

# UNDERSTANDING STUDENT SATISFACTION

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## About Issue Papers

Issue papers are brief studies that address specific topics using data taken from the annual BC College and Institute Student Outcomes Survey. This issue paper and others are available at <http://outcomes.ceiss.org/Publications/>.

## Introduction

The measurement of student satisfaction can be useful to post-secondary institutions, to help them to pinpoint their strengths and identify areas for improvement. Satisfaction ratings go beyond teaching assessments, which have a narrow focus, to include broader aspects of the student learning experience. To grasp the complexity of that learning experience, it is not enough to know the degree to which students are satisfied, it is important to understand the factors that contribute to student satisfaction.

The purpose of this study is to identify aspects of the educational experience that are associated with former students' overall expression of satisfaction. Determining which features of the student experience are most closely related to satisfaction may provide information about actions that can be taken to maintain high levels of satisfaction and improve student learning.

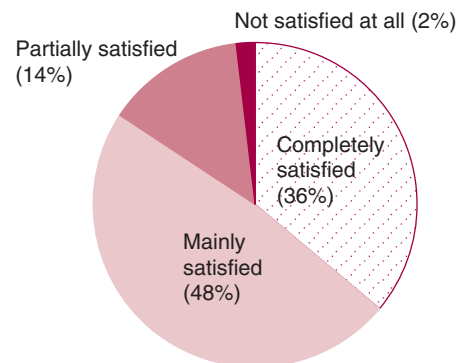
The BC College and Institute Student Outcomes Survey asks former students to make an overall statement about their satisfaction with their studies. As well, survey respondents rate many aspects of their educational experience, from skill development and personal growth to quality of curriculum and instruc-

tion. These ratings provide a wealth of information for exploring the dimensions of student satisfaction. The survey also gathers information about former students' academic achievement and their employment and further education outcomes.

## Measuring student satisfaction

Every year the majority (about 85 percent) of former students say they were "mainly" or "completely satisfied" with the program of study they left. Very few report being completely dissatisfied. In 2002, less than 2 percent of survey respondents answered "not at all" when asked if they were satisfied with their program's studies.

### Former students' satisfaction with studies



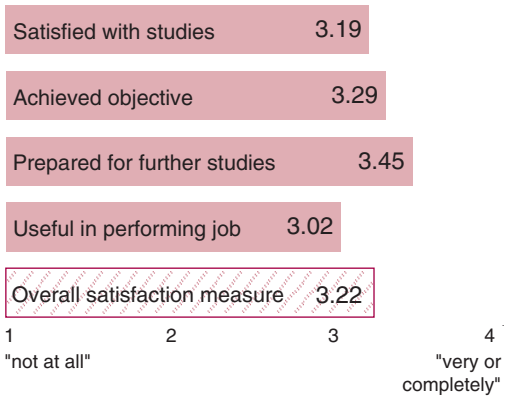
Note: 17,242 former students responded to this question.

The majority also reported that they achieved their most important objective for enrolling and were either

well prepared for further studies or found their education useful in performing their jobs. While these three general assessments describe different aspects of the educational experience, they can be considered measures of satisfaction with studies.

Using the 2002 survey results, the average response to all four questions was above “3” on four-point scales—“1” being “not at all” and “4” being “very” or “completely.” To create an indicator of satisfaction that reflects a comprehensive view of former students’ experiences, these four ratings were combined into a measure of satisfaction,<sup>1</sup> which was then used for all the comparisons that follow.

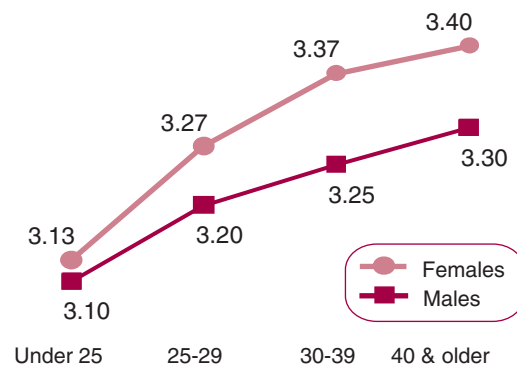
### Former students' average satisfaction ratings



## Characteristics associated with satisfaction

Certain characteristics of former students were associated with a high degree of reported satisfaction; for example, females and older students tended to report somewhat higher levels. Also, students who attended post-secondary institutions outside of the Lower Mainland and those in nursing or health-related programs were more likely to give high ratings for satisfaction. Although knowing student characteristics may not directly help institutions to improve student assessments, it is important to examine their influence in the mix of factors that affect satisfaction ratings.

### Satisfaction scores by age and gender



## The educational experience and satisfaction

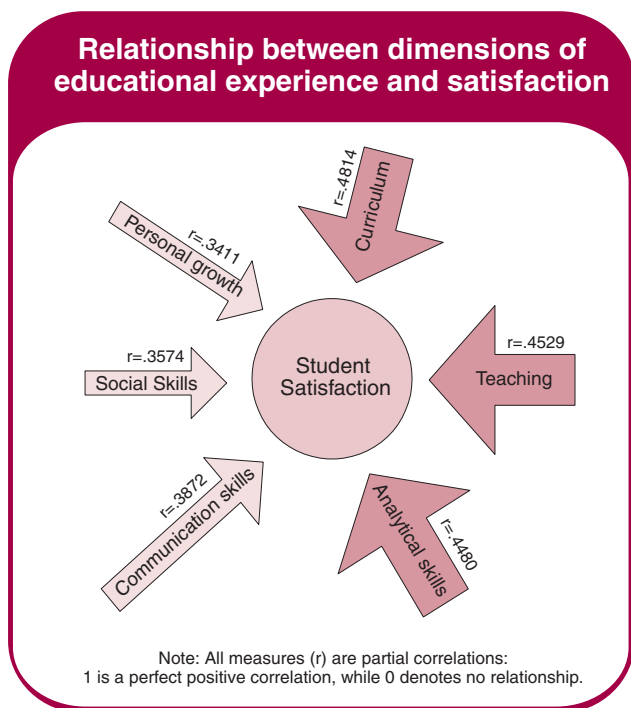
In 2002, the survey included questions that provided numerous items relating to former students’ educational experience—assessments of skills development and ratings of various aspects of courses and programs—that could be used to explore satisfaction. To simplify the task of comparing a large number of variables to the satisfaction measure, they were grouped into six factors or *dimensions*.<sup>2</sup>

### Dimensions of educational experience

<b>Curriculum</b>	Curriculum content Organization of course content Courses cover relevant topics Courses up to date Courses cover standards used in field
<b>Teaching</b>	Quality of instruction Availability of instructors outside class Opportunities for class discussions Opportunities for class presentations Tests or papers assigned
<b>Analytical skills</b>	Analyze, think critically, solve problems Combine ideas into new information Find and use information Learn on one's own
<b>Communication skills</b>	Speak effectively Write clearly and concisely Read and comprehend material
<b>Social skills</b>	Work effectively with others Develop supportive relationships
<b>Personal growth</b>	Understand oneself and abilities Develop values and ethical standards Aware of cultures and philosophies

Four of the six dimensions were created from the ratings respondents gave to questions about the opportunities provided by their programs for skill development and personal growth—communication skills, social skills, analytical skills, and personal growth. The other two factors—curriculum and teaching—emerged from respondents’ program and course ratings.

All the dimensions were positively correlated with the satisfaction measure, that is, former students who gave high ratings to their courses or skill development were likely to rate satisfaction high as well.<sup>3</sup> While none of the six had a really high correlation with the satisfaction measure, together the dimensions explained 30 percent of the difference in satisfaction scores.<sup>4</sup> That means that almost a third of the variability in the satisfaction measure ratings can be attributed to the aspects of the educational experience that are grouped into the dimensions shown.

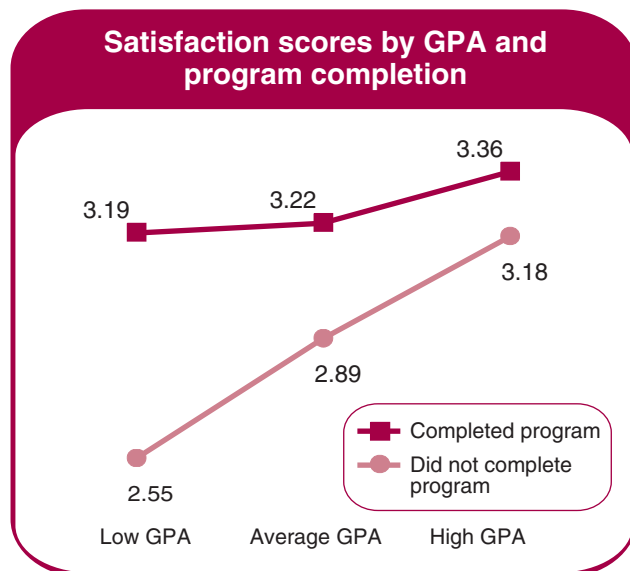


Whether the dimensions were considered together or independently, curriculum, teaching, and analytical skills consistently exerted the most influence on satisfaction ratings. The relationship between curriculum and overall satisfaction was the strongest of the six dimensions, closely followed by teaching and analytical skills.

Communication skills—that is, the opportunities former students were given to develop the ability to speak, write, and read well—were not as strongly related to the satisfaction measure. Likewise, personal growth and social skills were less likely to affect overall satisfaction.

## Satisfaction and outcomes

Student satisfaction is positively associated with program completion rates and grade achievement (GPA). Former students who reported higher levels of satisfaction tended to have higher grades and were more likely to have completed their program than students who were less satisfied. These findings are similar regardless of gender, age, program, or location of institution.



In contrast, there is almost no relationship between being employed and satisfaction scores. Those who were employed were not more satisfied than those who were not working (their scores were 3.21 and 3.22 respectively). Nor is there a difference between those who took further studies and those who did not (3.21 and 3.22 respectively).

Although it first appeared that employment was not associated with satisfaction, further examination showed that former students who were working in a job that they considered training-related gave different ratings than those who were not in a training-related job. The average satisfaction score for those in training-related

employment was 3.46, compared with 2.75 for respondents in non-training-related jobs.

When considered in combination with other variables, including program and skill ratings, GPA, and credential completion, training-related employment consistently exhibited the strongest relationship to satisfaction. Alone, degree of training-relatedness of employment explains 35 percent of the difference in satisfaction scores.<sup>5</sup>

## Conclusion

Former students who report that they were satisfied with their college, university college, and institute studies are also likely to report that they achieved their main objective for enrolling. As well, they are likely to say their studies prepared them for employment or further education. These items, combined into a single measure of satisfaction, align well with other measures of a successful academic experience—GPA and credential completion, for example.

Analysis of the ratings given to programs and other aspects of the educational experience showed that satisfaction with curriculum—curriculum content, organization, and relevance—is a critical dimension of former students' overall satisfaction. Providing students with a curriculum that achieves high approval ratings should promote high satisfaction ratings. Further, focussing on high quality instruction and creating opportunities for students to develop their analytical skills could also help institutions to maintain high levels of student satisfaction.

A good part of students' expression of satisfaction is related to factors other than the educational experience itself; there are demographic characteristics and outcomes that can influence satisfaction levels. Older students, females, and those from health-related programs tend to say they were more satisfied—having a training-related job shows the strongest effect. Although these factors are outside the direct control of post-secondary institutions, using them in the analysis contributes to an understanding of what makes students satisfied.

## Endnotes

<sup>1</sup> These four items are conceptually similar, they are positively correlated, and they group together as one factor in a factor analysis, which is used to determine if clusters of variables exist in a file. The factor analysis result suggests that the four items are measuring aspects of the same concept. To create the new satisfaction measure, the four variables were averaged on a case-by-case basis, giving every respondent an averaged score.

<sup>2</sup> Dimensions were created through factor analysis: conceptually related variables were tested until six clear groupings emerged (all the grouped variables had factor loadings  $>.7$  in component matrices). Each dimension was then tested for reliability (all alphas  $>.7$ ).

<sup>3</sup> All reported correlations have been calculated using the SPSS Partial Correlation procedure controlling for four variables: gender, age, program, and region. They are all statistically significant at the .001 level.

<sup>4</sup> This figure, derived from a multiple regression analysis, means that 30 percent of the variation in satisfaction scores was explained or predicted by the dimensions listed (R Square = .302).

<sup>5</sup> In a regression analysis, 35 percent of the variation in satisfaction scores (R Square = .354) was explained or predicted by the ratings given to training-relatedness of employment.

### BC College and Institute Student Outcomes Survey

Since 1988, BC's public colleges, university colleges, and institutes, in co-operation with the Ministry of Advanced Education, have collected student feedback through an annual province-wide survey. Former students are asked about their post-secondary experiences, labour market outcomes, and further education. There were over 17,000 respondents to the 2002 survey, which was conducted by telephone with former students, 9 – 20 months after they completed all or a significant portion of their post-secondary program.

The survey results are used by institutions to improve programs and services; by the Ministry of Advanced Education for policy

evaluation and planning; and by students, parents, and the general public to make post-secondary education choices.

The BC Outcomes Working Group (OWG) oversees the project, from data collection to the reporting of survey results. The OWG is a partnership among the Ministry of Advanced Education, colleges, university colleges, institutes, and organizations, including the Senior Academic Administrators' Forum, the Senior Educational Services Officers' Committee, and the BC Council on Admissions and Transfer. The survey is conducted with funding from the Ministry of Advanced Education and BC's colleges, university colleges, and institutes.