0 0 43 38	0 0 0	0 50 0 5
AGE BY GENDER MALES 10-11 YRS (n=0) FEMALES 10-11 YRS (n=0) MALES 12-14 YRS (n=3) FEMALES 12-14 YRS (n=1) MALES 15-16 YRS (n=3) FEMALES 15-16 YRS (n=4) MALES 17-19 YRS (n=8) FEMALES 17-19 YRS (n=11)	0 0 33 0 33 50 38 27	0 0 33 0 0 25 25 27	0 0 0 0 67 25 25 45	000000000000000000000000000000000000000	0 0 33 100 0 0 13
LEVEL OF SCHOOL THIS FALL ELEMENTARY (n=2) SECONDARY (n=17) POST-SECONDARY (n=8)	0 41 25	0 35 13	0 24 63	0 0 0	100 0 0
COMMUNITY SIZE 1,000,000 AND OVER (n=7) 100,000-999,999 (n=9) 10,000-99,999 (n=7) UNDER 10,000/RURAL (n=9)	29 33 0 56	43 33 14 22	29 33 43 22	0 0 0	0 0 43 0
REGION BRITISH COLUMBIA (n=3) PRAIRIES (n=5) ONTARIO (n=14) QUEBEC (n=10) ATLANTIC (n=1)	33 20 29 30 100	0 20 50 10 0	67 60 14 40 0	0 0 0 0	0 0 7 20 0
LANGUAGE ENGLISH (n=24) FRENCH (n=9)	33 22	33 11	29 44	0 0	4 22
TASTEMAKER SEGMENTS CUTTING EDGE (n=4) EARLY ADOPTERS (n=12) AVERAGE TEENS (n=9) LATE ADOPTERS (n=4) SATELLITES (n=3)	25 33 11 50 67	25 25 11 50 33	25 33 67 0	0 0 0 0	25 8 11 0

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Table 16

Question read: If taking any science or math courses in school now:

— Other than yourself, who would you say has done the most to encourage, help or support you in your science and/or math courses in school?

	PARENTS	TEACHERS	FRIENDS	NO ONE/ MYSELF	COMBINATION OF PEOPLE	OTHER
	74	TENOREIE	,,,,,,,,	,	, === ==	VIII.21
Average (n=712)	45	25	8	6	5	11
GENDER						
MALE (n=371)	44 47	23 27	8 8	8 5	5 5	12 9
FEMALE (n=340)	47	21		,	J	
AGE	•	•	•	•	0	0
10-11 YRS (n=0) 12-14 YRS (n=283)	0 53	0 28	0 6	0 4	4	5
15-14 YRS (n=203)	46	21	8	8	6	10
17-19 YRS (n=227)	36	23	10	7	6	18
17 10 1110 (11-227)	•			·	•	
AGE BY GENDER			_	• .	_	_
MALES 10-11 YRS (n=0)	0	0	0	.0	0	0
FEMALES 10-11 YRS (n=0)	0	0	0	0	0	0
MALES 12-14 YRS (n=139)	54	27	6	4	3	7
FEMALES 12-14 YRS (n=145)	52	29	8	4	4	3
MALES 15-16 YRS (n=103)	42	20	7	12	8	12
FEMALES 15-16 YRS (n=98)	50	22	10 12	5 9	5 6	7 18
MALES 17-19 YRS (n=129)	35 36	20 29	6	6	6	17
FEMALES 17-19 YRS (n=98)	30	29	U	Ü	Ū	17
LEVEL OF SCHOOL THIS FALL						
ELEMENTARY (n=79)	58	30	6	0	4	1
SECONDARY (n=499)	44	23	7	8	6	11
POST-SECONDARY (n=117)	42	27	14	3	1	13
COMMUNITY SIZE						
1,000,000 AND OVER (n=144)	38	24	12	7	5	15
100,000-999,999 (n=188)	48	26	10	5	3	9
10,000-99,999 (n=166)	51	21	5	7	7	9
UNDER 10,000/RURAL (n=215)	44	27	6	7	7	10
REGION						
BRITISH COLUMBIA (n=79)	49	22	10	1	3	15
PRAIRIES (n=126)	44	26	9	6	7	8
ONTARIO (n=261)	39	26	5	8	8	14
QUEBEC (n=169)	53	21	11	9	1	6
ATLANTIC (n=76)	49	30	7	1	5	8
LANGUAGE						
ENGLISH (n=557)	42	26	7	6	7	12
FRENCH (n=155)	55	19	11	9	1	5
,			. •	-	·	_
TASTEMAKER SEGMENTS						
CUTTING EDGE (n=70)	34	24	6	13	3	20
EARLY ADOPTERS (n=228)	44	26	7	5	7	12
AVERAGE TEENS (n=181)	48	24	7	6	4	10
LATE ADOPTERS (n=138)	51 45	25 23	8 12	3 11	7 4	7 4
SATELLITES (n=91)	45	23	12	11	4	4

Table 17

Question read: If taking any science or math courses in school now:

— What was it that person(s) did that you felt was the most helpful?

	ENCOURAGED ME	ME WITH HELPED	SHOWED ME THAT I NEEDED IT	EXPLAINED IT FULLY	OTHER
Average (n=631)	30	22	14	11	23
GENDER MALE (n=325) FEMALE (n=306)	; 32 28	21 24	14 14	7 15	26 19
AGE 10-11 YRS (n=0) 12-14 YRS (n=258) 15-16 YRS (n=172) 17-19 YRS (n=198)	0 26 33 32	0 27 22 16	0 11 14 19	0 13 11 7	0 22 20 26
AGE BY GENDER MALES 10-11 YRS (n=0) FEMALES 10-11 YRS (n=0) MALES 12-14 YRS (n=128) FEMALES 12-14 YRS (n=131) MALES 15-16 YRS (n=89) FEMALES 15-16 YRS (n=89) MALES 17-19 YRS (n=113) FEMALES 17-19 YRS (n=86)	0 0 31 22 33 33 32	0 0 27 27 24 20 12 22	0 0 12 11 12 16 19	0 9 17 7 16 4	0 0 21 24 25 16 33 16
LEVEL OF SCHOOL THIS FALL ELEMENTARY (n=74) SECONDARY (n=433) POST-SECONDARY (n=107)	23 30 33	38 21 16	7 14 23	11 11 8	22 24 20
COMMUNITY SIZE 1,000,000 AND OVER (n=128) 100,000-999,999 (n=169) 10,000-99,999 (n=146) UNDER 10,000/RURAL (n=188)	20 32 36 31	24 22 19 22	16 12 15 14	9 12 10 12	30 21 20 21
REGION BRITISH COLUMBIA (n=74) PRAIRIES (n=113) ONTARIO (n=224) QUEBEC (n=151) ATLANTIC (n=69)	26 25 27 45 20	27 25 21 20 22	7 17 17 9 20	8 11 9 13 12	32 23 25 13 26
LANGUAGE ENGLISH (n=496) FRENCH (n=135)	25 48	23 18	16 7	10 13	25 13
TASTEMAKER SEGMENTS CUTTING EDGE (n=58) EARLY ADOPTERS (n=211) AVERAGE TEENS (n=153) LATE ADOPTERS (n=130) SATELLITES (n=76)	24 27 33 35 32	16 21 22 24 25	14 16 13 15	12 11 8 10 14	34 26 24 16

Table 18

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Question read: What effect would making the following changes in your science and/or math courses have on how much you enjoy those courses?

—More experiments

	ENJOY A LOT MORE	ENJOY A LITTLE MORE	MAKE NO DIFFERENCE	ENJOY A UTTLE LESS	ENJOY A LOT LESS	NO OPINION
Average (n=749)	40	35	18	4	1	2
GENDER			_			_
MALE (n=396) FEMALE (n=355)	44 36	36 32	13 24	3 5	2 1	2 2
AGE						
10-11 YRS (n=0)	0	0	0	0	0	0
12-14 YRS (n=296)	51	30	16	2	0	2
15-16 YRS (n=206)	40	36	17	3	2	2
17-19 YRS (n=247)	28	38	23	6	2	3
AGE BY GENDER			•		•	•
MALES 10-11 YRS (n=0)	0	0	0	0	0 0	0
FEMALES 10-11 YRS (n=0)	0 57	0 30	0 11	0	0	3
MALES 12-14 YRS (n=152)	46	30	20	3	0	1
FEMALES 12-14 YRS (n=145)	45	37	10	3	3	2
MALES 15-16 YRS (n=107) FEMALES 15-16 YRS (n=100)	36	34	24	4	1	1
MALES 17-19 YRS (n=137)	30	43	18	4	3	1
FEMALES 17-19 YRS (n=111)	25	33	29	6	1	5
LEVEL OF SCHOOL THIS FALL						
ELEMENTARY (n=87)	48	32	17	1	0	1
SECONDARY (n=513)	45	32	18	2	2	1
POST-SECONDARY (n=130)	22	42	22	8	1	6
COMMUNITY SIZE						
1,000,000 AND OVER (n=155)	41	35	19	1	1	4
100,000-999,999 (n=198)	39	34	17	5	3	3
10,000-99,999 (n=175)	47	27	18	7	0	1
UNDER 10,000/RURAL (n=223)	36	40	19	2	1	1
REGION BRITISH COLUMBIA (n=88)	48	30	18	2	1	1
PRAIRIES (n=132)	39	37	18	5	i	i
ONTARIO (n=277)	41	33	19	2	2	3
QUEBEC (n=177)	33	36	21	7	1	3
ATLANTIC (n=78)	50	37	9	1	i	1
LANGUAGE						
ENGLISH (n=590)	43	34	17	3	1	2
FRENCH (n=160)	31	36	22	7	1	4
TASTEMAKER SEGMENTS						
CUTTING EDGE (n=75)	47	25	17	1	5	4
EARLY ADOPTERS (n=240)	41	33	19	4	0	2
AVERAGE TEENS (n=184)	41	35	18	3	1	2
LATE ADOPTERS (n=147)	33	44	17	4	0	2
SATELLITES (n=99)	44	28	21	2	2	2

Table 19

. Question read: What effect would making the following changes in your science and/or math courses have on how much you enjoy those courses? —More hands-on work

	ENJOY A LOT MORE	ENJOY A LITTLE MORE	MAKE NO DIFFERENCE	ENJOY A UTTLE LESS	ENJOY A LOT LESS	NO OPINION
Average (n=749)	. 36	33	19	8	2	1
GENDER MALE (n=393)	40	32	18	7	3	1
FEMALE (n=354)	32	35	21	8	2	2
AGE	•	•	0	0	•	•
10-11 YRS (n=0) 12-14 YRS (n=296)	0 40	0 29	20	8	0 3	0 1
15-16 YRS (n=205)	39	31	18	10	2	1
17-19 YRS (n=247)	30	41	19	6	1	3
AGE BY GENDER						
MALES 10-11 YRS (n=0)	0	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	0	0	0	0 9	0	0
MALES 12-14 YRS (n=151) FEMALES 12-14 YRS (n=145)	45 34	26 32	16 23	7	4 3	1 1
MALES 15-16 YRS (n=107)	43	28	17	8	3	1
FEMALES 15-16 YRS (n=98)	34	34	19	11	1	i
MALES 17-19 YRS (n=136)	32	41	20	4	1	i
FEMALES 17-19 YRS (n=110)	28	41	18	7	i	5
LEVEL OF SCHOOL THIS FALL #4						
ELEMENTARY (n=87)	44	24	24	6	2	0
SECONDARY (n=513)	38	32	18	8	3	1
POST-SECONDARY (n=131)	27	42	20	5	0	6
COMMUNITY SIZE						
1,000,000 AND OVER (n=155)	34	34	19	8	3	3
100,000-999,999 (n=195)	39	33	17	7	2	2
10,000-99,999 (n=175)	37	25	22	10	5	1
UNDER 10,000/RURAL (n=223)	33	40	19	7	0	1
REGION	42	34	17	-	•	
BRITISH COLUMBIA (n=89) PRAIRIES (n=133)	42 37	32	21	7 8	0 1	1 1
ONTARIO (n=277)	42	32	15	6	3	2
QUEBEC (n=176)	16	37	28	13	4	2
ATLANTIC (n=77)	51	31	10	4	3	1
LANGUAGE				•		
ENGLISH (n=590)	42	33	16	6	2	2
FRENCH (n=158)	15	37	29	13	4	2
TASTEMAKER SEGMENTS/C						
CUTTING EDGE (n=74)	43	28	20	4	3	1
EARLY ADOPTERS (n=241)	41	24	22	10	2	2
AVERAGE TEENS (n=185)	31	41	17	7	2	1
LATE ADOPTERS (n=148)	33	39	17	7	3	1
SATELLITES (n=99)	31	39	16	9	2	2

	ENJOY A LOT MORE	ENJOY A LITTLE MORE	MAKE NO DIFFERENCE	ENJOY A LITTLE LESS	ENLIDY A LOT LESS	NO OPHION
Average (n=749)	31	41	24	1	0	3
GENDER MALE (n=395) FEMALE (n=354)	30 32	43 38	23 25	2 1	0 1	3
	02	00	25	•	•	J
AGE 10-11 YRS (n=0)	0	0	0	0	0	0
12-14 YRS (n=297)	33	39	23	2	1	2
15-16 YRS (n=208)	31	41	23	1	0	4
17-19 YRS (n=247)	29	42	25	0	0	4
AGE BY GENDER	_	_	_	:		_
MALES 10-11 YRS (n=0)	0	0	0	0	0	0
FEMALES 10-11 YRS (n=0) MALES 12-14 YRS (n=152)	30	45	20	3	0	2
FEMALES 12-14 YRS (n=144)	36	34	26	1	1	1
MALES 15-16 YRS (n=106)	32	42	20	1	1	5
FEMALES 15-16 YRS (n=100)	30	41	25	1	0	3
MALES 17-19 YRS (n=137)	28	42	26	0	0	3
FEMALES 17-19 YRS (n=110)	30	42	23	0	0	5
LEVEL OF SCHOOL THIS FALL						
ELEMENTARY (n=87)	28	36	30	5	1	1
SECONDARY (n=512)	31	42	24	1	0	2
POST-SECONDARY (n=131)	34	38	21	0	0	8
COMMUNITY SIZE						
1,000,000 AND OVER (n=156)	24	44	23	3	1	4
100,000-999,999 (n=196)	32	40	23	1	0	3
10,000-99,999 (n=174)	39	39	19	1	0	3
UNDER 10,000/RURAL (n=222)	29	41	27	0	0	2
REGION	07				_	
BRITISH COLUMBIA (n=89)	27 34	45 32	26 30	1 0	0 1	1 4
PRAIRIES (n=131) ONTARIO (n=277)	30	32 41	24	1	Ó	3
QUEBEC (n=177)	32	41	20	3	1	4
ATLANTIC (n=76)	32	51	16	ő	ò	1
LANGUAGE						
ENGLISH (n=589)	31	41	24	1	0	3
FRENCH (n=161)	32	40	20	3	1	4
TASTEMAKER SEGMENTS						
CUTTING EDGE (n=74)	30	43	18	4	1	4
EARLY ADOPTERS (n=241)	32	41	22	0	0	3
AVERAGE TEENS (n=185)	29	40	26	2	1	3
LATE ADOPTERS (n=146)	31	38	27	1	0	3
SATELLITES (n=99)	35	40	22	0	0	2

Table 21

Question read: What effect would making the following changes in your science and/or math courses have on how much you enjoy those courses?

— Taking your science and math classes with only girls if you're a girl and only boys if you're a boy

	ENJOY ALOT MORE	ENJOY A LITTLE MORE	MAKE NO DIFFERENCE	ENJOY A LITTLE LESS	ENJOY A LOT LESS	NO OPINION
Average (n=749)	4	3	31	18	41	2
GENDER	_					
MALE (n=394) FEMALE (n=354)	5 2	2 5	29 34	16 20	46 36	2 3
AGE						
10-11 YRS (n=0)	0	0	0	0	0	0
12-14 YRS (n=295)	6	4	32	17	40	1
15-16 YRS (n=205)	2 2	1 4	29	22	42	3
17-19 YRS (n=247)	2	4	33	16	42	3
AGE BY GENDER	0	0	0	0	.0	0
MALES 10-11 YRS (n=0)	0	0	0	Ö	0	0
FEMALES 10-11 YRS (n=0) MALES 12-14 YRS (n=151)	9	3	35	13	40	Ö
FEMALES 12-14 YRS (n=146)	2	7	27	23	40	1
MALES 15-16 YRS (n=107)	2	ó	24	22	48	4
FEMALES 15-16 YRS (n=100)	2	3	34	22	37	2
MALES 17-19 YRS (n=138)	3	4	25	16	51	1
FEMALES 17-19 YRS (n=110)	3	3	44	16	30	5
LEVEL OF SCHOOL THIS FALL						
ELEMENTARY (n=88)	6	5	41	16	33	0
SECONDARY (n=512)	4	3	29	19	45	1
POST-SECONDARY (n=131)	4	5	32	17	37	6
COMMUNITY SIZE						
1,000,000 AND OVER (n=156)	2	6	25	22	42	3
100,000-999,999 (n=196)	6	2	26	16	48	2
10,000-99,999 (n=175)	5	1	36	15	41	2
UNDER 10,000/RURAL (n=223)	2	4	37	19	36	1
REGION		_				
BRITISH COLUMBIA (n=88)	1	2	22	22	52	1
PRAIRIES (n=131)	5 3	2 5	29	16	47 45	1 2
ONTARIO (n=275) QUEBEC (n=175)	5	3	29 39	15 24	45 26	3
ATLANTIC (n=77)	3	1	38	16	40	3
LANGUAGE						
ENGLISH (n=590)	3	4	29	16	46	2
FRENCH (n=160)	6	3	40	25	24	3
TASTEMAKER SEGMENTS						
CUTTING EDGE (n=74)	8	3	27	14	47	1
EARLY ADOPTERS (n=241)	4	5	26	19	45	2
AVERAGE TEENS (n=186)	5	2	34	18	38	3
LATE ADOPTERS (n=147)	0	3	37	22	37	1
SATELLITES (n=100)	4	4	34	16	40	2

Table 22

\*\*Cuestion read: What effect would making the following changes in your science and/or math courses have on how much you enjoy those courses? — Learning something new every day

<i>:</i>	ENJOY A LOT MORE	ENJOY A LITTLE MORE	MAKE NO DIFFERENCE	ENJOY A LITTLE LESS	ENJOY A LOT LESS	NO OPINION
Average (n=749)	24	38	27	8	2	2
GENDER						
MALE (n=395)	24	43	25	4	2	2
FEMALE (n=356)	24	32	28	11	3	3
AGE						
10-11 YRS (n=0)	0	0	0	0	0	0
12-14 YRS (n=296)	31	35	25	6 8	1	1
15-16 YRS (n=206)	20	39 39	27 28	9	3 2	2 3
17-19 YRS (n=247)	19	39	20	9	2	3
AGE BY GENDER	_			_		
MALES 10-11 YRS (n=0)	0	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	0	0	0 22	0 1	0	0 2
MALES 12-14 YRS (n=152)	35 26	41 30	22 27	13	3	1
FEMALES 12-14 YRS (n=145) MALES 15-16 YRS (n=107)	20 21	45	24	5	3	3
FEMALES 15-16 YRS (n=99)	20	33	30	10	4	2
MALES 17-19 YRS (n=136)	15	44	29	8	2	1
FEMALES 17-19 YRS (n=110)	25	34	26	9	1	5
LEVEL OF SCHOOL THIS FALL						
ELEMENTARY (n=87)	39	29	26	5	1	0
SECONDARY (n=511)	23	39	26	9	2	1
POST-SECONDARY (n=130)	21	38	27	5	2	7
COMMUNITY SIZE						
1,000,000 AND OVER (n=157)	16	36	32	10	1	4
100,000-999,999 (n=196)	28	35	25	8	2	3
10,000-99,999 (n=175)	30	37	23	5	4	2
UNDER 10,000/RURAL (n=223)	22	41	26	8	1	1
REGION						
BRITISH COLUMBIA (n=88)	20	36	31	7	3	2
PRAIRIES (n=132)	24	42	27	5	2	1
ONTARIO (n=275)	24	34	27	11	3	2
QUEBEC (n=175)	25	39	26	6	1	3
ATLANTIC (n=78)	27	45	19	5	1	3
LANGUAGE						
ENGLISH (n=589)	24	37	27	8	2	2
FRENCH (n=160)	25	42	24	5	1	3
TASTEMAKER SEGMENTS						
CUTTING EDGE (n=73)	27	32	27	11	1	1
EARLY ADOPTERS (n=242)	23	36	28	8	2	2
AVERAGE TEENS (n=184)	22	42	25	6	2	3
LATE ADOPTERS (n=146)	25	38	31	5	0	1
SATELLITES (n=100)	26	37	20	11	4	2

Table 23

\*\*Cuestion read: What effect would making the following changes in your science and/or math courses have on how much you enjoy those courses?

— Having a female teacher if you're a girl and having a male teacher if you're a boy

	ENJOY A LOT MORE	ENJOY A LITTLE MORE	MAKE NO DIFFERENCE	ENJOY A LITTLE LESS	ENJOY A LOT LESS	NO O <del>PINI</del> ON
Average (n=749)	4	5	70	7	12	2
GENDER						
MALE (n=394)	5 3	3 6	69 72	6 8	15 8	2 2
FEMALE (n=354)	3	Ü	12	· ·	U	٤.
AGE 10-11 YRS (n=0)	0	0	0	0	0	0
12-14 YRS (n=297)	7	5	67	8	11	1
15-16 YRS (n=206)	1	4	72	8	11	3
17-19 YRS (n=247)	2	4	72	5	14	3
AGE BY GENDER						
MALES 10-11 YRS (n=0)	0	0	0	σ	Ó	0
FEMALES 10-11 YRS (n=0)	0	0	0	0	0	0
MALES 12-14 YRS (n=151)	9	4	66	7	14	1
FEMALES 12-14 YRS (n=144)	4 1	7 1	69 70	10 8	8	1
MALES 15-16 YRS (n=106)	2	8	72 74	8 7	14 8	4 1
FEMALES 15-16 YRS (n=99) MALES 17-19 YRS (n=137)	3	4	69	4	18	1
FEMALES 17-19 YRS (n=110)	2	3	<b>75</b>	7	8	5
LEVEL OF SCHOOL THIS FALL						
ELEMENTARY (n=88)	5	7	70	6	13	0
SECONDARY (n=512)	4	4	70	8	13	1
POST-SECONDARY (n=131)	2	5	72	5	11	7
COMMUNITY SIZE						
1,000,000 AND OVER (n=155)	3	6	66	10	12	3
100,000-999,999 (n=197)	4	4	69	6	15	3
10,000-99,999 (n=175)	6	3	75	3	11	2
UNDER 10,000/RURAL (n=222)	4	5	71	9	11	1
REGION	_	_		_		
BRITISH COLUMBIA (n=90)	6 2	6	64	9	14	1
PRAIRIES (n=132) ONTARIO (n=276)	5	8 3	73 66	7 8	11 14	1 3
QUEBEC (n=175)	4	2	75	7	9	2
ATLANTIC (n=78)	1	8	74	3	12	3
LANGUAGE						
ENGLISH (n=589)	3	5	69	7	13	2
FRENCH (n=159)	5	2	74	8	9	3
TASTEMAKER SEGMENTS						
CUTTING EDGE (n=73)	12	4	58	10	15	1
EARLY ADOPTERS (n=240)	4	6	66	8	13	2
AVERAGE TEENS (n=185)	5	3	70	7	13	3
LATE ADOPTERS (n=147)	0 1	5 2	77 83	7 4	10 8	1 2
SATELLITES (n=99)	1	-	00	4	0	۲

Table 24

. Question read: What effect would making the following changes in your science and/or math courses have on how much you enjoy those courses?

— Having your parents get more involved in helping you with your course work

	ENJOY A LOT MORE	ENJOY A UTTLE MORE	MAKE NO DIFFERENCE	ENJOY A LITTLE LESS	ENLOY A LOT LESS	OBMINOS
Average (n=749)	7	19	49	13	10	2
GENDER			_	_		
MALE (n=395) FEMALE (n=355)	8 7	18 21	49 48	13 12	10 10	2 2
AGE						
10-11 YRS (n=0)	0	0	0	0	0	0
12-14 YRS (n=295)	12	21	46	11	10	1
15-16 YRS (n=206)	5	17	51	15	9	3
17-19 YRS (n=247)	4	19	49	13	10	3
AGE BY GENDER	•	^	•		•	•
MALES 10-11 YRS (n=0)	0	0	0	0	0 0	0
FEMALES 10-11 YRS (n=0)	0	0	43	0 10	-	0 1
MALES 12-14 YRS (n=152)	17 6	19 22	43 49	10	10 10	1
FEMALES 12-14 YRS (n=144) MALES 15-16 YRS (n=106)	2	19	54	11	10	4
FEMALES 15-16 YRS (n=99)	7	17	48	18	8	1
MALES 17-19 YRS (n=137)	3	17	50	18	10	ż
FEMALES 17-19 YRS (n=110)	6	23	48	8	10	5
LEVEL OF SCHOOL THIS FALL						
ELEMENTARY (n=88)	16	19	47	8	10	0
SECONDARY (n=513)	8	18	48	15	11	1
POST-SECONDARY (n=130)	2	22	53	9	6	8
COMMUNITY SIZE						
1,000,000 AND OVER (n=156)	4	16	48	18	11	3
100,000-999,999 (n=196)	9	17	48	13	10	3
10,000-99,999 (n=175)	9	23	47	11	7	2
UNDER 10,000/RURAL (n=223)	7	21	51	9	11	1
REGION						
BRITISH COLUMBIA (n=90)	8	21	44	16	10	1
PRAIRIES (n=131)	4	21	48	15	11	1
ONTARIO (n=277)	7	16	44	14	16	3
QUEBEC (n=176)	10	24	53	8	2	2
ATLANTIC (n=77)	10	18	58	8	3	3
LANGUAGE						
ENGLISH (n=590)	7	18	48	13	12	2
FRENCH (n=160)	9	26	51	9	2	3
TASTEMAKER SEGMENTS						
CUTTING EDGE (n=74)	8	16	42	11	22	1
EARLY ADOPTERS (n=241)	6	15	51	14	12	2
AVERAGE TEENS (n=185)	8	18	54	10	7	3
LATE ADOPTERS (n=146)	4	29	48	12	5	1
SATELLITES (n=99)	15	18	40	15	9	2

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Table 25

Question read: What effect would making the following changes in your science and/or math courses have on how much you enjoy those courses?

— Guest speakers who use science or math in their work

	ENJOY A LOT MORE	ENJOY A LITTLE MORE	MAKE NO DIFFERENCE	ENJOY A LITTLE LESS	ENLIOY A LOT LESS	NO OPINION
Average (n=749)	20	38	28	8	3	3
GENDER MALE (n=395) FEMALE (n=355)	19 22	39 37	31 25	7 9	2 4	2 3
AGE 10-11 YRS (n=0) 12-14 YRS (n=296) 15-16 YRS (n=206) 17-19 YRS (n=247)	0 22 20 20	0 35 36 43	0 26 33 27	0 10 6 6	0 4 2 2	0 2 2 3
AGE BY GENDER MALES 10-11 YRS (n=0) FEMALES 10-11 YRS (n=0) MALES 12-14 YRS (n=152) FEMALES 12-14 YRS (n=144) MALES 15-16 YRS (n=106) FEMALES 15-16 YRS (n=100) MALES 17-19 YRS (n=137) FEMALES 17-19 YRS (n=111)	0 0 25 17 13 27 16 24	0 0 32 40 37 35 50	0 0 28 24 41 26 28 25	0 0 11 10 5 8 4	0 0 3 6 2 2 1 3	0 0 2 3 3 2 1 5
LEVEL OF SCHOOL THIS FALL ELEMENTARY (n=87) SECONDARY (n=511) POST-SECONDARY (n=131)  COMMUNITY SIZE 1,000,000 AND OVER (n=156) 100,000-999,999 (n=196) 10,000-99,999 (n=175)	21 21 21 20 18 26	37 37 42 32 37 39	26 30 26 30 32 24	9 9 4 10 8 7	5 3 1	2 1 7 3 3 2
UNDER 10,000/RURAL (n=222)  REGION BRITISH COLUMBIA (n=89) PRAIRIES (n=131) ONTARIO (n=277) QUEBEC (n=176) ATLANTIC (n=76)	19 27 20 21 16 24	37 42 38 32 47	24 27 27 25 40 22	7 10 6 10 7	1 5 3 2	3 1 1 3 3 5
LANGUAGE ENGLISH (n=590) FRENCH (n=160)	22 16	40 31	25 40	8 8	3 3	3 3
TASTEMAKER SEGMENTS CUTTING EDGE (n=75) EARLY ADOPTERS (n=241) AVERAGE TEENS (n=184) LATE ADOPTERS (n=146) SATELLITES (n=99)	27 21 19 19	32 39 36 39 42	31 28 30 25 28	3 8 9 12 5	7 2 2 2 4	1 2 3 3 3



Table 26

;:

Question read: What effect would making the following changes in your science and/or math courses have on how much you enjoy those courses?

— "Mentor programs" where you go to work in a job using science or math for a day

•	ENJOY	ENJOY	MAKE	ENJOY A	ENJOY	
	A LOT MORE	MORE	NO DIFFERENCE	LESS	A LOT LESS	NO OPHNON
Average (n=749)	41	31	19	4	3	2
words (n=1 10)	••	•		·	-	_
GENDER	4.0	00	00		•	•
MALE (n=395) FEMALE (n=355)	40 43	29 32	23 15	4 4	3 3	2 3
· Livial (ii-555)	-,0			·	_	_
AGE	_			_		
10-11 YRS (n=0) 12-14 YRS (n=296)	0 45	0 25	0 21	0 4	0 3	0 1
15-14 TR3 (n=256) 15-16 YRS (n=206)	41	32	18	4	3	2
17-19 YRS (n=247)	36	37	17	4	2	3
AGE BY GENDER						
MALES 10-11 YRS (n=0)	0	0	0	0	0	0
FEMALES 10-11 YRS (n=0)	0	0	0	0	0	0
MALES 12-14 YRS (n=151)	47	21	25	2	4	1
FEMALES 12-14 YRS (n=145)	43	29	17 20	6 4	3 1	2 3
MALES 15-16 YRS (n=106) FEMALES 15-16 YRS (n=99)	37 46	36 26	20 16	4	5 .	2
MALES 17-19 YRS (n=137)	34	34	23	5	3	1
FEMALES 17-19 YRS (n=111)	39	42	12	3	0	5
LEVEL OF SCHOOL THIS FALL				•		
ELEMENTARY (n=88)	42	23	27	3	3	1
SECONDARY (n=513)	43	29	19	5	3	1
POST-SECONDARY (n=130)	36	41	14	1	2	7
COMMUNITY SIZE						
1,000,000 AND OVER (n=156)	32	35	17	8	4	3
100,000-999,999 (n=196)	48	27	16	3	4	2
10,000-99,999 (n=175)	49	29	15 26	3 4	2 1	2 2
UNDER 10,000/RURAL (n=224)	35	33	20	4	'	2
REGION	40		40	•	•	
BRITISH COLUMBIA (n=89) PRAIRIES (n=131)	40 46	34 26	18 19	3 4	3 5	1
ONTARIO (n=276)	41	34	16	3	3	ż
QUEBEC (n=175)	37	31	21	7	1	3
ATLANTIĊ (n≕77)	45	23	26	1	1	3
LANGUAGE						
ENGLISH (n=589)	43	31	18	3	3	2
FRENCH (n=159)	36	30	22	8	1	3
TASTEMAKER SEGMENTS						
CUTTING EDGE (n=74)	42	34	14	5	4	1
EARLY ADOPTERS (n=240)	43	28	20	5	3	2 3
AVERAGE TEENS (r⊫185) LATE ADOPTERS (n≔148)	39 43	30 33	<b>2</b> 2 17	3 4	3 2	3 1
SATELLITES (n=99)	40	35	16	2	3	3
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