

Graduate Outcomes Survey



Graduate Outcomes Survey 2000

conducted for
School District 23

by
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Executive Summary

The seventh consecutive annual survey of graduates was conducted for School District 23 Central Okanagan, in June of 2000 by Reed Early of Nexus Consortium.

Six students from grade 9, 10 and 11 were chosen to form the survey team. They were trained by Mr. Early in telephone survey methodology and they assisted in designing, pilot testing, and conducting the survey. Each did their own data entry and preliminary analysis of the results.

The survey includes 26 questions, requires about 6 minutes to complete and was done on paper while speaking on the telephone. Calling was done from the Martin Education Centre. Students were given a list of names on a call tracking sheet and directed in the best procedure to attempt to reach each one.

This year, from the 3172 total, a sample of 1100 graduates were systematically drawn. In all 368 graduates were reached and completed the survey, 198 from 1998 and 170 from the present year (2000). Response rates are 26% and 50% respectively.

The respondents are from all 8 high schools in the School District. Females make up 53% of the total while males make up 47%. Chronologically, 54% are graduates from 2 years ago and 46% are current graduates.

Of the 1998 graduates called 83% are employed, 73% are satisfied with their job, 69% have enrolled in an education or training program since graduating and 75% feel they have made a successful transition from high school.

Graduates of 1998 and 2000 are largely satisfied with high school and with preparation for their future (2.4 on a scale of 3). In particular they are satisfied with the quality of teaching and how grades are earned, as well as preparation for managing their time, doing projects, using computers and writing assignments.

However, trends from past surveys show that these positive findings are being eroded, particularly in the last few years. Employment levels have declined from 1996, enrollment in education/training is at pre 1994 levels, and all three satisfaction scales started to slide around 1998. These findings indicate a need for attention. Based on the findings of predictors and outcomes, some implications to stop the slide are given.

There are five implications: 1) Continue to enhance the amount of job information; it is linked to satisfaction. 2) Continue to provide information about colleges and universities; it leads to increased satisfaction as well as post secondary enrollment. 3) Maintain and enforce attendance policies; attendance is linked to key indicators such as post secondary enrollment and satisfaction. 4) Continue to solicit student input into decision making; student input fosters ownership and enhances satisfaction. 5) Further emphasize improvements in information technology; students will feel better prepared for post secondary education.

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Methodology

The Graduate Outcomes Survey uses conventional phone survey methodology. This requires several steps. Sampling involves choosing the selection technique, obtaining a sampling list, and systematically selecting from the list. Surveying involves generating the questions, designing the survey, pilot testing, revising and conducting the phone survey. Data entry and analysis involves creating the data entry file, entering the data, cleaning errors from the data, importing the file into the statistics program and generating summary statistics. All of these steps were done with the assistance of the high school students on Project Placement. These processes are described in more detail below.

Project Placement Students

In May 2000 notice was sent to all high schools in School District 23 to announce the Career Programs Graduate Follow Up Survey Project Placement. Interested students were to submit a resume and cover letter to the project placement host, Reed Early, by fax. Eight students applied. Six were short listed and invited to an interview and orientation day held at the Martin Education Centre Friday, June 2, 2000. The six students were hired for the project.

Students were given six training sessions of 1½ hours each, or nine hours of training. Handouts, readings, worksheets, homework assignments and a multiple choice test comprised the paper portion of the training. Interactive teaching, role plays, and discussion were also used to train the students. The project took 35 hours over the period from June 2 to June 28 as shown here.

Project Schedule

JUNE 2000				
Mon	Tues	Wed	Thurs	Fri
		May 31 deadline send resumes to 762-0778 fax or rearly@silk.net	June 1	June 2 orientation at Martin Ed. Ctr 3:30pm
5 training at Martin Ed Ctr 3:45-5:15pm	6 training at Martin Ed Ctr 3:45-5:15pm	7 training at Martin Ed Ctr 3:45-5:15pm	8	9
12 training at Martin Ed Ctr 3:45-5:15pm	13 training at Martin Ed Ctr 3:45-5:15pm	14 trial/testing at Martin Ed Ctr 3:45-5:15pm	15	16
19 calling at MEC 3:45-8:30pm	20 calling at MEC 3:45-8:30pm	21 calling at home (to 8pm use quiet rm)	22	23
26	27	28 training, data entry 1-5pm at KSS career ctr	29 (possible additional data entry at KSS)	30

Trial Call - Checklist

A “practical exam” was given. A trial phone call was conducted over the phone with 2000 graduate Delia Homer, who graded each student on the criteria below.

Did the person:	yes	sometimes	no
say their name	9	9	9
speak the introduction clearly	9	9	9
speak too fast	9	9	9
make it clear when a response was wanted	9	9	9
rush on without pausing for the response	9	9	9
repeat the question when necessary	9	9	9
hesitate unnecessarily	9	9	9
have a “smile” in their voice	9	9	9
sound confused or unsure	9	9	9
respond appropriately to negative responses	9	9	9
thank you for your time	9	9	9
close off the interview and say goodbye	9	9	9

Design

A draft set of questions was taken from the previous year’s Graduate Outcomes Survey. Input was received from SD23 Career Programs staff and the survey team. The survey team pilot tested the survey and provided useful feedback and minor revisions. The result is a telephone survey which requires about 6 minutes to complete (see Appendix A).

Sample

The School District 23 graduate lists were sent to the researcher. The files included name, phone number, gender and year of graduation. The lists included 1714 graduates from 1998. Initial sampling rates of 1:2 were used for this list to generate 761 names to call. There were 1458 graduates from 2000. Sample rates of 1:4 were used yielding 339 names (see also Appendix C). These lists were printed onto call tracking sheets (see Appendix B) and given to survey team members. All call tracking sheets were collected at the end as confidential information.

Call tracking ensures that a systematic attempt has been made to reach every person, and record the occurrence of no answer, answering machines, wrong phone number, out of service numbers, person not available, new number etc. Most no contact losses were due to wrong phone numbers, fax numbers, no answer, out of service, did not graduate, and other problems. Very few refused the survey or were too busy.

A total of 368 students were surveyed this year, 198 who graduated in 1998 and 170 from 2000 (see Appendix C). Added to the existing 2345 surveys this yields 2713 surveys.

Phoning

Students were supervised by the researcher during the phoning. Calling of high school graduates took place during the high school exam period from June 19 to 27. Each attempt was recorded on the call tracking sheets (see example in Appendix B). Call-backs were scheduled at a time convenient to the respondent. In some cases multiple call-backs were required.

Data Entry and Analysis

Students on the survey team were required to complete at least 55 surveys, and some managed over 65. They then entered the data onto computers at Kelowna Secondary School using Microsoft Excel spreadsheet. Data checking and cleaning was done using Excel software by each student on their own set of surveys.

Later, these were compiled and added to the past year's surveys. The Statistical Package for the Social Sciences was used to analyse the results at the office of the researcher.

Confidence in Results

A sample of 368 is large enough to make certain predictions based on a known chance of error. In 19 samples out of 20 (95%), taken from this year's survey, the sample results will fall within a given margin of error from the true population survey (census). We can therefore be 95% certain that the results for this year's survey are accurate within $\pm 4.9\%$ (margin of error).

For all 2713 surveys to date, results can be more accurate. In 19 samples out of 20, the results will differ less than 1.8% in either direction providing 95% confidence that the results are accurate within $\pm 1.8\%$.

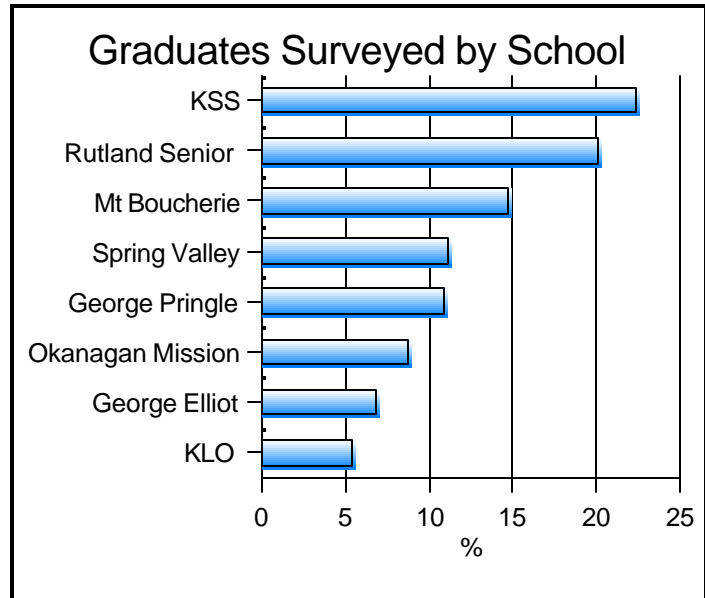
Descriptive Results

Demographics

Of the 368 people surveyed this year 54% (198) are from 1998 and 46% (169) from 2000, plus one from 1999. As well 53% (196) are females and 47% (172) are males (see Appendix D).

This year's returns from each high school are, from most to least, Kelowna Secondary 22%, Rutland Secondary 20%, Mt Boucherie Secondary 15%, Spring Valley Secondary 11%, George Pringle Secondary 11%, Okanagan Mission Secondary 9%, George Elliot Community School 7% and KLO Secondary 5%.

Results for each question can be found in Appendix D. What follows are the highlights of this year's survey, including most significant questions and the new items added. The section following, called Predictors and Outcomes, draws from the larger sample of surveys from all years.



Key Indicators

The following results indicate all valid responses of this year's survey for each key question (in italics).

Would you say you attended some, most or all of your classes?

In self reports less than half (42%) say they attended "all" of their classes, almost half (47%) state they attended "most" classes while 11% say they attended "some" of their classes, based on 368 responses.

Were you enrolled in a Career Preparation program such as Health or Arts and Culture?

Overall 53% indicate they were enrolled in Career Preparation, based on 368 responses. As well 92% indicate they completed Career Preparation and Work Experience, based on 199 responses.

Were you enrolled in a Secondary School Apprenticeship?

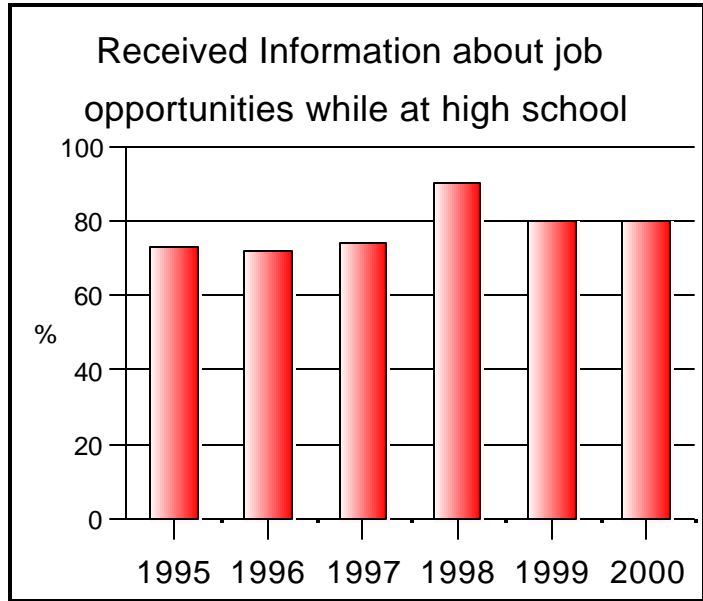
In total 6% indicated they were in a Secondary School Apprenticeship, based on 366 responses and 17 of those indicated they completed the first year technical training, based on 21 responses.

Did you receive information about future job opportunities?

This year 80% of students report receiving job information, based on 366 responses.

While in high school did you receive information about colleges and universities you could apply to?

This question indicates 86% of students had received such information, based on 367 responses.



Did you receive information about choices of programs you could take?

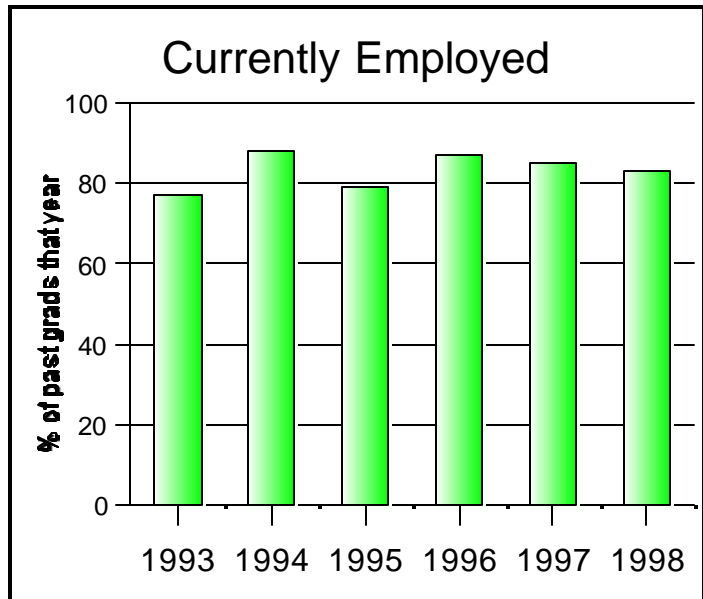
Three quarters (75%) had received information on the choices of programs they could take, based on 367 responses.

Graduates Two Years Later

The next results are taken from graduates of 1998 in this survey only, with trends from past years graphed for perspective.

Are you currently employed (at a regular paid job)?

Of all 1998 students surveyed this year 83% are employed, based on 198 responses. Furthermore 73% are satisfied with their current job, based on 167 responses.

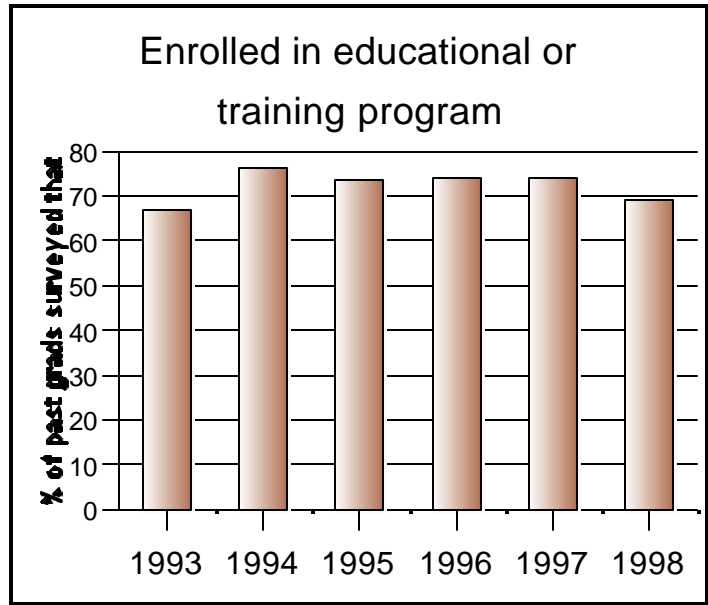


Have you enrolled in any educational or training program of any kind?

Overall 69% have enrolled in education or training, based on 198 responses.

This year we asked *"Have you completed that program?"*

In total 75% (162) are enrolled (present or future), 14% (31) have completed and 10% (22) have dropped the program.



When cross tabulated by employment we see that, of the employed, 76% are enrolled, 20% have completed and 15% have dropped the program. Of the unemployed, 59% are enrolled, 18% completed and 23% dropped. These findings are based on 139 responses.

Currently employed	yes			total
	enrolled	dropped	total	
employed	23 19.7%	77 65.8%	17 14.5%	117 100.0%
unemployed	4 18.2%	13 59.1%	5 22.7%	22 100.0%
total	27 19.4%	90 64.7%	22 15.8%	139 100.0%

Have you made a successful transition from high school to what you are doing now?

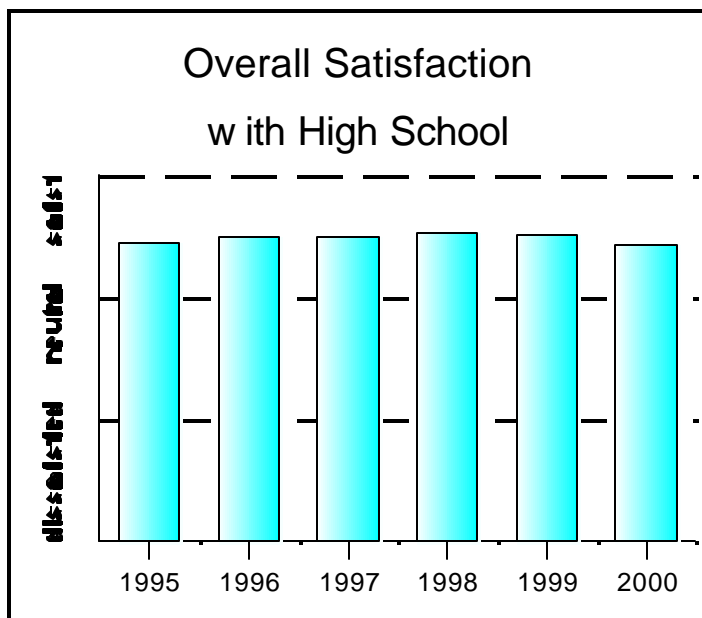
This year 75% of students indicate they have made a successful transition from high school, based on 199 responses.

Satisfaction This Year

The findings below are based on 1998 and 2000 graduates from this year's survey.

How do you feel about your high school...(nine satisfaction items)?

Responses to these nine satisfaction



questions were added and inverted and an average of overall satisfaction was created with a low of 1 (dissatisfied) and high of 3 (satisfied). The mean score on this high school satisfaction scale is 2.4, near the middle of "satisfied".

This scale was composed of nine items. Ranked highest were "quality of teaching" (79%), and "how grades are earned" (68%) as shown below most to least (details in Appendix D).

Satisfaction with High School

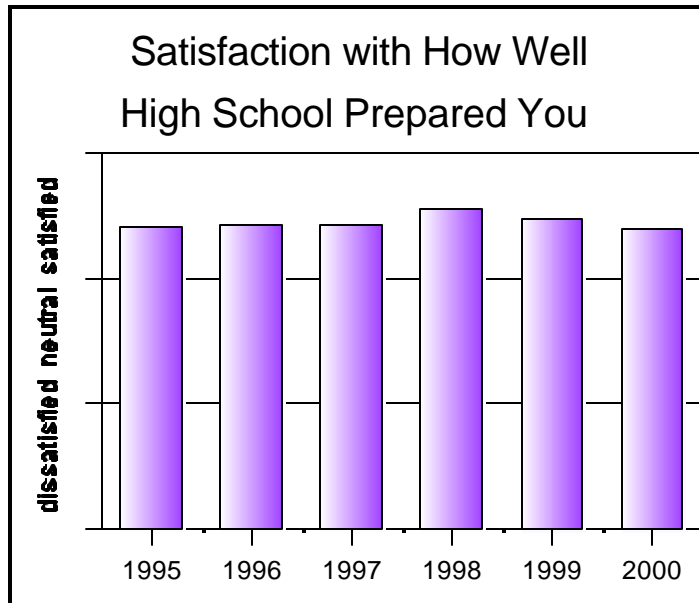
	Name	Count	Pct of Responses	Pct of Cases
quality of teaching	Q16A	288	15.9	79.3
how grades are earned	Q16H	245	13.5	67.5
relevance of courses	Q16E	235	13.0	64.7
school discipline	Q16F	216	11.9	59.5
career counselling	Q16C	213	11.8	58.7
after school activities	Q16B	199	11.0	54.8
school buildings	Q16I	175	9.7	48.2
input into decisions	Q16G	145	8.0	39.9
learning activities involving community	Q16D_COM	93	5.1	25.6
		-----	-----	-----
Total responses		1809	100.0	498.3

5 missing cases; 363 valid cases

How do you feel about how well high school prepared you...(six items)

In the same manner as the above an overall scale of preparedness for work was computed. The mean response on a scale from 1 to 3 is 2.4.

There were six items in this scale. Ranking highest were "managing time" (86%) and "using computers" (66%) as shown below in descending order.



Satisfaction with Preparation

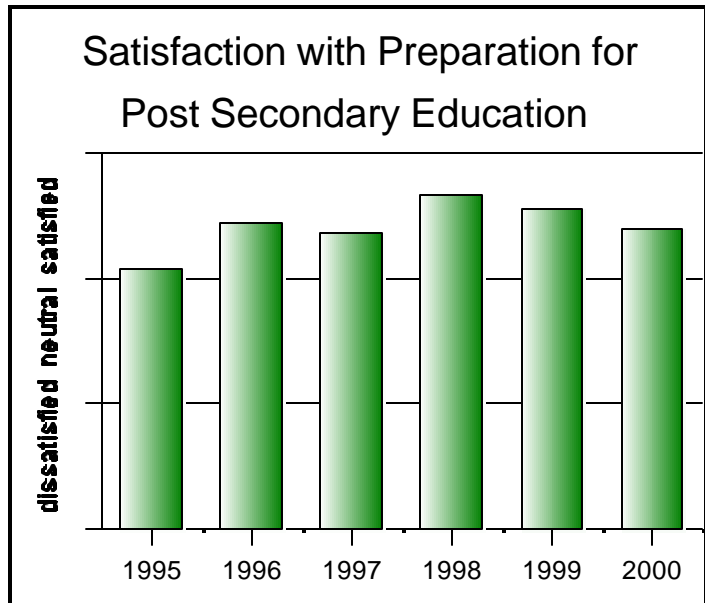
	Name	Count	Pct of Responses	Pct of Cases
managing time	Q17E	300	25.6	85.7
using computers	Q17C	232	19.8	66.3
running a household	Q17F	211	18.0	60.3
working with others	Q17D	178	15.2	50.9
working	Q17A	162	13.8	46.3
continuing your education	Q17B	91	7.8	26.0
		-----	-----	-----
Total responses		1174	100.0	335.4

18 missing cases; 350 valid cases

How satisfied are you with how well high school prepared you for... (six items).

Overall satisfaction, as computed from the six items, is again 2.4 on a scale of 1 to 3.

Ranked highest of the scale items was "doing projects" (74%) and "writing assignments" (64%) as can be seen below.



Satisfaction with Preparation for Post Secondary Education

Name	Count	Pct of Responses	Pct of Cases	
doing projects	Q18F	249	20.9	73.9
writing assignments	Q18C	215	18.0	63.8
writing exams	Q18B	210	17.6	62.3
doing library research	Q18E	204	17.1	60.5
studying	Q18A	169	14.2	50.1
using info tech	Q18D_IT	145	12.2	43.0
Total responses		1192	100.0	353.7

31 missing cases; 337 valid cases

Did you set career goals for yourself while in high school?

Most (75%) of the recent graduates had set career goals for themselves (based on 368 responses). As well 85% selected subjects related to their career goals (based on 278 responses) and 57% had selected a work option related to their career goals (based on 278 responses).

If you could tell the School District one thing about your high school experience what would it be?

Answers to this question, and the students' comments are combined in Appendix E, sorted by school. Some common positive responses are included here.

- ! *it was good*
- ! *teaching was good*
- ! *keep older teachers, don't just replace them because of age*
- ! *awesome opportunity, prepared us well*
- ! *9 o'clock start worked better*
- ! *want to stay there forever*
- ! *friendliness*

Some common suggestions for improvement were

- ! *spend more time preparing students for writing exams and studying*
- ! *school needs a new building*
- ! *improve discipline, stop moving buildings and have a serious look at bullying*
- ! *more strict about skipping*
- ! *CAPP should teach about taxes*
- ! *classes were too long*
- ! *too easy*
- ! *get rid of portables*

The next section utilizes data from all surveys to date to analyse predictors and outcomes.

Predictors and Outcomes

A predictor normally precedes an outcome. It is the factor that may be acted on in some way to influence change, such as attendance. Some predictors cannot be changed, such as a gender, but can inform policy making and planning interventions. The following comparative statistics show the interaction of predictors and outcomes.

Different measures of association are used to determine the effect of predictors (ie. groups) on outcomes. Chi square (pronounced “kye”) is used for categorical outcome variables, like employment. T-Test is used for difference of means (averages) for instance a comparison of satisfaction levels across two groups. Analysis of Variance (ANOVA) is used to compare means across three or more groups.

When the degree of difference between groups exceeds that of chance, the difference is said to be statistically significant. Below, only associations that were significant (better than the .05 level) are noted in the text.

In the matrix below a “r” marks associations which have a significant effect (P#.05). Data from all survey years are used in the following analyses.

Significance Levels of Associations Between Predictors and Outcomes (r indicates p <.05)						
Predictors	Outcomes					
	Are You Currently Employed (Q8)	Enrolled in Post Sec. Ed (Q12)	Completed education program (Q14 - this year only)	Satisfied with Prep (Q16)	Satisfied with Prep (Q17)	Sat with Prep for Post Sec Educ. (Q18)
Gender	.91	.00 r	.27	.05 r	.35	.01 r
Graduating Year	.00 r	.00 r	.00 r	.03 r	.01 r	.01 r
Attendance (Q2)	.40	.00 r	.10	.00 r	.00 r	.00 r
Career Prep & Work Experience (Q4)	.70	.94	.64	.08	.94	.56
Rec'd Job Info (Q7)	.82	.25	.07	.00 r	.00 r	.00 r
Received info about College/Univ (Q10)	.81	.00 r	.26	.00 r	.00 r	.00 r

Employed (Q8)

From the surveys to date the significant predictor of employment is year of graduation. Those graduates from earlier years are more likely to be employed when surveyed.

Enrolled in Post Secondary Education (Q12)

There are four predictors of being enrolled in post secondary education. Women are more likely to go on with their education, as are graduates of earlier years. Students with higher self reported attendance are more likely to be enrolled as well as those who received information about colleges and universities.

When we examine employment and enrollment together we see that, of the employed, 71% have enrolled in an education or training program and 29% have not. Of the unemployed fewer (64%) have enrolled in education or training and 36% have not. This is a statistically significant difference based on 1140 responses from two years after graduation.

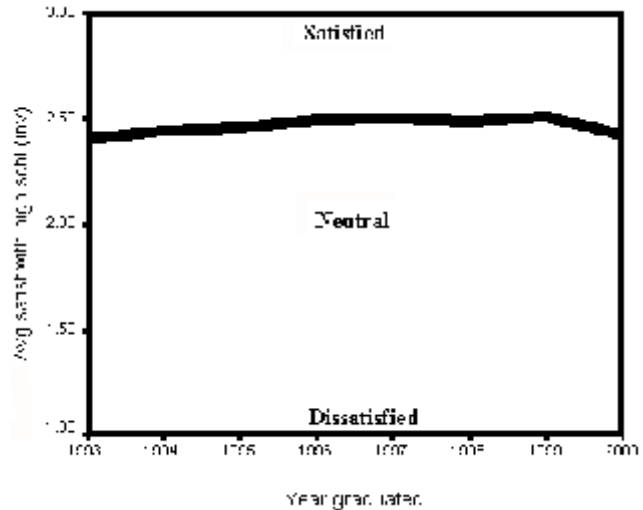
		Since graduation have enrolled in education or training		
		yes	no	total
Currently employed	employed	637 71.1%	259 28.9%	896 100.0%
	unemployed	156 63.9%	88 36.1%	244 100.0%
total		793 69.6%	347 30.4%	1140 100.0%

Completed Education Program (Q14)

This question was added this year. The significant predictor of education program completion is graduating year. The 1998 graduates are more likely than 2000 graduates to have completed their educational program.

Satisfied with High School (Q16SCALE)

There are five predictors of being generally satisfied with high school. Males are slightly more likely to be satisfied. More recent graduates (up to 1999), and those with higher self reported attendance are more satisfied. Those who received job information are more likely to be satisfied as well as those who received information about colleges and universities while in high school.



Satisfied with Preparation (Q17SCALE)

Four significant factors helped to predict satisfaction with how well high school prepared students generally. Recent graduates up to 1999 are more satisfied. Those who attended most or all classes are more likely to be satisfied. Those who received job information are also more likely to be satisfied as are those who received college and university information.

Satisfied with Preparation for Post Secondary Education (Q18SCALE)

There are five predictors of satisfaction with overall preparation for post secondary education. Males are slightly more satisfied overall than are females. Recent graduates tend to be more satisfied. Those who report better attendance are more satisfied, those who received information on jobs, and those who received college and university information are more satisfied.

Summary of Significant Predictors and Outcomes	
Predictor	Outcome
Graduates from earlier years	Employed
Females	Enrolled in Post Secondary Education
Graduates from earlier years	
Students with higher self reported attendance	
Those who received college/university information	
Graduates from earlier years (1998 vs 2000)	Completed education program
Males	Satisfied with High School Experience
Graduates from recent years (up to 1999)	
Those with higher reported attendance	
Those who received job information	
Those who received college/university information	
Graduates from recent years (up to 1999)	Satisfied with Preparation
Those with higher reported attendance	
Those who received job information	
Those who received college/university information	
Males	Satisfied with Prep for Post Sec Ed
Graduates from recent years (up to 1999)	
Those with higher reported attendance	
Those who received job information	
Those who received college/university information	
Significant associations only, based on all valid surveys to date. See Appendix F for details.	

are more likely to be

The above chart is read across the rows, filling in the words "Are more likely to be" between the predictors on the left and the outcomes on the right.

What are listed are the largest trends. In some cases, such as Satisfaction with High School, the general satisfaction is rising since 1994, but there has been a drop in the last year, causing the appearance of a contradiction. We are seeing some previous gains starting to slide. See the graph on page 11.

Summary and Implications

The 2000 survey gives reason for continued optimism. This year's results illustrate positive key indicators in a number of areas:

- [83% of past graduates are employed
- [75% of past graduates feel they have made a successful transition
- [69% of past graduates are enrolled in an education or training program
- [86% of students are satisfied with their preparation for managing their time
- [79% of students are satisfied with the quality of teaching
- [74% of students are satisfied with their preparation for doing projects
- [68% of students are satisfied with the grading procedures
- [66% of students are satisfied with the preparation for using computers
- [64% of students are satisfied with the preparation for writing assignments

However, looking over the long term, some upward trends have started to slide:

- r Employment, which was rising, is down slightly for the third year in a row
- r Enrollment in education or training for graduates two years later is down again
- r Overall satisfaction with high school is down slightly over last year
- r Satisfaction with preparation generally, and preparation for post secondary education is down slightly over last year returning to pre-1998 levels.

Implications

It is important to note that, in light of current School District 23 initiatives, many of the following predictor-outcome linkages have already been recognized and acted on:

1. Receiving job information increases satisfaction in all areas. Efforts to provide this information need to be sustained and enhanced.
2. Providing students with information about colleges and universities increases student satisfaction. The excellent efforts in this area need to be continued and increased where possible. Students indicate a strong desire for such information.
3. Increased attendance is positively associated with enrollment in post secondary education and student satisfaction. Schools need firm attendance policies, that are enforced, to encourage high attendance for all.
4. Student satisfaction with high school, although generally high, has indicated a drop this year. One way to increase satisfaction is to solicit further student input into decision making.
5. Students express less satisfaction with their preparation for post secondary education compared to last year. One area to concentrate on is in improvements to information technology.