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Highlights

The 2009 Apprenticeship Student Outcomes (APPSO) Survey was conducted with former apprenticeship students who completed the final year of their apprenticeship training in a B.C. post secondary institution between July 1, 2007 and June 30, 2008. In February and March of 2009, 2,099 former students from 27 institutions (14 public and 13 private) participated in survey telephone interviews—the following are highlights from the survey findings:

Former apprenticeship students

- 2,099 students completed the survey; 82 percent said they received their Trades Qualification (TQ) or Inter Provincial (IP) Certification by the time of the survey
- 96 percent of the respondents were male and the median age was 28 years
- 34 percent of respondents had taken foundation industry or other pre apprenticeship training before their apprenticeships; of those students, 84 percent took their prior training in the same field as their apprenticeship program
- 8 percent had been in a high school apprenticeship program, and 70 percent of those students received credit towards their in school apprenticeship training

In school experiences

- 19 percent of respondents began their in school training above Level 1
- 34 percent of those who took previous pre apprenticeship training began their apprenticeship above Level 1
- 80 percent said their training did *very well* or *well* in helping them develop the skill to learn on their own
- 87 percent rated the helpfulness of their instructors as *very good* or *good*
- 73 percent said their in school training was *very good* or *good* at covering the topics relevant to their field
- 93 percent said they were *very satisfied* or *satisfied* with their in school training
- 90 percent said the knowledge and skills they gained from in school training were useful to them in preparing to write the TQ or IP exams
- 61 percent of respondents said the length of their in school training was *about right*

Workplace

- 78 percent rated the skills taught on the job as *very good* or *good*
- 91 percent said their in school training was *very related* or *somewhat related* to their workplace experience
- 91 percent said they were *very satisfied* or *satisfied* with their overall workplace training experience

Employment

- 89 percent of respondents were employed at the time of the survey
- 97 percent were in the labour force: employed or looking for work
- 7.8 percent of respondents who were in the labour force were unemployed at the time of the survey
- 77 percent of employed respondents worked with their current employer for at least one apprenticeship placement
- 95 percent said their job was *very related* or *somewhat related* to their training
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Former Apprenticeship Students

The 2,099 former students who were interviewed as part of the 2009 Apprenticeship Student Outcomes Survey had completed training in **23** different apprenticeship program areas. They were all asked to report previous education, including any other trades training they had taken and any credentials they had achieved before the apprenticeship program they recently completed. They were also asked about their Aboriginal status and if they had learned English as a second language. Information on age and gender came from administrative records.

The typical B.C. apprenticeship student in 2009 was a male about 28 years old who was enrolled in a Red Seal industry training program. He completed high school but probably didn't take a high school apprenticeship program, and he had probably taken some previous post secondary education before enrolling in his apprenticeship program.

More than likely, he started his apprenticeship training at Level 1, although if he had taken foundation industry or other pre apprenticeship training his chances of starting at a higher level were improved. If he had taken pre apprenticeship training it was most likely in the same field as his apprenticeship program.

The typical apprenticeship student in 2009 went on to receive his TQ or IP certification. At the time of the survey, he was working at a job related to his apprenticeship training, most likely at a workplace where he did an apprenticeship placement, and was earning about \$29 per hour.

Who were former apprenticeship students?

Despite increases in the number of students eligible for the survey in recent years, the characteristics of survey respondents have remained stable over time. The gender distribution, Aboriginal status, median age, and most common programs of males and females have remained virtually identical in each of the past five years.

For a detailed listing of the progrj

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The characteristics of survey respondents have been relatively stable

Characteristic	2009	2008	2007	2006	2005
Eligible for survey	3,568	2,906	2,453	2,414	2,342
Respondents	2,099	1,680	1,414	1,463	1,156
Response rate	59%	58%	58%	61%	49%
% Male	96%	96%	96%	97%	96%
% Female	4%	4%	4%	3%	4%
Most common program (Males)	Electrician	Electrician	Electrician	Electrician	Automotive Mechanics
Most common program (Females)	Culinary Arts	Culinary Arts	Culinary Arts	Culinary Arts	Culinary Arts
% Aboriginal	4%	4%	4%	5%	4%
Median age*	28	28	29	29	29
Age range*	18 60	19 60	19 61	19 59	17 59

*Age is age at time of survey

Former students ranged in age from 18 to 60 years and had a median age of 28 years. At the time of the survey, more than half of the respondents were less than 30

Top 3 Programs – Females (n=86)	Top 3 Programs – Males (n=1,898)
Culinary Arts (35% of female respondents)	Electrician (19% of male respondents)
Electrician (16%)	Carpentry (13%)
Autobody/Collision & Repair (10%)	Plumbing (10%)

As in previous years, about 4 percent of respondents (n=88) identified themselves as Aboriginal, and their most popular programs were: Electrician (16 percent), Carpentry (14 percent), and Steel Fabrication & Welding (13 percent).

In this report, trades programs are grouped into program areas according to Classification of Instructional (CIP) coding. To see which programs are included in each program area, refer to [Appendix C: Apprenticeship Program Areas and Institutions' Programs](#). Program areas are considered either large (20 or more respondents) or small (< 20 respondents). Small program areas are rolled up into an "Other" category. Almost all of the former apprenticeship students surveyed were enrolled in large program areas (95 percent); only five percent were enrolled in small program areas.

Small apprenticeship program areas (<20 respondents)

Apprenticeship Program Area	Respondents	% of Total Respondents
Horticulture & Landscaping	19	0.9%
Marine & Power Sport	19	0.9%

Respondents from participating public institutions

Public Institutions	Respondents	% of Total Respondents
British Columbia Institute of Technology	680	32%
Camosun College	119	6%
College of New Caledonia	124	6%
College of the Rockies	36	2%
Kwantlen Polytechnic		

Apprenticeship programs included in 2009

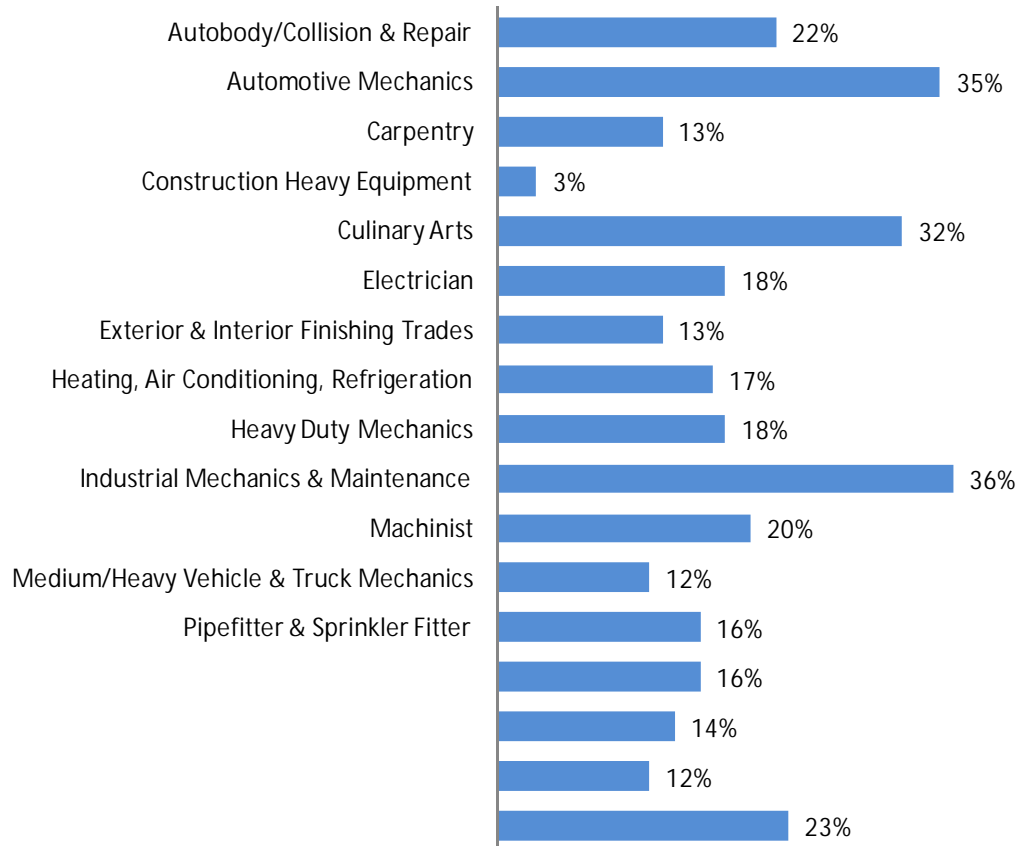
The results varied by program; the percentages of respondents from small trades programs¹ who received certification varied from 100 to 47 percent. From larger programs, the percentage of those who received certification ranged from a high of 98 percent of Medium/Heavy Vehicle & Truck Mechanics to a low of 59 percent of respondents from Exterior & Interior Finishing Trades (see [Appendix E: Qualification or Certification by Trade – 2009 and 2008](#)).

Students who did not receive their qualification or certification were asked to provide the reason why not. More than a third (38 percent) of those who answered said they had insufficient work hours to receive their qualification or certification. Just over one quarter (28 percent) said they were unsuccessful on their exam, and 12 percent had not yet written their exam. The remainder of those who did not receive their qualification or certification were waiting for their employer to sign off (8 percent) or still waiting for their certification (7 percent), or they provided some other reason (8 percent).

¹ Small programs are those with fewer than 20 respondents.



The proportion of students who started above Level 1* varied significantly by program area



*Excludes responses that could not be coded into Levels 1-5

Previous education background also had an impact on starting level. Students who had not completed high school were less likely to start above Level 1 (11 percent), compared with students who had completed high school (20 percent). However, compared with those who had not taken a high school apprenticeship program, those who had taken a high school program were not significantly more likely to start above Level 1, even if they had received technical credit for their high school

there were no significant differences based on the type of previous credential (if

How did students rate the quality of their in school training?

Former students were asked to rate certain aspects of their in school training using a 5 point scale: *very good*, *good*, *adequate*, *poor*, or *very poor*. They were instructed to identify any items they thought did not apply to their studies. Respondents gave particularly high ratings to their program instructors—quality of instruction, helpfulness, and availability of instructors were rated positively by more than eighty percent of respondents. Students also rated the variety and fairness of tests, papers, or other assigned work quite favourably. Although most items received very few *not applicable* responses, library materials and computers and software were only applicable to about half of all respondents.

Students rated their instructors very favourably

Aspect of Training	Very good or good*	Not applicable
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Respondents' ratings of the quality of their training varied by program area

Apprenticeship Program Area	Amount of practical experience*	Textbooks & learning materials*	Quality of tools & equipment*
Autobody/Collision & Repair	78%	77%	89%
Automotive Mechanics	77%	72%	77%
Carpentry	76%	61%	88%
Construction Heavy Equipment	69%		

Almost the same number (19 percent) suggested that the length of the in school training should be increased.

The course could be a bit longer. It's a lot of information thrown at a student in the five or six weeks that we are there.

Make it eight weeks instead of six weeks.

Other common suggestions included: revising certification exams, ensuring better preparation for certification exams, improving program organization, and improving the quality of teaching.

Remove unnecessary information from the IP examination as it is useless.

There should be more preparation for the certification exam.

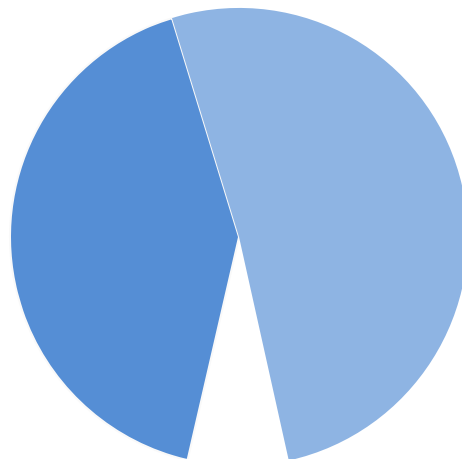
The program could have better preparation and be more organized, as it is too disorganized.

More experienced instructors.

How satisfied were former students with their in school training?

Almost all respondents (93 percent) said they were *very satisfied* or *satisfied* with their in school training. There has not been a significant change in overall satisfaction with in school training since this survey began in 2005. Although overall satisfaction with in school training has not varied over time, it does vary across program areas. [Appendix H: 2009 Respondents' Satisfaction Ratings, by Apprenticeship Program Area](#), provides the most recent results by program area.

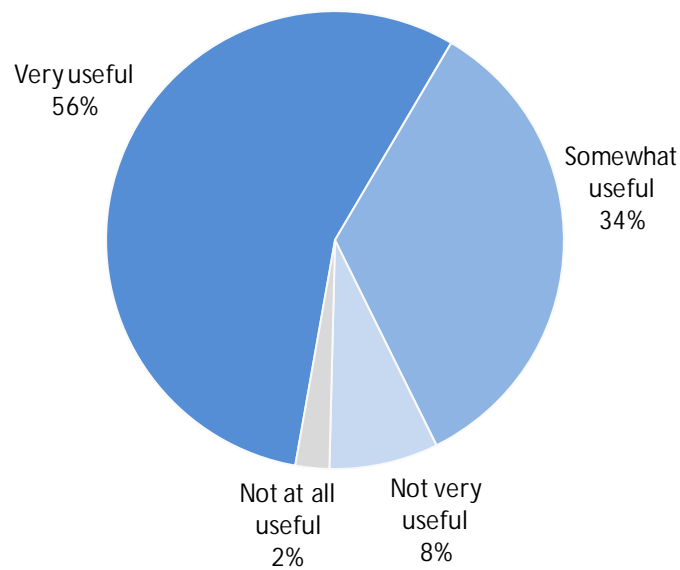
Almost all respondents were satisfied with their in school training



How useful was in school training when preparing for certification exams?

Nine out of ten respondents agreed that the knowledge and skills they gained from in school training were *very useful* or *somewhat useful* to them in preparing to write the TQ or IP certification examination. Among large programs, this proportion ranged from 77 percent (Exterior & Interior Finishing Trades) to a high of 100 percent (Precision Metal Working). Among respondents from small programs, 98 percent found the knowledge and skills they gained in school useful in preparing them to write their certification exams.

Nine out of ten respondents found their in school training useful in preparing them to write the TQ or IP certification exam



Ratings of *appropriate variety of duties* were consistently high across programs

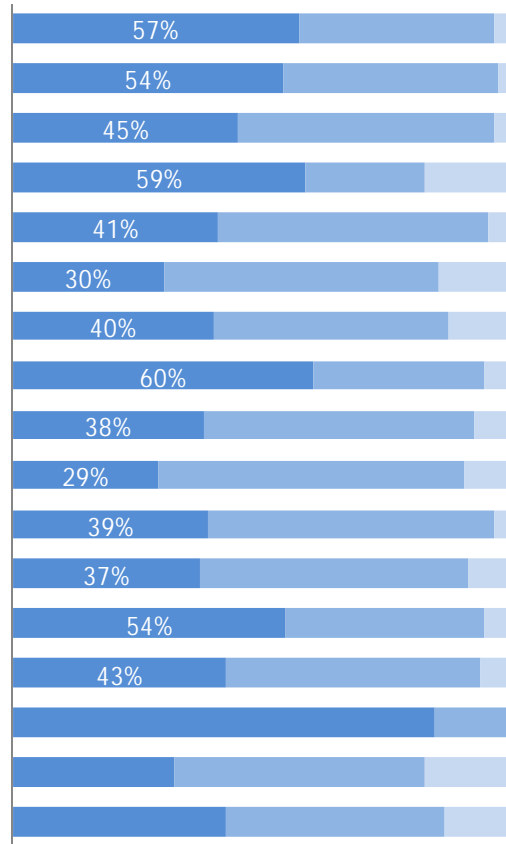
Apprenticeship Program Area	Appropriate variety of duties*	Opportunity to experience all aspects of trade*
Autobody/Collision & Repair	84%	88%
Automotive Mechanics	84%	76%
Carpentry	85%	70%
Construction Heavy Equipment	81%	73%
Culinary Arts	73%	63%
Electrician	84%	68%
Exterior & Interior Finishing Trades	86%	78%
Heating, Air Conditioning, Refrigeration	79%	69%
Heavy Duty Mechanics	74%	68%
Industrial Mechanics & Maintenance	73%	63%
Machinist	70%	59%
Medium/Heavy Vehicle & Truck Mechanics	77%	72%
Pipefitter & Sprinkler Fitter	86%	75%
Plumbing	81%	68%
Precision Metal Working	84%	77%
Steel Fabrication & Welding	84%	65%
Other, small programs (<20 respondents)	82%	79%
Total	82%	71%

*Percentage who said *very good* or *good*, calculated excluding those who said *not applicable*.

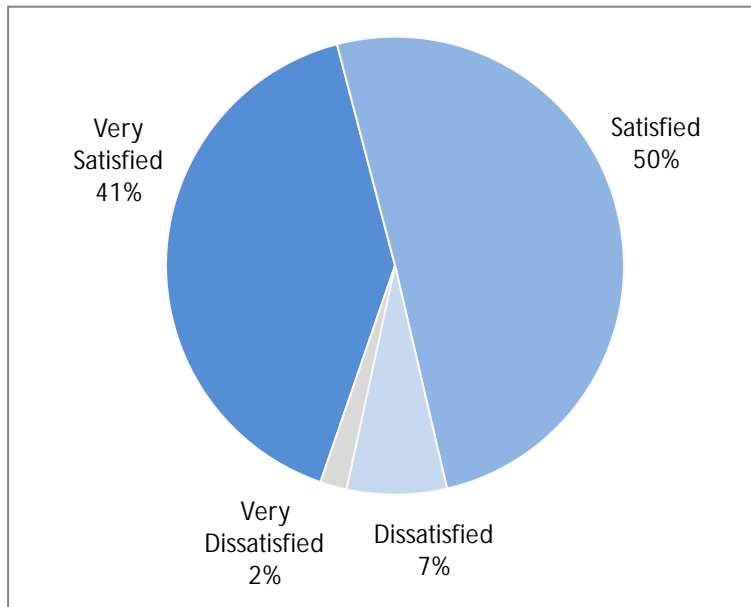
How related was the workplace experience to in school training?

Survey respondents were asked how related their in school training was to their workplace experience. The vast majority (91 percent) said it was *very related* or *somewhat related*. Although there was some variation in responses by program area, the proportion of respondents who said their in school training was *very related* or *somewhat related* to their workplace experience was consistently high across all programs, ranging from 82 percent (Construction Heavy Equipment and Steel Fabrication & Welding) to 100 percent (Precision Metal Working).

Large majorities of students found their workplace experience was related to their in school training



More than ninety percent of students were satisfied with their overall workplace training experience



Employment

Students were asked a number of questions about employment: some questions related to labour force participation, others were related to industry and occupation. Respondents who were employed were also asked about their hours of work, earnings, and the relation of their current employment to their apprenticeship training.

How have labour market conditions in B.C. changed over the past year?

The employment outcomes of former apprentices surveyed in 2009 should be considered in the context of what has been happening in the overall B.C. economy over the past year.

In the latter half of 2008, British Columbia entered an economic slowdown, and labour market conditions began tightening. Between March 2008 and March 2009, there were 83,400 job losses in B.C.⁴ Many of these losses (34,000) were in the construction industry, where approximately half of all employed apprenticeship survey respondents have been working in recent years.

As a result of tightening labour market conditions, the employment rate (unadjusted) among B.C.'s population age 20 to 59 fell from 79.7 percent in March of 2008 to 75.9 percent in March of 2009. The fall in the employment rate for the population age 20 to 59 was paralleled by a rise in their unemployment rate, from 3.9 percent in March of 2008, to 7.2 percent in March of 2009.⁵

What

training was 90 percent or higher in all large programs, and was 96 percent in small programs.

How useful were knowledge and skills gained for job performance?

Respondents who were employed at the time of the survey were asked how useful the knowledge and skills they gained in their program have been in performing their job. Overall, 96 percent of employed respondents said their training was *very useful* or *somewhat useful* in performing their job, although responses did vary somewhat by program area. For detailed results by program area, see [Appendix I: Usefulness of In School Training when Performing Job](#).

What occupations did former apprenticeship students have?

As in previous years, a large majority—91 percent—of those employed reported

from a low of \$17 (Chefs & Cooks, Butchers & Bakers), to a high of \$34 (Technical Occupations in Electronics & Electrical Engineering).

Hourly wage of most common occupations, 2009

Occupation*	Respondents	Median Hourly Wage
Motor Vehicle Mechanics	285	\$30

Median hourly wage rates

availability of instructors, and quality of instruction. Students also found the variety and fairness of tests, papers, and other assigned work to be quite good.

In terms of program content, most students found their courses covered the standards and topics relevant to their field, but they were less likely to say that their training was up to date. Again, responses varied considerably by program area.

Overall, 93 percent of students were satisfied with their training, and nine out of ten found that the knowledge and skills that they gained were useful in preparing them to write their certification exams.

Workplace training

Former apprentices gave high ratings to several aspects of their workplace training. Respondents gave particularly high ratings to an appropriate variety of duties, exposure to a variety of equipment, and skills taught on the job. Ratings of opportunity to experience all aspects of the trade and quality of teaching or mentoring provided were not as high, but ranged considerably by program.

The vast majority of students said their in school training was related to their workplace experience, and this figure was high in all program areas. Overall, 91 percent of former apprentices were satisfied with their overall workplace training experience.

Labour force participation

At the time of the survey, almost all former apprentices were participating in the labour market (either working or looking for work). In March 2009, the unemployment rate among former students surveyed was 7.8 percent, although this figure varied considerably by program area. The unemployment rate among former apprentices was higher than in 2008 (2.6 percent), but there were substantial job losses in B.C. between March 2008 and March 2009. Many of these job losses occurred in the Construction industry, where approximately half of all employed apprenticeship survey respondents have been working in recent years.

Almost all respondents who were employed were working full time, in permanent positions. Approximately three quarters of former apprenticeship students were working for an employer with whom they did a previous placement.

Former apprenticeship students were very likely to be working in occupations related to their training and almost all found their training useful in performing their job. More than ninety percent of former apprentices were working in trades, transport, and equipment operators and related occupations at the time of the survey. Despite the fact that B.C.'s labour market conditions slowed considerably

Appendices

Appendix A: Apprenticeship Survey Methodology

Apprenticeship Survey Project

The Apprenticeship Student Outcomes (APPSO) Survey project is conducted with funding from the Ministry of Advanced Education and Labour Market Development (ALMD), the British Columbia Industry Training Authority (ITA), and participating British Columbia post secondary institutions. The British Columbia Outcomes Working Group (OWG) oversees all aspects of the project, from data collection to the reporting of survey results. The OWG is a longstanding partnership among ALMD, participating post secondary institutions, and system wide organizations, such as the Senior Academic Administrators' Forum, the Senior Educational Services Administrators' Forum, the BC Registrars' Association, and the BC Council on Admissions and Transfer.

Apprenticeship Survey Committee

The steering committee for this apprenticeship survey project, made up of representatives from B.C.'s public apprenticeship training institutions, ALMD, and the ITA, is a subcommittee of the BC OWG. The Apprenticeship committee has responsibility for oversight of the survey and the resulting publications.

The apprenticeship survey project uses the methodology developed for the Diploma, Associate Degree, and Certificate Student Outcomes (DACSO) Survey.¹⁰ The Apprenticeship committee developed the survey instrument, which uses many of the same questions as the DACSO survey questionnaire. In particular, the apprenticeship questionnaire includes the questions designed for performance measures used by ALMD and the institutions.

Use of data from the Apprenticeship Survey

Data from the apprenticeship student survey are currently used by ALMD and ITA for policy development and to monitor the effectiveness of the post secondary system. Participating B.C. post secondary institutions use information from the annual survey for program and curriculum reviews, for marketing and de-

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Cohort

The survey cohort included all apprenticeship students who *completed the final year of their apprenticeship programs* at a participating B.C. post secondary institution. The following criteria were used to define the survey cohort: all apprenticeship students who completed the final year of their apprenticeship programs (i.e., 3 , 4 , or 5 year apprentice programs) between July 1, 2007 and June 30, 2008 at a B.C. public post secondary institution or at a B.C. private training institution.

Since apprenticeship students may take different parts of their apprenticeship programs at different institutions, the *last* institution that the student attended was considered the institution of record and that institution was asked to submit the names in their cohort file. The cohort extract included elements such as name, address, telephone number, program description, length of apprenticeship, gender, birth date, program start date, and completion date.

There were 27 B.C. post secondary institutions that participated in this project—14 of them were public. These public institutions provided 78 percent of the survey respondents. The cohort of students from private institutions was provided by the ITA. The following tables list the participating institutions, the number of former apprentices from each who were eligible for the survey, and the number who responded to the survey.

Participating public institutions

Public Institutions	Eligible for Survey	Respondents	Response Rate
British Columbia Institute of Technology	1,122	680	61%
Camosun College	216	119	55%
College of New Caledonia	169	124	73%
College of the Rockies	60	36	60%
Kwantlen Polytechnic University	111	70	63%
North Island College	121	57	47%
Northern Lights College	47	26	55%
Northwest Community College	22	14	64%
Okanagan College	236	134	57%
Selkirk College	19	13	68%
Thompson Rivers University	154	97	63%
University of the Fraser Valley	57	36	63%
Vancouver Community College	346	170	49%
Vancouver Island			

Participating private institutions

Private Institutions	Eligible for Survey	Respondents	Response Rate
B.C. Floor Covering Joint Conference Society	15	8	53%
B.C. Wall & Ceiling Association Surrey	42	25	60%
D.C. 38 Joint Trade Society	33	12	36%
Electrical Industry Training Institute	46	19	41%
Funeral Service Association of B.C.	15	6	40%
Joint Apprentice Refrigeration Trade School	60	41	68%
Operating Engineers Training Centre	45	32	71%
Pacific Vocational College	329	188	57%
Piping Industry Trade School	67	41	61%
Quadrant Marine Institute	8	6	75%
R.C.A.B.C. Roofing Institute	48	28	58%
Sheet Metal Workers Training Institute	37	23	62%
Trowel Trades Training Association	38	28	74%
Private Institutions Total	783	457	58%

The cohort extracts were assembled and reviewed for completeness and then passed to the survey contractor for data collection.

Data collection

Overall call results, 2009 Apprenticeship Student Outcomes Survey

Call Result	N	Percent of Cohort
Completion	2,099	58.8%
Incomplete Survey	37	1.0%
Refused/ Declined	313	8.8%
Specific Appointment	8	0.2%
Soft Appointment	55	1.5%
Left Message Call Again	271	7.6%
Busy	2	0.1%
No Answer	12	0.3%

Limitations

The former students who were interviewed—59 percent of those eligible for surveying—were those from the cohort who could be located and who agreed to be surveyed. They may not be representative of all former students.

Some of the 23 apprenticeship program areas had relatively small numbers; for these programs, the numbers were too small to permit comparative or in depth analysis.

Percentages

For consistency and ease of presentation, most percentages in the report text, tables, and charts have been rounded and may not always add to 100.

Unless otherwise noted, each percentage is based on the number of students who gave a valid response to the question—those who refused the question, or said *don't know*, were not included in the calculation.

Appendix B: 2009 Institution Names and Codes

Institution Name	Code
B.C. Floor Covering Joint Conference Society	BCFC
B.C. Wall & Ceiling Association Surrey	BCWCA
British Columbia Institute of Technology	BCIT
Camosun College	CAM
College of New Caledonia	CNC
College of the Rockies	COTR
Electrical Industry Training Institute	EITI
Funeral Service Association of B.C.	

Appendix C: Apprenticeship Program Areas and Institutions' Programs

Apprenticeship Program Area	Institution's Program Name	Institution	Respondents

Apprenticeship Program Area	Institution's Program Name	Institution	Respondents
Electrician			
	Electrical Apprentice	BCIT	143
	Electrical Apprentice IV	CNC	46
	Apprentice Electrician	OKN	43
	Electrical Apprentice	TRU	42
	Electrician Apprenticeship Training	CAM	30
	Electricity Apprentice	NIC	29
	Apprenticeship Year 4 Electrical	SEL	13
	Electricity Apprenticeship	FVAL	12
	Electrical Apprenticeship Year 4	COTR	7
	Electrician Apprenticeship Level 4	NLC	6
Exterior& Interior Finishing Trades			
	Joinery (Cabinetmaker) Apprentice	BCIT	34
	Roofing	RCABC	28
	Wall & Ceiling Installer Modular Program	BCWCA	25
	LXR Bricklayer	TTTA	14
	Cement Masonry	TTTA	8
	Floor Covering	BCFC	8
	Glazing Apprentice	BCIT	7
	Painting & Decorating	JTS	7
	Tilessetting	TTTA	6
	Glazier Modular Program	JTS	5
Heating, Air Conditioning, Refrigeration			
	Refrigeration	JARTS	41
	Refrigeration Apprentice	BCIT	11
	Heat/Frost Insulation Apprentice	BCIT	#
Heavy Duty Mechanics			
	Diesel Commercial Transport Mechanic Apprentice Level 4	VCC	23
	Heavy Duty Mechanics Apprentice	TRU	21
	Diesel Heavy Duty Mechanics Apprentice Level 4	VCC	18
	Heavy Duty Mechanics Apprentice	BCIT	14
	Heavy Duty Mechanics		

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Apprenticeship Program Area	Institution's Program Name	Institution	Respondents

Appendix D: Response Rates by Program

Apprenticeship Program Area	Eligible for Survey	Respondents	Response Rate
Airframe Mechanics & Aircraft Maintenance	18	12	67%
Autobody/Collision & Repair	144	79	55%
Automotive Mechanics	222	141	64%
Carpentry	439	247	56%
Construction Heavy Equipment	61	36	59%
Culinary Arts	172		

Appendix F: Common Occupations by Selected Apprenticeship Trade Program Areas

Apprenticeship Program Area	Respondents	Percent in Occupation*
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Apprenticeship Program Area	National Occupation Code – 3 Digit Level	Respondents	Percent in Occupation*
Plumbing			
	Plumbers, Pipefitters and Gas Fitters	170	83%
	Contractors & Supervisors, Trades & Related	26	13%
Precision Metal Working			
	Printing Press operators, Commercial Divers & Other Trades & Related Occupations, n.e.c.	29	97%
Steel Fabrication & Welding			
	Metal Forming, Shaping & Erecting Occupations	95	81%
	Contractors & Supervisors, Trades & Related	16	14%

NOCs with fewer than 10 students are not shown, therefore categories do not add to 100%

Appendix G: 2009 Ratings

(ii) How did respondents rate aspects of in school training?

Apprenticeship Program Area	Quality of Instruction	Organization of Program	Quality of Tools & Equipment
Airframe Mechanics & Aircraft Maintenance	92%	75%	82%
Autobody/Collision & Repair	97%	90%	89%
Automotive Mechanics	92%	87%	77%
Carpentry	81%	74%	88%
Construction Heavy Equipment	92%	86%	97%
Culinary Arts	92%	79%	89%
Electrician	76%	75%	63%
Exterior & Interior Finishing Trades	77%	68%	87%
Heating, Air Conditioning, Refrigeration	85%	81%	74%
Heavy Duty Mechanics	81%	73%	65%
Horticulture & Landscaping	89%	53%	100%
Industrial Electronics	78%	56%	56%
[REDACTED]	74%	59%	56%
Lineworker	73%	33%	36%
Machinist	85%	77%	55%
Marine & Power			

(iii) How did respondents rate

(ii) How satisfied were former students with their overall workplace training experience?

Apprenticeship Program Area	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Valid responses
Airframe Mechanics & Aircraft Maintenance	0%	75%	0%	25%	12
Autobody/Collision & Repair	28%	67%	1%	4%	78
Automotive Mechanics	37%	54%	8%	1%	141
Carpentry	39%	56%	4%	2%	245
Construction Heavy Equipment	47%	41%	6%	6%	32
Culinary Arts	31%	58%	11%	0%	74
Electrician	42%	50%	7%	0%	371
Exterior & Interior Finishing Trades	51%	42%	5%	2%	142
Heating, Air Conditioning, Refrigeration	42%	48%			

Appendix I: Usefulness of In School Training when Performing Job

How useful was training when performing job?

Apprenticeship Program Area	Very Useful	Somewhat Useful	Not Very Useful	Not At All Useful	Valid responses
Airframe Mechanics & Aircraft Maintenance	67%	33%	0%	0%	12
Autobody/Collision & Repair	71%	27%	1%	1%	75
Automotive Mechanics	67%	33%	0%	0%	129
Carpentry	65%	33%	2%	0%	209
Construction Heavy Equipment	74%	22%	4%	0%	23
Culinary Arts	53%	43%	3%	1%	70
Electrician	49%	46%	4%	0%	320
Exterior & Interior Finishing Trades	51%	44%	2%	3%	126
Heating, Air Conditioning, Refrigeration	63%	35%	2%	0%	51
Heavy Duty Mechanics	57%	38%	4%	1%	105
Horticulture & Landscaping	86%	14%	0%	0%	14
Industrial Electronics	78%	22%	0%	0%	18
Industrial Mechanics & Maintenance	46%	50%	3%	1%	72
Lineworker	60%	40%	0%	0%	15
Machinist	58%	42%	0%	0%	85
Marine & Power Sport	31%	56%	6%	6%	16
Medium/Heavy Vehicle & Truck Mechanics	60%	38%	0%	3%	40
Mortuary Science & Embalming	83%	#	#	#	6
Parts & Warehousing			36%	0%	
Pipefitter & Sprinkler Fitter	67%	31%	0%	2%	104

