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ABSTRACT

In the mid 1990s, the Ontario Government decided to enhance the accountability of the Colleges of Applied Arts and Technology by measuring and rewarding their performance in meeting specific goals and outcomes. The KPI Satisfaction Survey is a tool developed by the Ministry of Training Colleges and Universities in conjunction with the colleges to measure college performance. Information collected from students, graduates, and employers is used by the colleges to identify their strengths, to demonstrate their achievements, and to improve programs and services. This report presents the results of the Employer Satisfaction Survey for Sheridan College. It identifies the College's strengths and areas for improvement, as well as the drivers of satisfaction. The employer population for the summer 2000, fall 2000, and winter 2001 was 2,206 based on the number of graduates in the period who were employed. A total of 653 telephone surveys produced a response rate of 30%. Over 80% of employers were satisfied with graduates' skills and abilities, with the exception of math skills (74%) and research and analysis (73%). Six of the 18 skills, including teamwork and quality of work, received 90% or more satisfactory ratings. Five appendixes contain detailed charts and tables of survey results. (Contains 20 tables and charts.) (NB)

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ED 474 337

Ontario Colleges of Applied Arts & Technology

Sheridan College

Summer 2000 - Winter 2001

KPI

Employer Executive Summary Report

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Introduction to the KPI Project

In the mid 1990s, the Ontario Government decided to enhance the accountability of Colleges of Applied Arts & Technology by measuring and rewarding their performance in meeting specific goals and outcomes. The Ministry of Training Colleges and Universities identified these goals and outcomes. The KPI Satisfaction Survey is a tool developed by the Ministry of Training Colleges and Universities in conjunction with the colleges to measure college performance. The government and colleges worked together to identify and define the following five key performance indicators (KPI):

- graduate employment
- graduate satisfaction
- employer satisfaction
- student satisfaction
- graduation rate

The project was launched in 1997, when graduate and Employer data was collected over the Fall of '97 and Winter of '98. KPI Student satisfaction data collection began in 1998. The current survey data, which constitutes the KPI project's fourth survey period, was collected from graduates of Summer 2000, Fall 2000 and Winter 2001.

Graduate employment, graduate satisfaction and employer satisfaction data are collected through telephone surveys. These three KPI are used to determine the distribution of a portion of government transfer payments amongst Ontario's colleges. In 2000-01, colleges received \$14 million in performance-based funding. The government also uses this information to produce its annual Employment Profile of college graduates.

The KPI Student Satisfaction Survey is a paper-based survey distributed to all students in Ontario's Colleges of Applied Arts & Technology. The colleges calculate student graduation rates. These two KPI are not linked to funding at this time.

The information collected from students, graduates and employers is used by the colleges to identify their strengths, to demonstrate their achievements and to improve their programs and services.

Introduction to Sheridan College Employer Executive Summary Report

This report is an analysis of the Employer KPI results for Sheridan College. It identifies the College's Strengths and Areas for Improvement. It determines the drivers of satisfaction at the College and the Top and Bottom programs. Employer responses have also been analyzed by industry.

The Employer population for the Summer 2000, Fall 2000 and Winter 2001 periods was 2,206 based on the number of Graduates in that period who were employed. A return rate of 30% was achieved with the 653 telephone surveys. In the worst case scenario, the College level results in this report are accurate to within +/- 3% at the 95% confidence level.

At the end of this report there are Appendices which contain easy-to-read tables and charts for each section of this report.

Summary of Employer Satisfaction Survey

College Strengths

Over 80% of Employers were 'Satisfied' in all of the skills and abilities with two exceptions - 'Math Skills' (74%) and 'Research and analysis' (73%). Six of the 18 skills and abilities received 90% or more satisfaction ratings from Employers. These were: 'Teamwork', 'Responsible', 'Quality of work', 'Comprehension', 'Adaptable' and 'Productivity'.

Areas for Improvement

There were 2 skills and abilities with less than 80% Employer satisfaction. These were: 'Math skills' and 'Research and analysis'.

Program Analysis

The eleven Top Programs for the Sheridan College Employer survey, for the four survey periods combined, are as follows:

Program	KPI Satisfaction Rate	Responses
Correctional Worker (1691)	100%	28
Social Service Worker – Gerontology (1151)	100%	24
Business Admin – Finance (A210)	100%	23
Law & Security Admin. – Private Security (13M1)	100%	19
Educational Assistant (1500)	100%	18
Architectural Technology Co-op (5200)	100%	15
Early Childhood Education DE (1197)	100%	14
Architectural Technology (5560)	100%	13
Police Foundations (1101)	100%	12
Business – Marketing (2170)	100%	12
Chemical Eng. Technology Co-op (5750)	100%	10

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Summary of Employer Satisfaction Survey

The seven Bottom Programs for the Sheridan College Employer survey, for the four survey periods combined, are as follows:

Program	KPI rate
Law & Security Admin. – Loss (13M0)	79%
Business Admin – Human Resources Mgmt (A220)	79%
Early Childhood Assistant (1840)	79%
Animation – Classical (6010)	75%
Systems Analyst Co-op (E060)	73%
Illustration – Interpretive (6091)	71%
Investigation – Public & Private (1002)	67%

Drivers of Satisfaction

The top 7 drivers of Employer KPI Satisfaction were determined to be:

1. 'Quality of work'
2. 'Specific job-related skills'
3. 'Critical thinking'
4. 'Specific job-related knowledge'
5. 'Productivity'
6. 'Comprehension'
7. 'Problem solving'

These factors all had '*Very Strong*' relationships with the KPI Satisfaction question.

College Trends

The Employer KPI Satisfaction rate has remained constant over the last three survey periods.

There have been some changes in specific satisfaction ratings for skills and abilities since the 1998/1999 survey period. There have been increases in satisfaction with 'Specific job-related knowledge' (+3%), 'Specific job-related skills' (+5%) and 'Computer skills' (+6%). There have also been some decreases in satisfaction with 'Problem solving' (-4%) and 'Organization and planning' (-3%).

/

Summary of Employer Satisfaction Survey

Industry Analysis

1. Professional, Scientific & Technical Services

The Professional, Scientific & Technical Services industry had an average KPI Satisfaction rate of 90%. Satisfaction ratings in this industry were about the same or below the Provincial average in all cases but two. These were 'Computer skills' and 'Research and analysis' which were about 5% higher in their satisfaction rating. Importance ratings for this industry were close to or below the Provincial ratings in most cases. Exceptions to this were higher ratings in 'Computer skills' and in 'Research and analysis'.

2. Health Care & Social Assistance

The Health Care & Social Assistance industry had a high KPI Satisfaction rate of 94%. Employers from this industry rated educational preparation for most skills and abilities as 'Important' and also gave the majority of them high satisfaction rates. The two factors with the lowest rated importance were 'Math skills' with 37% 'Important' and 'Computer skills' with 43% 'Important'.

3. Manufacturing

The Manufacturing industry had a high KPI Satisfaction rate of 94%. The areas of highest satisfaction were in 'Teamwork' and 'Responsible'. It had close to average importance ratings for most factors with the exceptions of 'Math skills', 'Computer skills' and 'Research and analysis' which had much higher importance ratings than the Provincial average; 'Specific job-related knowledge' had a much lower importance rating than the Provincial average. This industry had a mix of higher, lower and average satisfaction ratings when compared to the Province.

4. Retail Trade

The Retail Trade industry had a KPI Satisfaction rate of 90%. In regard to satisfaction, Retail Trade had a mixture of ratings that were above and about the same as the Provincial average. The highest satisfaction came in 'Teamwork' and 'Responsible'. Importance ratings for this industry were average or slightly below average with the exceptions of 'Math skills' which was rated as more important in this industry than the Provincial average. The most important factors for this industry include 'Quality of work', 'Productivity' and 'Teamwork'.

5. Information & Cultural Industries

The Information & Cultural Industries had a KPI Satisfaction rate of 87%. In general, satisfaction ratings for this industry were equal to or below the Provincial averages with 2 exceptions. These were 'Computer skills' with 92% and 'Research & analysis' with 76%. Importance ratings for Information & Cultural Industries were all over the map, some higher, some lower and some the same as the Provincial averages. The largest differences were in 'Written Communications' and 'Math skills' where this industry had much lower importance ratings and in 'Computer skills' and 'Research & analysis' where this industry had much higher importance ratings.

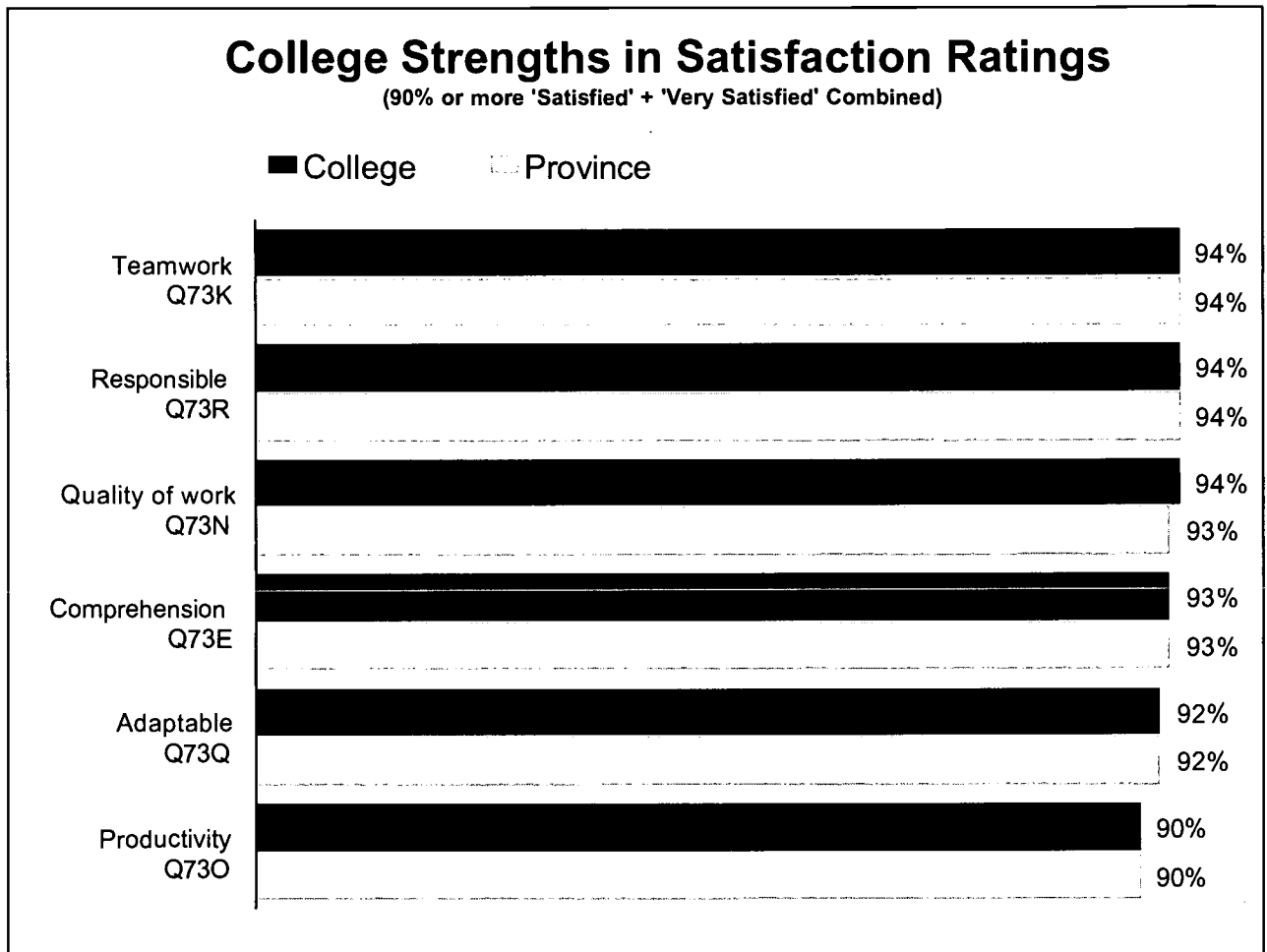
Summary of Employer Satisfaction Survey

6. Educational Services

The Educational Services industry had a high KPI Satisfaction rate of 95%. Satisfaction ratings in this industry were average to above average in all cases but two. These were 'Teamwork', which was about 5% lower and 'Math skills', which was just slightly lower than the Provincial average. Importance ratings for this industry were very close to or above Provincial ratings.

College Strengths

When asked "When the graduate first started working with you after his/her graduation, how satisfied were you with his/her overall educational preparation for the following skills and abilities?", employers gave 90% or higher satisfaction rates to 6 of the 18 skills and abilities listed. They are listed in the following chart with the corresponding Provincial averages for easy comparison:



As seen in the chart above Sheridan College rated the same as the Province in each of these skills/abilities, except for 'Quality of work' which was slightly higher (by 1%).

Over 80% Employers were 'Satisfied' in all the skills/abilities listed with only two exceptions. These are Research and analysis' (73% Satisfied') and Math Skills' (74% Satisfied'). See Appendix 1 for details.

College Strengths

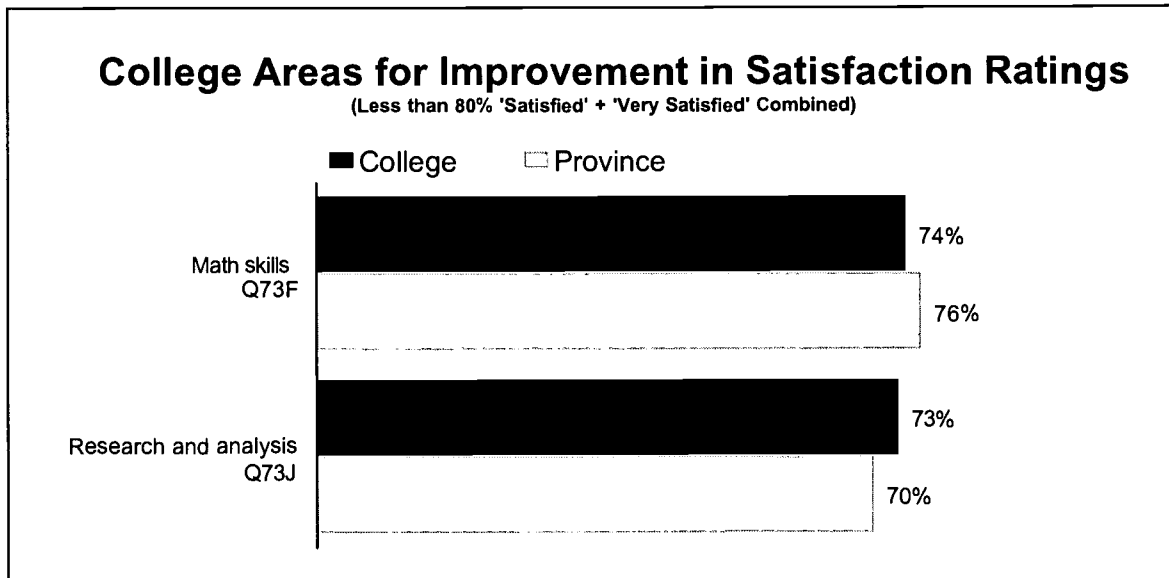
A particular area of strength is in 'Quality of work' where 94% of Employers were 'Satisfied'. This factor had the strongest relationship with the KPI question and was considered the number one driver of KPI Employer satisfaction. Ninety-five percent of Employers who are 'Satisfied' with 'Quality of work' were also 'Satisfied' in the KPI question.

There were two other factors that were considered college strengths from the previous chart. These were 'Comprehension' (93% Satisfied) and 'Productivity' (90% Satisfied). Both of these factors were also considered drivers of KPI Satisfaction as they had 'Very Strong' relationships with the KPI question.

Although 'Computer skills' had a satisfaction rating of 88% by the Employers and therefore was not included in the top factors of strength, it was 5% higher than the Provincial rating. Because of this, it can also be seen as an area of strength at the College. The Employer satisfaction for this skill has also increased by 6% since the 1998/1999 survey period.

College Areas for Improvement

There were only 2 skills and abilities of the 18 that received less than 80% Employer satisfaction. These are considered areas for improvement and are listed in the following chart with the corresponding Provincial averages for easy comparison:



As seen in the chart above, Sheridan College rated lower than the Province in 'Math skills' but higher than the Province when it came to 'Research and analysis'. In fact, the satisfaction rate for 'Research and analysis' is 3% higher than the Provincial level.

The highest Employer dissatisfaction rating at the College was 11%. The factor that had this rating was 'Specific job-related skills'. This should be of some concern since this factor was a 'Very Strong' driver of KPI Satisfaction.

These areas for improvement are consistent with last year's results.

Although not having satisfaction rates below 80%, both 'Written Communications' and 'Problem solving' are below the Provincial average by 3%.

Drivers of Satisfaction

What are Drivers of Satisfaction?

“Drivers of satisfaction” are certain aspects of college preparation that most strongly influence Employers’ satisfaction ratings in the KPI.

In order to establish these drivers of satisfaction, correlational analysis was conducted to determine which factors were most highly related to the KPI Satisfaction question¹. The stronger the relationship between the key question and educational factors, the more these factors appear to drive Employer satisfaction ratings. [It should be noted that correlations do not prove that one factor *causes* another factor, but rather establishes that the two factors are related. An experiment would be required to determine a causal relationship.]

General

The College’s Employer data from all survey periods (Fall 1997 through Winter 2001) was combined to provide a larger number of cases and more weight to the conclusions being made in this section.

Detailed results of the correlational analysis are presented in Appendix 3 in an easy-to-read table.

The educational factors that were examined to determine the drivers of Employer satisfaction included the eighteen skills and abilities listed in Question 73².

It is worthy of note that if an employer indicated that they were ‘Satisfied’ with a skill/ability, then there was a 93% to 96% chance that they would be ‘Satisfied’ in the KPI Satisfaction question.

¹ KPI Q74 “In general, how would you rate your satisfaction with this employee’s overall college preparation for the type of work he/she was doing?”

² Q73 “When the graduate first started working with you after his/her graduation, how satisfied were you with his/her overall educational preparation for the following skills and abilities?”

Drivers of Satisfaction

Drivers of KPI Question 74³

The top 7 drivers of Employer KPI Satisfaction are listed below in order of the strength of relationship between the KPI question and the driver. The stronger the relationship between these drivers and the KPI question, the more they affect the KPI Satisfaction rate.

- | |
|--|
| <p style="text-align: center;">Top Drivers of KPI Satisfaction</p> <ol style="list-style-type: none">1. 'Quality of work'2. 'Specific job-related skills'3. 'Critical thinking'4. 'Specific job-related knowledge'5. 'Productivity'6. 'Comprehension'7. 'Problem solving' |
|--|

All the drivers of satisfaction listed above are *'Very Strongly'* related to the KPI Satisfaction question. If an Employer is 'Satisfied' with the graduates 'Quality of work' then 95% of the time they will be 'Satisfied' in the KPI question.

As in the Graduate survey, job-relatedness of programs in developing graduates' skills and knowledge are among the top drivers of KPI Satisfaction. If an Employer is 'Satisfied' with how a graduate has been specifically trained for the job, then 96% of the time they will also be 'Satisfied' in the KPI question.

'Quality of work' is the number 1 driver of KPI Satisfaction, which makes sense as this factor is obviously going to be important to an employer. If an employer is 'Satisfied' with a Graduate's 'Quality of work', there is a 95% chance that they will also be 'Satisfied' in the KPI question. This is in contrast to only 22% 'Satisfied' in KPI if they are 'Not Satisfied' with a Graduate's 'Quality of work'.

It is interesting to note that the specific skill and ability that made the number 3 driver was 'Critical thinking'.

There were an additional 8 other skills and abilities that had *'Strong'* relationships with the KPI question.

The remaining 3 skills and abilities included 'Math skills', 'Teamwork' and 'Computer skills' and they had *'Moderate/Weak'* relationships with the KPI Satisfaction question. For complete details, see Appendix 3.

³ KPI Q74 "In general, how would you rate your satisfaction with this employee's overall college preparation for the type of work he/she was doing?"

Program Analysis

The following analysis goes beyond the overall college results to the results of specific programs. The most important factor to note at the outset of this analysis is that the response rate for the Employer Survey is very low. Therefore, it is highly likely that there will be changes in the Top Programs list from year to year, because even one respondent's rating will have a significant impact on the program's average rate.

In this analysis, Employer data has been combined over the four survey periods (i.e. Fall 1997 through Winter 2001). This gives more weight to the selection process.

In Appendix 2 you will find a table displaying all of the College's programs with their statistical accuracy ratings over the combined period. This is a percentage that tells you when you look at program numbers how accurate they are to within plus or minus a certain percentage in the worst case scenario at the 95% confidence level.

Top Programs

The Top Programs for the Sheridan College Employer Survey were considered to be those with 100% KPI Satisfaction Rate, which had at least 10 responses in the KPI Satisfaction Rate from the Fall of 1997 through to Winter 2001. Eleven programs qualified to be Top programs. These are listed in the table below:

SHERIDAN TOP PROGRAMS		
Programs with 100% or higher KPI Satisfaction for Fall 1997 through to Winter 2001	KPI Satisfaction Rate	Responses (Must be 10 or more)
1691 Correctional Worker	100%	28
1151 Social Service Worker – Gerontology	100%	24
A210 Business Admin – Finance	100%	23
13M1 Law & Sec Administration – Private Security	100%	19
1500 Educational Assistant	100%	18
5200 Architectural Technology Co-op	100%	15
1197 Early Childhood Education DE	100%	14
5560 Architectural Technology	100%	13
1101 Police Foundations	100%	12
2170 Business – Marketing	100%	12
5750 Chemical Eng Technology Co-op	100%	10

Program Analysis

Altogether, there were 69 Sheridan College programs which received 100% KPI Employer satisfaction; however, more than half of them (54%, 37 programs) had less than 5 Employer responses.

Two programs that made the top programs shown on the previous page for the employer survey also made the top programs list for the graduate survey. These were Architectural Technology Co-op and Police Foundations and are listed in bold in the previous table. These programs had 15 and 12 Employers included in the KPI rating for this program over the past 4 survey periods respectively.

Bottom Programs

There were seven programs that received less than 80% KPI Employer satisfaction and that had more than 10 responses. These are listed in the table below:

Programs with less than 80% KPI Satisfaction for Fall 1997 through to Winter 2001	KPI Satisfaction Rate	Responses (must be 10 or more)
Law & Security Administration – Loss (13M0)	79%	24
Business Admin – Human Resources Mgt (A220)	79%	24
Early Childhood Assistant (1840)	79%	38
Animation – Classical (6010)	75%	16
Systems Analyst Co-op (E060)	73%	40
Illustration – Interpretive (6091)	71%	14
Investigation – Public & Private (1002)	67%	12

The Investigation – Public & Private program made the bottom list in both the Employer survey and the Graduate survey and hence it is bold in the table above.

College Trends

This section is an analysis of College trends over the four survey periods. Care should be taken in the weight that is placed upon these results because of potential statistical fluctuations (accurate to within +/- 3% at the 95% confidence level). Because of this, only changes of 3% or more will be noted.

There was a significant change in the scale of the survey in the Summer 1998 through Winter 1999 survey period. This had a dramatic affect on Employer satisfaction ratings. Therefore in this section analysis will be focussed on the changes in the last 3 survey periods in which time the scale has been consistent.

Appendix 4 displays the College's trends in an easy-to-read table for the four survey periods.

KPI Satisfaction Rate

The Employer KPI Satisfaction rate has remained fairly constant since the 1998/1999 survey period. In the 1998/1999 survey period, the KPI Satisfaction rate was 93% and is only 92% for this current survey period. The dissatisfaction rate has dropped slightly from the 1999/2000 survey period; however it has remained fairly constant as well since the 1998/1999 survey period (from 2% to 1%).

	KPI Employer Satisfaction Rate	Neither satisfied nor dissatisfied	Dissatisfied and Very dissatisfied	Number of Employers included in KPI
F97/W98	84%	14%	2%	327
S98/F98/W99	93%	6%	2%	363
S99/F99/W00	92%	5%	3%	438
S00/F00/W01	92%	7%	1%	491

Satisfaction Ratings

The satisfaction ratings for the various skills and abilities listed in Question 73⁴ have remained fairly stable between this survey period and the last. They are all within 2% of the last survey period's ratings as can be seen in the table on the following page. The one exception to this is in the area of Specific job-related skills' that has seen a 4% increase from the 1999/2000 survey period to the current one.

⁴ Q73 "When the graduate first started working with you after his/her graduation, how satisfied were you with his/her overall educational preparation for the following skills and abilities?"

College Trends

There were some larger differences between the 1998/1999 survey period and the 2000/2001 survey period:

- 'Computer skills' increased by 6% since the 1998/1999 survey period. From 1998/1999 to the next survey period it increased by 7%, and has remained stable since then.
- 'Specific job related skills' increased by 5% since the 1998/1999 survey period; and 4% of that increase has been since the last survey period (i.e. 1999/2000).
- 'Problem solving' steadily decreased by 4% since the 1998/1999 survey period.
- 'Specific job-related knowledge' increased by 3% since the 1998/1999 survey period and has remained stable for the last two survey periods.
- 'Organization and planning' decreased by 3% since the 1998/1999 survey period; 2% of that decrease has been since the last survey period (i.e. 1999/2000).

Skill/Ability in Question 73	F97/W98 Employer Satisfaction	S98/F98/W99 Employer Satisfaction	S99/F99/W00 Employer Satisfaction	S00/F00/W01 Employer Satisfaction	Change between S98/F98/W99 to S00/F00/W01
KPI Employer Satisfaction	84%	93%	92%	92%	-1%
A. Sp. job-related knowledge	61%	81%	84%	84%	+3%
B. Specific job-related skills	64%	83%	84%	88%	+5%
C. Oral communication	73%	89%	90%	89%	0%
D. Written communications	67%	83%	82%	84%	+1%
E. Comprehension	79%	93%	93%	93%	0%
F. Math skills	60%	74%	76%	74%	0%
G. Computer skills	70%	82%	89%	88%	+6%
H. Critical thinking	68%	87%	87%	87%	0%
I. Problem solving	69%	87%	85%	83%	-4%
J. Research and analysis	52%	73%	74%	73%	0%
K. Teamwork	88%	94%	94%	94%	0%
L. Organization and planning	68%	89%	88%	86%	-3%
M. Time management	67%	84%	83%	84%	0%
N. Quality of work	81%	93%	94%	94%	+1%
O. Productivity	74%	91%	90%	90%	-1%
P. Creative and Innovative	64%	81%	82%	82%	+1%
Q. Adaptable	80%	91%	94%	92%	+1%
R. Responsible	85%	93%	95%	94%	+1%

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College Trends

Demographics

Demographics have remained fairly steady since the last survey period. There were only two changes of 5% or more. The first is the proportion of Employers who said 'Yes', down by 8% to "Are there other skills that you feel will be in demand in the future and should be included in the educational preparation of college graduates?". The second is the proportion of Employers who said 'Yes', down by 5% to "Are there other skills that we have not talked about that are required for the type of work which this employee is doing/you are doing?".

The table below displays some of the demographic information derived from the Employer Satisfaction Survey over the four survey periods and the changes between this survey period and the last survey period shaded in gray.

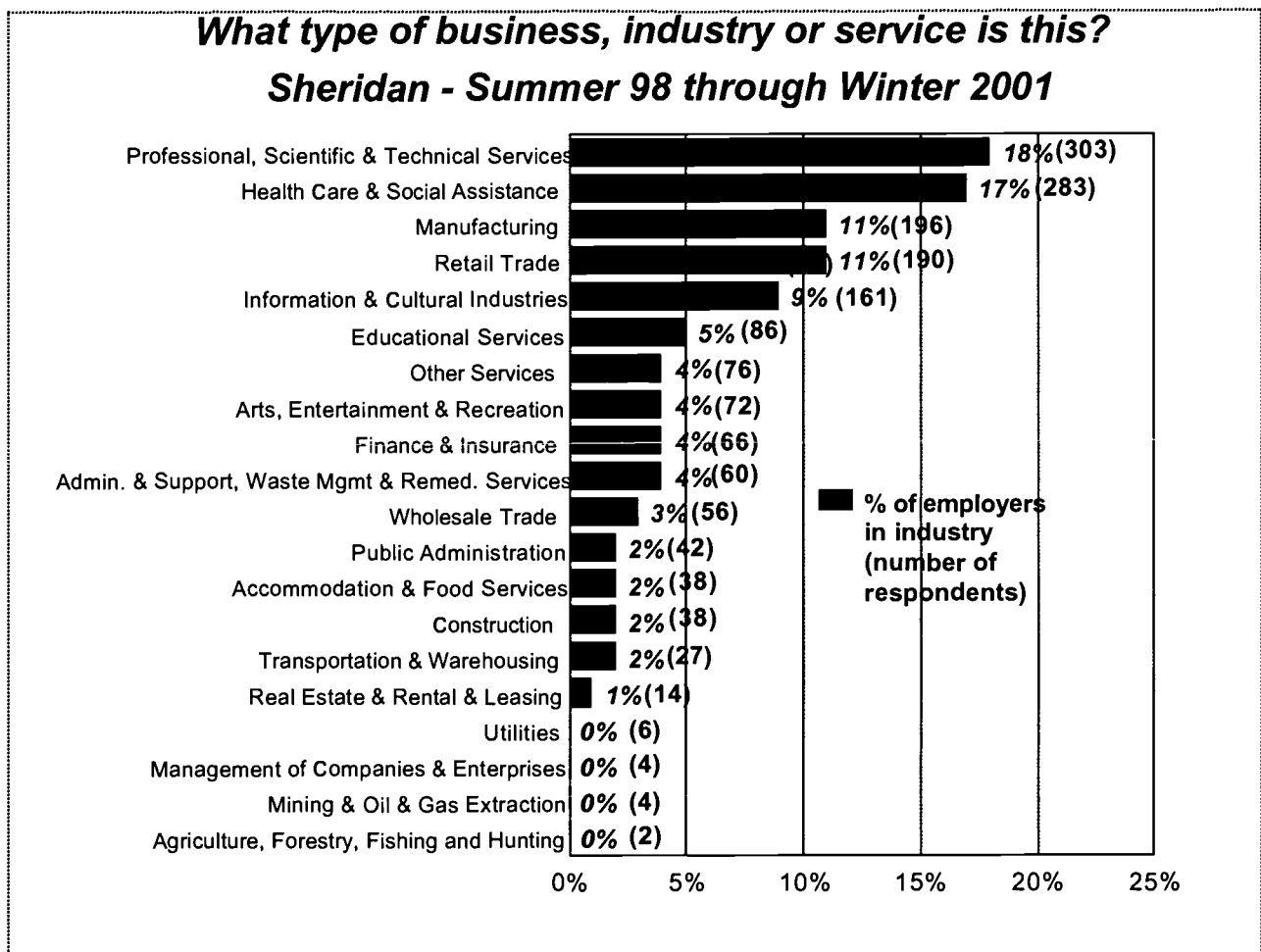
College Demographic Information	F97/ W98	S98/ F98/ W99	S99/ F99/ W00	S00/ F00/ W01	Changes between S99/F99/W00 & S00/F00/W01
Q70 Percentage of Employers who confirmed that the graduate was employed by them.	99%	99%	98%	98%	0%
Q71 Percentage of graduates who had been working 'Less than 3 months'.	8%	4%	8%	6%	-2%
Q71 Percentage of graduates who had been working for '3-6 months'.	24%	22%	22%	21%	-1%
Q71 Percentage of graduates who had been working for '6 mths-1 year'.	45%	47%	44%	42%	-2%
Q71 Percentage of graduates who had been working for '1-2 years'.	14%	13%	13%	17%	+4%
Q71 Percentage of graduates who had been working for '2 yrs or more'.	9%	14%	13%	14%	+1%
Q71 Percentage of 'Refused/Don't Know' responses.	7%	5%	7%	6%	-1%
Q75 Percentage of Employers who said 'Yes' to "Are there other skills that we have not talked about that are required for the type of work which this employee is doing/you are doing?"	28%	43%	33%	28%	-5%
Q77 Percentage of Employers who said 'Yes' to "Are there other skills that you feel will be in demand in the future and should be included in the educational preparation of college graduates?"	48%	62%	51%	43%	-8%

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Industry Analysis

Employer responses were sorted into North American Industry Classification System (NAICS) Sectors. The NAICS system is used to classify businesses across Canada, the USA and Mexico. This section of the report will determine the Employer satisfaction and importance ratings for the industries in which graduates are employed.

Data from the Summer of 1998 through to Winter 2001 was used in this analysis to provide a large number of cases. Over this time period there were 1,724 Employers included. The table below shows the proportion of Sheridan College graduate employers in each industry.



The tables and charts in Appendix 5 provide details of this Analysis. The six industries with 5% or more of the total Employer responses were examined in some detail in the following pages.

Industry Analysis

PROFESSIONAL, SCIENTIFIC & TECHNICAL SERVICES

The Professional, Scientific & Technical Services industry had an average KPI Satisfaction rate of 90%. Satisfaction ratings in this industry were about the same or below the Provincial average in all cases but two. These were 'Computer skills' and 'Research and analysis' which were about 5% higher in their satisfaction rating. Importance ratings for this industry were also close to or below Provincial ratings in most cases. Exceptions to this were much higher ratings in 'Computer skills' and in 'Research and analysis'.

The Professional, Scientific & Technical Services industry had the highest proportion of graduate Employers over the past 3 survey periods including 303 Employers. This industry had a KPI Satisfaction rate of 90%. This is very close to the average of the industries and also the Provincial average over the past three survey periods.

In general, Employers in this industry had slightly below average satisfaction ratings when compared to Provincial ratings over the past 3 survey periods, with 2 exceptions. These exceptions included 'Computer skills' and 'Research and analysis', which were about 5% higher in their satisfaction rate.

The satisfaction rates from Employers in this industry ranged from 73% to 94% for the skills and abilities in terms of educational preparation. 'Math skills' was rated the lowest, while 'Teamwork' was rated the highest. Four other factors had 90% or more satisfaction ratings, including 'Computer skills' with 90%, 'Quality of work' with 90%, 'Responsible' with 91% and 'Comprehension' with 92%. This is good news for the College, because the Employers also rated those 5 top factors with 95% to 100% importance rating.

This industry had 4 factors that had less than 80% satisfaction. These were 'Math skills' with 73%, 'Research & analysis' with 77%, 'Time Management' with 79% and 'Specific job-related knowledge' with 77%. Both 'Math skills' and 'Research and analysis' were also rated with low importance ratings (57% and 65% respectively). 'Specific job-related knowledge' needs some improvement, however, as it has been seen to be *Very Strongly* related to the KPI Satisfaction, and has also been rated with an 84% importance rating.

In general, Professional, Scientific & Technical Services had average to below average importance ratings when compared to the Province over the past three survey periods. This industries' highest importance ratings came in 'Quality of work' with 100%, 'Productivity' with 98% and 'Teamwork' also with 98%. The one factor in this industry that received an importance rating which was way above the Provincial average (by about 25%) was 'Computer skills', which Employers rated with a 95% importance rating.

The lowest importance rating for this industry, by far, was in 'Math skills' with only 57% of Employers rating this as 'Important'.

Industry Analysis

HEALTH CARE & SOCIAL ASSISTANCE

The Health Care & Social Assistance Industry had a high KPI Satisfaction rate of 94%. Employers from this industry rated educational preparation for most skills and abilities as 'Important' and also gave the majority of them high satisfaction rates. The two factors with the lowest rated importance were 'Math Skills' with 37% 'Important' and 'Computer skills' with 43% 'Important'.

The Health Care & Social Assistance industry had the second highest proportion of graduate Employers over the past 3 survey periods including 283 Employers. It had a KPI Satisfaction rate of 94%. This is very close to the Provincial average over the past three survey periods.

Employers in this industry had above average satisfaction ratings ranging from 63% to 97%. More than 95% of Employers were 'Satisfied' with educational preparation for three of the skills & abilities listed in Question 73. These were 'Quality of work' with 97%, 'Comprehension' with 96% and 'Responsible' with 96%. These are areas of strength in this industry as these three factors also had very high importance ratings (99% to 100%). This means that not only do Employers find these factors 'Important', but they are also 'Satisfied' with how the graduates have been prepared in these areas.

However, there were also 3 skills and abilities with less than 80% Employer satisfaction. These were 'Research & Analysis' with 71%, 'Computer skills' with 70% and 'Math skills' with 63%. This is an average rating for 'Research & Analysis' but below average for the other two factors. Though these satisfaction ratings are low, they also have the lowest importance ratings in this industry.

In general, Health Care and Social Assistance had average to above average importance ratings when compared to the Province over the past three survey periods. The three exceptions to this were in 'Math Skills' (about 20% below average), 'Computer skills' (about 30% below average) and 'Research and analysis' (about 5% below average).

There were several factors in this industry which are 'Important' to Employers. In fact, of the 18 factors listed, Employers rated 15 of these with over 90% importance. Two of these factors had 100% importance. They were 'Responsible' and 'Comprehension'.

The factors with the lowest importance ratings were 'Math skills' with 37% 'Important' and 'Computer skills' with 43% 'Important'.

Industry Analysis

MANUFACTURING

The Manufacturing Industry had a high KPI Satisfaction rate of 94%. The areas of highest satisfaction were in 'Teamwork' and 'Responsible'. It had close to average importance ratings for most factors with the exceptions of 'Math skills', 'Computer skills' and 'Research and analysis' which had much higher importance ratings than the Provincial average; 'Specific job-related knowledge' had a much lower importance rating than the Provincial average. This industry had a mix of higher, lower and average satisfaction ratings when compared to the Province.

The Manufacturing industry had the third highest proportion of graduate Employers over the past 3 survey periods including 196 Employers. It had a KPI Satisfaction rate of 94%. This is slightly higher than the Provincial average over the past three survey periods.

Employers in this industry had several satisfaction ratings below average and several above average, with ratings ranging from 74% to 96%. The highest satisfaction rating for this industry was in 'Teamwork'. An additional five skills and abilities had satisfaction ratings above 90%, including 'Comprehension' with 92%, 'Computer skills' with 91%, 'Quality of work' with 92%, 'Adaptable' with 92% and 'Responsible' with 94% 'Satisfied'.

This industry had 4 factors that had less than 80% satisfaction. These were 'Creative and innovative' with 79% 'Research & analysis' with 75%, 'Specific job-related knowledge' with 74% and 'Time management' with 77%. One area that would be particularly important for improvement would be 'Specific job-related knowledge' as it is a 'Very Strong' driver of KPI Satisfaction.

The importance ratings were about average or below average for this industry compared to the Provincial average. There were 3 exceptions. These were 'Computer skills' where this industry rated about 20% higher than the average, 'Research and analysis' which rated about 10% higher and 'Math skills' which rated about 10% higher as well. The greatest differences are with 'Computer skills', with an importance rate about 20% higher, and 'Specific job-related knowledge', with an importance rate about 17% lower.

The four most 'Important' factors to Employers in this industry are 'Quality of work' with 100%, 'Responsible' with 99%, 'Productivity' with 98%, and 'Comprehension' with 98%. Satisfaction ratings for these factors ranged from 87% to 94%, with the lowest rating for 'Productivity'.

'Computer skills' received a 90% importance rating from Employers in this industry. This was about 20% higher than the Provincial average and is one of the highest importance ratings for this factor among all the industries.

The factor that was rated with the least importance in this industry was 'Math skills' with only 67%.

Industry Analysis

RETAIL TRADE

The Retail Trade Industry had a KPI Satisfaction rate of 90%. With regard to satisfaction, Retail Trade had a mixture of ratings that were above and about the same as the Provincial average. The highest satisfaction came in 'Teamwork' and 'Responsible'. Importance ratings for this industry were average or slightly below average with the exception of 'Math skills' which was rated as more important in this industry than the Provincial average. The most important factors for this industry include 'Quality of work', 'Productivity' and 'Teamwork'.

The Retail Trade industry had the fourth highest proportion of graduate Employers over the past 3 survey periods including 190 Employers. It had a KPI Satisfaction rate of 90%.

Employers in this industry had satisfaction ratings that were within the average, with ratings ranging from 70% to 96%. The highest ratings were in 'Teamwork' with 96% 'Satisfied' and 'Responsible' with 95% 'Satisfied'. An additional 5 skills and abilities had satisfaction rates above 90%. These are 'Oral communication' with 92%, 'Comprehension' with 93%, 'Quality of work' with 92%, 'Productivity' with 93% and 'Adaptable' with 93%. This is good news for the College, since 3 of those factors are *Very Strong* drivers of KPI Satisfaction.

This industry had only one factor that had less than 80% satisfaction, which was 'Research and analysis'. Although this rating is average, the employers of this industry only rated it as 50% 'Important'.

In general, Retail Trade's importance ratings were average or below, with the exception of 'Math Skills' that was about 10% above the Provincial average.

Retail Trade's highest rated factors of importance for Employers included 'Quality of work' with 100%, 'Productivity' with 99%, 'Teamwork' with 99%, 'Responsible' with 98% and 'Oral communication' with 98%. Employers rated 92% to 96% 'Satisfied' for these same factors. For a complete listing of these and other factors see Appendix 5, Table 1.

Industry Analysis

INFORMATION & CULTURAL INDUSTRIES

The Information & Cultural Industries had a KPI Satisfaction rate of 87%. In general, satisfaction ratings for this industry were equal to or below the Provincial averages with 2 exceptions. These were 'Computer skills' with 92% and 'Research & analysis' with 76%. Importance ratings for Information & Cultural Industries were all over the map, some higher, some lower and some the same as the Provincial averages. The largest differences were in 'Written Communication' and 'Math skills' where this industry had much lower importance ratings and in 'Computer skills' and 'Research & analysis' where this industry had much higher importance ratings.

The Information & Cultural Industries had the fifth highest proportion of graduate Employers over the past 3 survey periods including 161 Employers. It had a KPI Satisfaction rate of 87%, which is below the Provincial average over the past three survey periods.

In general, Employers in this industry had satisfaction ratings ranging from 70% to 96% that were the same or below Provincial averages. There were 2 exceptions to this. The first exception was in 'Computer skills' where 92% of Employers were 'Satisfied' which was about 10% higher than the Provincial average. This is a strength as 85% of Employers from this industry also said that 'Computer skills' were 'Important', which is above average. The second exception was in 'Research and analysis', which received a 76% satisfaction rating, which is about 5% above the Provincial average. This is an area of strength as 'Research and analysis' also received an above average importance rating of 65%.

This industry had 8 factors that had less than 80% satisfaction. The lowest satisfaction ratings were in 'Math skills' with 71% 'Satisfied' and 'Written Communications' with 70%. The employers rated these factors with a 36% and 65% importance rating respectively.

In Information & Cultural Industries, the most important factors to Employers were 'Quality of work' and 'Responsible' both ranked with 100%, and 'Time Management' with 99%. 'Comprehension' and 'Productivity' also ranked with very high importance ratings of 98%. The factor of least importance was 'Math skills' with only 36% of Employers saying that this was 'Important'.

When comparing the importance ratings between this industry and the Province, this industry rated at average, above, and below average rates. The greatest differences were in 'Math skills' about 20% lower in this industry, and 'Written Communications' which was about 20% lower and 'Computer skills' which was about 15% higher.

Industry Analysis

EDUCATIONAL SERVICES

The Educational Services industry had a high KPI Satisfaction rate of 95%. Satisfaction ratings in this industry were average to above average in all cases but two. These were 'Teamwork', which was about 5% lower and 'Math skills', which was just slightly lower than the Provincial average. Importance ratings for this industry were very close to or above Provincial ratings.

The Educational Services industry had the sixth highest proportion of graduate Employers over the past 3 survey periods including 86 Employers. It had a KPI Satisfaction rate of 95% that is second highest among industries over the past three survey periods.

In general, Employers in this industry had ratings that ranged from 75% to 98% which are ratings that are average to above average satisfaction ratings when compared to Provincial ratings over the past 3 survey periods. The two exceptions were with 'Teamwork' which was about 5% below average and 'Math skills' which was slightly below average.

The highest satisfaction ratings for this industry were in 'Quality of work' and 'Specific job-related knowledge' with 98% 'Satisfied'. This is a strength of the industry as these two factors were *Very Strongly* related to the KPI Satisfaction question. Both of these factors also had high importance ratings of 100% and 95% respectively. Altogether, the employers in this industry rated 13 skills and abilities with 90% or more satisfaction.

This industry had 2 factors that had less than 80% satisfaction. These were 'Research & analysis' with 76% and 'Math Skills' with 75%. These factors were rated with a 63% and a 55% importance rating respectively.

In general, Educational Services had average to above average importance ratings when compared to the Province over the past three survey periods. The exceptions were with 'Teamwork', 'Productivity' and 'Math skills' that were rated slightly below average.

This industries' highest importance ratings came in 'Quality of work' with 100%, 'Responsible' with 100%, 'Adaptable' with 99% and 'Comprehension' with 98%. The two factors in this industry that received an importance rating which were significantly above the Provincial averages (by about 10%) was 'Creative and innovative' and 'Written Communications' which Employers rated with 87% and 92% 'Important' respectively.

The lowest importance rating for this industry by far was in 'Math skills' with only 55% of Employers rating this as 'Important'. This factor was only slightly below the average.

Appendices

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APPENDIX 1 – Employer Satisfaction Ratings (S00-W01)

Table 1 – Satisfaction – Question 73 “When the graduate first started working with you after his/her graduation, how satisfied were you with his/her overall educational preparation for the following skills and abilities?” The table is ranked in high-to-low order by College Employer satisfaction rating.

Skill/Ability	College Ranking	Province Ranking	College Satisfaction	Province Satisfaction	Difference	College Dis-Satisfaction	Province Dis-Satisfaction	Difference	College Responses
KPI Question 74 Employer Satisfaction Rate	N/A	N/A	92%	92%	0%	1%	2%	-1%	491
73K. Teamwork	1	1	94%	94%	0%	2%	2%	0%	529
73R. Responsible	1	1	94%	94%	0%	2%	2%	0%	532
73N. Quality of work	1	3	94%	93%	+1%	2%	2%	0%	532
73E. Comprehension	4	3	93%	93%	0%	2%	2%	0%	531
73Q. Adaptable	5	5	92%	92%	0%	2%	2%	0%	531
73O. Productivity	6	7	90%	90%	0%	3%	4%	-1%	528
73C. Oral communication	7	6	89%	91%	-2%	3%	3%	0%	532
73B. Specific job-related skills	8	10	88%	86%	+2%	9%	11%	-2%	529
73G. Computer skills	8	15	88%	83%	+5%	1%	2%	-1%	517
73H. Critical thinking	10	10	87%	86%	+1%	3%	3%	0%	530
73L. Organization and planning	11	8	86%	87%	-1%	4%	3%	+1%	529
73D. Written communications	12	8	84%	87%	-3%	2%	3%	-1%	532
73M. Time management	12	10	84%	86%	-2%	6%	4%	+2%	531
73A. Sp. job-related knowledge	12	14	84%	84%	0%	3%	4%	-1%	530
73I. Problem solving	15	10	83%	86%	-3%	4%	4%	0%	530
73P. Creative and Innovative	16	16	82%	79%	+3%	2%	3%	-1%	528
73F. Math skills	17	17	74%	76%	-2%	2%	1%	+1%	514
73J. Research and analysis	18	18	73%	70%	+3%	2%	3%	-1%	506

APPENDIX 2 –KPI Statistical Accuracy Table (F97 - W01)

This table presents all the programs from Fall 1997 through Winter 2001 listed alphabetically. The college level results in this report can be treated as accurate to within +/- 3% at the 95% confidence level (based on the worst case scenario). Results at the program level range significantly depending on the return rate – accuracy increases with a larger sample (number of surveys). A program with 20 surveys of 25 students would be accurate to within 5 to 10%, depending upon the result (e.g. satisfaction results at the high end or low end are statistically more accurate than are results around the 50% mark).

PROGRAM	Prg. Code	KPI Grad. Satis. Rate	Total Grads.	Survey Responses	% of Grads rep. in results	+/- % Accuracy at 95% confidence level
Advanced Television & Film	6705	67%	22	5	23%	39%
Advertising	2835	87%	287	45	16%	13%
Animal Care	5430	83%	289	41	14%	14%
Animation – Classical	6010	75%	180	27	15%	17%
Animation – Classical (ISSA)	6011	67%	66	21	32%	18%
Animation – Filmmaking	6015	0%	1	0	0%	-1%
Applied Photography	6210	88%	158	45	28%	12%
Architectural Technician	5060	100%	31	3	10%	54%
Architectural Technician Co-op	5620	100%	14	6	43%	30%
Architectural Technology	5560	100%	29	14	48%	19%
Architectural Technology Co-op	5200	100%	68	18	26%	20%
Art and Art History	6370	100%	154	13	8%	26%
Art Fundamentals	6350	80%	1017	39	4%	15%
Bachelor of Design Hon Deg	6131	100%	48	11	23%	26%
Business – Accounting	2450	100%	66	9	14%	30%
Business – Accounting Co-op	2400	100%	9	4	44%	37%
Business – Finance	A060	100%	27	3	11%	53%
Business – General	2150	83%	65	8	12%	32%
Business – Human Resources	A120	100%	51	2	4%	68%
Business – Marketing	2170	100%	98	15	15%	23%
Business – Marketing Co-op	2600	0%	4	0	0%	-1%
Business – Retailing	2280	75%	22	5	23%	39%
Business – Trans/Distr Co-op	2420	0%	1	0	0%	-1%
Business Admin – Accounting	2050	92%	235	46	20%	13%
Business Admin – Accounting Co-op	2340	96%	156	28	18%	17%
Business Admin – Finance	A210	100%	213	23	11%	19%
Business Admin – General	2800	100%	40	5	13%	41%
Business Admin – Human Resources Mgt	A220	79%	265	30	11%	17%
Business Admin – Marketing	2830	98%	378	49	13%	13%
Business Admin – Marketing Co-op	2520	86%	65	16	25%	21%
Chem Eng Technology Env	5891	100%	13	3	23%	50%

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APPENDIX 2 –KPI Statistical Accuracy Table (F97 - W01)

Table continued...

PROGRAM	Prg. Code	KPI Grad. Satis. Rate	Total Grads.	Survey Responses	% of Grads rep. In results	+/- % Accuracy at 95% confidence level
Chem Eng Technology Env Co-op	5821	100%	21	7	33%	30%
Chemical Eng Technology Co-op	5750	100%	40	10	25%	27%
Chemical Engineering Technology	5460	100%	16	1	6%	95%
Chemical Technician – Laboratory	5210	100%	26	3	12%	53%
Community Outreach & Develop	1001	100%	76	7	9%	35%
Computer Animation	6120	92%	137	24	18%	18%
Computer Animation – Tech Dir	6121	100%	20	6	30%	33%
Computer Foundations	3460	100%	154	12	8%	27%
Computer Programmer	3220	86%	437	51	12%	13%
Computer Science Technician	3280	100%	14	3	21%	50%
Computer Science Technology	E130	100%	33	5	15%	40%
Computer Science Technology Co-op	E110	84%	145	43	30%	13%
Corporate Communications	2013	100%	31	2	6%	67%
Corporate Communications Co-op	2019	100%	36	3	8%	54%
Correctional Worker	1691	100%	193	32	17%	16%
Cosmetic Techniques & Mgmt	2843	87%	99	16	16%	22%
Court and Tribunal Agent	1004	78%	105	13	12%	25%
Crafts & Design – Ceramics	4090	100%	34	12	35%	23%
Crafts & Design – Fabrics	4150	100%	23	2	9%	66%
Crafts & Design – Furniture	4210	100%	32	10	31%	26%
Crafts & Design – Glass	4270	100%	29	9	31%	27%
Developmental Disabilities Worker	1000	86%	51	8	16%	32%
Early Childhood Assistant	1840	79%	278	38	14%	15%
Early Childhood Education	1190	91%	621	112	18%	8%
Early Childhood Education DE	1197	100%	97	15	15%	23%
Educational Assistant	1500	100%	121	21	17%	19%
Electromechanical Eng Technology	5012	0%	5	0	0%	-1%
Electromechanical Eng Technology Co-op	5112	100%	5	1	20%	88%
Electronics Engineering Technician	5170	100%	39	7	18%	34%
Electronics Engineering Technology	5120	100%	47	10	21%	27%
Electronics Engineering Technology Co-op	5300	80%	62	15	24%	22%
Environmental Control	5365	100%	45	5	11%	41%
Environmental Science Technician	5366	100%	12	2	17%	63%
Esthetician	1340	93%	114	35	31%	14%
General Arts & Science	13A0	100%	219	8	4%	34%
General Arts and Science	13D0	100%	32	2	6%	67%
Gerontology – Multidiscipline	1240	100%	10	3	30%	47%

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APPENDIX 2 –KPI Statistical Accuracy Table (F97 - W01)

Table continued...

PROGRAM	Prg. Code	KPI Grad. Satis. Rate	Total Grads	Survey Responses	% of Grads rep. In results	+/- % Accuracy at 95% confidence level
Graphic Design	6130	82%	195	54	28%	11%
Human Kinetics/Sports Injury Management	1912	0%	5	0	0%	-1%
Human Resource Management	A690	0%	2	0	0%	-1%
Human Resource Mgmt Co-op	A680	98%	319	48	15%	13%
Human Services Administration	1570	80%	83	10	12%	29%
Human Services Administration DE	1571	100%	29	2	7%	67%
Illustration – Interpretive	6091	71%	236	44	19%	13%
Illustration – Tech & Scien	6191	75%	63	9	14%	30%
Info Technology – Support Services	3610	0%	2	0	0%	-1%
Info Technology – Support Services Co-op	3614	100%	16	5	31%	36%
Information Technology Professional	3613	100%	54	7	13%	35%
Interactive Multimedia	3600	89%	132	20	15%	20%
Interior Design	6950	86%	198	40	20%	14%
International Business	2014	100%	69	8	12%	33%
International Business Co-op	2011	100%	53	4	8%	47%
Investigation – Public & Private	1002	67%	113	13	12%	26%
Journalism – New Media	2747	100%	34	4	12%	46%
Journalism – Print	2741	88%	49	9	18%	30%
Law & Sec Administration - Private Security	13M1	100%	162	22	14%	19%
Law & Security Administration – Loss	13M0	79%	204	25	12%	18%
Logistics	2015	0%	2	0	0%	-1%
Logistics – Co-op	2012	100%	47	7	15%	34%
Marketing Management	2017	100%	16	4	25%	42%
Marketing Management Co-op	2016	100%	36	5	14%	41%
Mech Eng Technician Draft Co-op	5630	0%	3	2	67%	40%
Mech Eng Technology Des Dr Co-op	5550	82%	43	12	28%	24%
Mechanical Eng Technology Co-op	5380	100%	43	10	23%	27%
Mechanical Eng Technology Des Dr	5500	100%	22	8	36%	28%
Mechanical Eng. Technician	5410	100%	10	3	30%	47%
Mechanical Eng. Technician – Draft	5020	100%	10	4	40%	38%
Mechanical Engineering Technology	5100	100%	26	6	23%	35%
Media Arts	6700	86%	210	60	29%	11%
Montessori EC Teacher Ed.	1198	88%	35	10	29%	26%
Music Theatre – Performance	6320	100%	85	12	14%	26%
New Media Design	6122	100%	50	12	24%	25%

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APPENDIX 2 –KPI Statistical Accuracy Table (F97 - W01)

Table continued...

PROGRAM	Prg. Code	KPI Grad. Satis. Rate	Total Grads.	Survey Responses	% of Grads rep. In results	+/- % Accuracy at 95% confidence level
Office Admin – Executive	2180	93%	193	27	14%	17%
Office Admin – General	2140	100%	72	4	6%	48%
Office Admin – Legal	2200	80%	72	16	22%	22%
Office Admin – Medical	2220	0%	1	0	0%	-1%
Office Admin – Office Systems	A670	100%	24	1	4%	96%
Personal Support Worker	1926	95%	222	51	23%	12%
Pharmacy Assistant Co-op	1915	93%	132	34	26%	14%
Police Foundations	1101	100%	90	12	13%	26%
Police Recruit Ed & Prep	13R0	83%	41	6	15%	37%
Quality Assurance Mfg & Mgt	5013	100%	11	2	18%	63%
Quality Assurance Mfg & Mgt Coop	5113	100%	36	10	28%	26%
Registered Nursing – Refresher	1904	67%	17	3	18%	51%
Risk Analyst	1215	100%	46	6	13%	37%
Security System Implementation & Design	1005	57%	73	10	14%	29%
Social Service Worker	1150	93%	283	37	13%	15%
Social Service Worker – Gerontology	1151	100%	214	33	15%	16%
Social Service Worker – Gerontology DE	1152	100%	37	2	5%	67%
Sports Injury Management	1911	95%	113	24	21%	18%
Systems Analyst	E210	100%	22	1	5%	96%
Systems Analyst Co-op	E060	73%	194	48	25%	12%
Telecommunications Management	3410	91%	103	14	14%	24%
Telecommunications Technology Co-op	5361	100%	53	12	23%	25%
Theatre & Drama Studies (Erin)	6401	100%	52	7	13%	34%
Theatre Arts – Tech Production	6737	100%	73	19	26%	19%
Tourism & Travel	2840	88%	272	41	15%	14%
Visual Merchandising Arts	6815	88%	90	23	26%	18%

APPENDIX 3 – Correlation KPI Q74 with Q73 (F97-W01)

Table 1 KPI Q74 “In general, how would you rate your satisfaction with this employee’s overall college preparation for the type of work he/she was doing?”

Q73 “When the graduate first started working with you after his/her graduation, how satisfied were you with his/her overall educational preparation for the following skills and abilities?”

Satisfaction with following skills and abilities	Ranking	Pearson's R	Chi-Square	% Satisfied in Q74 if Satisfied in Q73 (A-R)	% Satisfied in Q74 if 'Not Satisfied' in Q73 (A-R)	Difference in Satisfaction
73N. Quality of work	1	.503	575	95%	22%	73%
73B. Specific job-related skills	2	.473	458	96%	41%	55%
73H. Critical thinking	3	.467	507	96%	38%	58%
73A. Specific job-related knowledge	4	.462	433	96%	40%	56%
73O. Productivity	5	.446	462	95%	39%	56%
73E. Comprehension	6	.442	454	95%	35%	60%
73I. Problem solving	7	.425	358	96%	45%	51%
73M. Time management	8	.392	311	95%	51%	44%
73L. Organization and planning	9	.366	274	95%	50%	45%
73R. Responsible	10	.362	265	94%	41%	53%
73Q. Adaptable	11	.341	267	94%	43%	51%
73P. Creative and Innovative	12	.336	218	95%	49%	46%
73C. Oral Communication	13	.325	236	94%	55%	39%
73J. Research and analysis	14	.314	175	95%	53%	42%
73D. Written Communications	15	.300	174	95%	53%	42%
73F. Math skills	16	.287	155	95%	51%	44%
73K. Teamwork	17	.284	146	93%	48%	45%
73G. Computer skills	18	.282	158	93%	56%	37%

NOTE:

Correlations with Pearson's R values of 0.4 or more are considered 'Very Strong', values between 0.3 and 0.4 are considered 'Strong' and values of less than 0.3 are termed 'Moderate/Weak'. (Pearson's R is a statistical measure of the strength of association between two variables.) Ranking of questions is based on the Pearson's R value.

APPENDIX 4 – Employer Satisfaction Trends (F97-W01)

Question 73 “When the graduate first started working with you after his/her graduation, how satisfied were you with his/her overall educational preparation for the following skills and abilities?”

Skill/Ability in Question 73	97/98 Emp. Satis.	98/99 Emp. Satis.	99/00 Emp. Satis.	00/01 Emp. Satis.	97/98 Employer Neither Satisfied nor Dissatis.	98/99 Employer Neither Satisfied nor Dissatis.	99/00 Employer Neither Satisfied nor Dissatis.	00/01 Employer Neither Satisfied nor Dissatis.	97/98 Employer Dissatis.	98/99 Employer Dissatis.	99/00 Employer Dissatis.	90/01 Employer Dissatis.
KPI Employer Satisfaction	84%	93%	92%	92%	14%	6%	5%	7%	2%	2%	3%	1%
A. Specific job-related knowledge	61%	81%	84%	84%	29%	15%	13%	13%	9%	4%	3%	3%
B. Specific job-related skills	64%	83%	84%	88%	28%	14%	13%	9%	8%	3%	4%	3%
C. Oral communication	73%	89%	90%	89%	22%	8%	7%	8%	5%	2%	3%	3%
D. Written communications	67%	83%	82%	84%	26%	14%	15%	14%	7%	3%	3%	2%
E. Comprehension	79%	93%	93%	93%	19%	5%	6%	5%	2%	2%	1%	2%
F. Math skills	60%	74%	76%	74%	31%	25%	20%	24%	8%	1%	3%	2%
G. Computer skills	70%	82%	89%	88%	23%	14%	9%	11%	6%	4%	2%	1%
H. Critical thinking	68%	87%	87%	87%	25%	11%	10%	11%	7%	2%	4%	3%
I. Problem solving	69%	87%	85%	83%	24%	10%	12%	13%	7%	3%	3%	4%
J. Research and analysis	52%	73%	74%	73%	37%	25%	23%	25%	11%	2%	3%	2%
K. Teamwork	88%	94%	94%	94%	9%	4%	5%	4%	3%	2%	1%	2%
L. Organization and planning	68%	89%	88%	86%	27%	7%	8%	10%	5%	4%	4%	4%
M. Time management	67%	84%	83%	84%	27%	9%	12%	11%	6%	7%	5%	6%
N. Quality of work	81%	93%	94%	94%	16%	6%	4%	5%	4%	1%	2%	2%
O. Productivity	74%	91%	90%	90%	22%	6%	8%	8%	5%	3%	2%	2%
P. Creative and Innovative	64%	81%	82%	82%	28%	16%	15%	16%	8%	3%	3%	2%
Q. Adaptable	80%	91%	94%	92%	17%	7%	5%	6%	3%	2%	1%	2%
R. Responsible	85%	93%	95%	94%	12%	4%	4%	4%	3%	3%	1%	2%

Appendix 5 – NAICS Code by Importance of skill/ability in performing employee's work (S98-W01)

Table 1 Question 72 "How important is this skill/ability in performing the employee's work?"

INDUSTRY	Specific job-related knowledge	Specific job-related skills	Oral Communication	Written communications	Comprehension	Math skills	Computer skills	Critical thinking	Problem solving	Research and analysis	Teamwork	Organization and planning	Time management	Quality of work	Productivity	Creative and Innovative	Adaptable	Responsible
Other	88%	75%	94%	81%	94%	47%	81%	88%	94%	53%	100%	88%	75%	100%	94%	69%	88%	100%
Construction	86%	91%	95%	77%	91%	62%	73%	91%	95%	45%	95%	91%	91%	100%	95%	59%	100%	100%
Manufacturing	73%	84%	90%	86%	98%	67%	90%	94%	91%	69%	96%	90%	93%	100%	98%	70%	94%	99%
Wholesale Trade	74%	77%	91%	75%	91%	53%	75%	77%	87%	58%	94%	91%	91%	100%	98%	68%	85%	96%
Retail Trade	86%	86%	98%	79%	97%	69%	72%	92%	91%	50%	99%	92%	92%	100%	99%	78%	93%	98%
Trans./Warehousing	79%	89%	89%	74%	100%	67%	96%	93%	93%	73%	96%	86%	86%	100%	100%	63%	96%	100%
Information & Cultural Industries	89%	89%	88%	65%	98%	36%	85%	97%	93%	65%	96%	90%	99%	100%	98%	84%	95%	100%
Finance & Insurance	75%	80%	93%	75%	97%	76%	97%	90%	100%	70%	98%	92%	92%	100%	98%	72%	95%	98%
Real Estate/Rental/Leasing	85%	77%	92%	92%	100%	67%	100%	69%	92%	50%	92%	92%	92%	100%	100%	62%	85%	92%
Prof./Sci./Tech Services	84%	88%	94%	83%	97%	57%	95%	94%	95%	65%	98%	91%	93%	100%	98%	80%	92%	96%
Admin. & Sup., Waste Mgmt & Remed Serv.	81%	89%	96%	89%	93%	58%	79%	96%	96%	62%	94%	91%	94%	98%	94%	76%	100%	100%
Educational Services	95%	93%	96%	92%	98%	55%	71%	95%	98%	63%	96%	95%	95%	100%	98%	87%	99%	100%
Health Care & Social Assistance	98%	97%	99%	92%	100%	37%	43%	96%	99%	51%	97%	96%	98%	99%	97%	91%	99%	100%
Arts, Entertainment & Recreation	90%	97%	97%	67%	97%	36%	38%	93%	97%	42%	100%	97%	90%	100%	100%	84%	97%	97%
Accommodation & Food Services	84%	81%	97%	69%	95%	67%	69%	89%	92%	52%	97%	89%	89%	100%	97%	69%	95%	100%
Other Services	89%	93%	95%	79%	97%	49%	71%	97%	92%	57%	97%	92%	97%	100%	98%	90%	98%	100%
Public Administration	83%	88%	95%	98%	100%	46%	77%	95%	93%	64%	100%	88%	93%	98%	93%	79%	98%	93%

Appendix 5 – NAICS Code by Satisfaction with Educational Preparation (S98-W01)

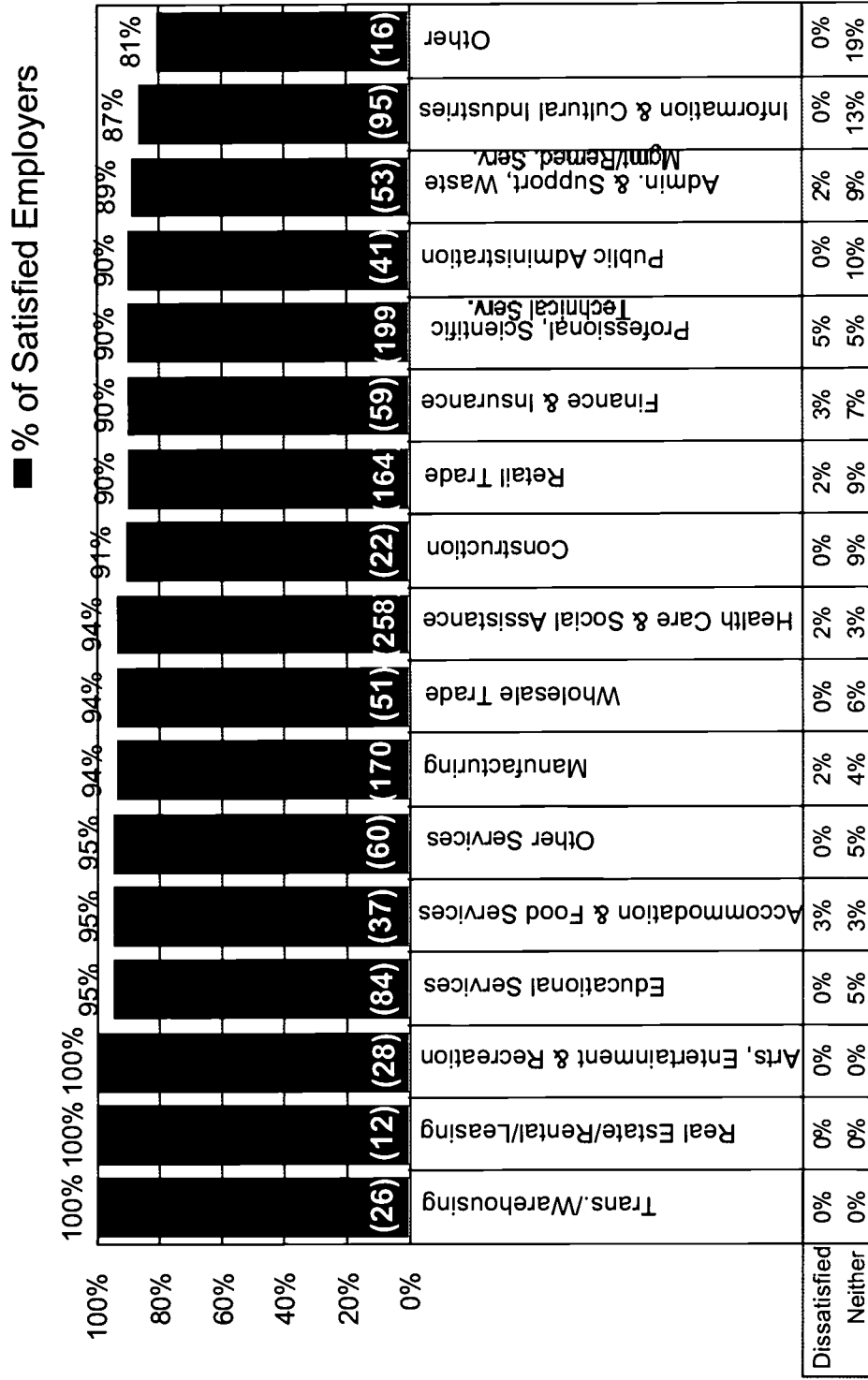
Table 2 Question 73 "How satisfied were you with his/her educational preparation for the following skills and abilities"

INDUSTRY	Specific job-related knowledge	Specific job-related skills	Oral Communications	Written communications	Comprehension	Math skills	Computer skills	Critical thinking	Problem solving	Research and analysis	Teamwork	Organization and planning	Time management	Quality of work	Productivity	Creative and Innovative	Adaptable	Responsible
Other	88%	87%	75%	77%	88%	73%	93%	81%	75%	64%	94%	88%	69%	94%	81%	69%	88%	94%
Construction	85%	90%	90%	67%	95%	85%	90%	86%	86%	58%	86%	86%	90%	95%	90%	81%	100%	100%
Manufacturing	74%	80%	87%	80%	92%	82%	91%	84%	82%	75%	96%	87%	77%	92%	87%	79%	92%	94%
Wholesale Trade	80%	82%	84%	74%	88%	74%	90%	81%	86%	64%	88%	76%	80%	94%	88%	79%	90%	90%
Retail Trade	88%	83%	92%	85%	93%	82%	85%	88%	86%	70%	96%	90%	88%	92%	93%	81%	93%	95%
Trans./Warehousing	83%	83%	96%	92%	89%	86%	100%	96%	92%	88%	96%	96%	88%	96%	92%	86%	88%	100%
Information & Cultural Industries	79%	83%	79%	70%	88%	71%	92%	85%	80%	76%	96%	78%	76%	94%	94%	79%	96%	88%
Finance & Insurance	75%	82%	85%	83%	92%	74%	93%	80%	85%	73%	95%	84%	85%	93%	82%	66%	93%	95%
Real Estate/Rental/Leasing	92%	75%	92%	92%	92%	89%	100%	85%	75%	60%	92%	85%	92%	100%	92%	58%	85%	92%
Prof./Sci./Tech Serv.	77%	82%	89%	80%	92%	73%	90%	84%	83%	77%	94%	84%	79%	90%	88%	80%	89%	91%
Admin. & Sup., Waste Mgmt & Remed Serv.	81%	82%	96%	88%	96%	88%	92%	87%	81%	84%	94%	92%	85%	94%	89%	81%	98%	94%
Educational Services	98%	96%	93%	87%	95%	75%	87%	94%	93%	76%	88%	91%	90%	98%	91%	91%	94%	93%
Health Care & Social Assistance	90%	90%	90%	90%	96%	63%	70%	91%	89%	71%	94%	91%	88%	97%	94%	87%	94%	96%
Arts, Entertainment & Recreation	90%	90%	90%	68%	90%	61%	85%	87%	83%	68%	100%	81%	77%	97%	94%	90%	94%	100%
Accommodation & Food Services	81%	86%	92%	87%	92%	83%	81%	91%	85%	71%	92%	97%	94%	92%	92%	81%	94%	97%
Other Services	80%	88%	90%	84%	93%	68%	83%	88%	85%	73%	89%	90%	85%	90%	93%	84%	90%	95%
Public Administration	80%	93%	95%	89%	95%	72%	82%	79%	77%	70%	90%	88%	93%	98%	92%	74%	83%	95%



APPENDIX 5 – NAICS Code by KPI Satisfaction with employee’s overall college preparation (S98-W01)

Chart 3 KPI Question 74 “How would you rate your satisfaction with this employee’s overall college preparation for the type of work he/she was doing?”



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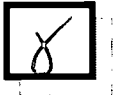


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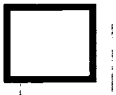


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