

# Alberta Advanced Education

Alberta Graduate Outcomes Survey  
Class of 2013/2014  
Quantitative Fieldwork and Analysis  
Employment Success Survey Technical Report

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## 1. Executive Summary

### 1.1 Background and Objectives

In December 2015, Leger Marketing Alberta Inc. (Leger) was contracted by Alberta Advanced Education (AE) to conduct a pilot project for the Employment Success Survey (ESS), a new survey conducted with employers and supervisors of 2013/14 Alberta graduates. This quantitative fieldwork summary report presents fieldwork results, including the number of surveys completed, length of time required by employers to complete the surveys, and identification of any problems or issues encountered in collecting and analyzing the data.

A total of 126 surveys were completed (13.0% gross response rate, based on the total completes/total population of employers invited to participate; an 8.8% referral rate was achieved).<sup>1</sup>

### 1.2 Methodology

Leger conducted all interviews online using Conformat Computer Aided Web Interviewing (CAWI) software. Conformat is capable of providing real time data collection updates, dispositions and survey results for web interviews.

The pre-test began on March 2<sup>nd</sup>, 2016 and continued until May 11<sup>th</sup>, 2016. The ESS was conducted in conjunction with the Graduate Outcomes Survey (GOS), meaning the employer sample was obtained from graduates of the publicly-funded post-secondary institutions who were willing to provide their employers' contact information for inclusion in the ESS study.

A total of 30 interviews (a 6.3% completion rate) were completed for the pre-test, resulting from 475 referrals (a 7.5% referral rate).

### 1.3 Questionnaire

The questionnaire was designed specifically for Computer Aided Web Interviewing (CAWI).

Prior to pre-testing the GOS and ESS, the initial plan was to ask graduates to forward ESS invitations to their supervisors. This process resulted in a very low response rate from graduates' supervisors. After the pre-test was completed, the methodology for gathering employer information for the ESS was changed to asking the graduate to provide Leger with their supervisor's name, title, company and email address. This revised methodology allowed Leger to control the sending of the ESS invitations and reminders, and avoid duplication of invitations and completions.<sup>2</sup> The GOS script pertaining to the ESS portion of the study, as well as the ESS invitation email, were adjusted accordingly.

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<sup>1</sup> A detailed explanation can be found in Section 6.2

<sup>2</sup> Detailed results of this revised methodology can be found in Section 6.2

#### **1.4 Questionnaire Specifications**

A total of 126 interviews were completed for the ESS, after being in field from April 5<sup>th</sup> to September 19<sup>th</sup>, 2016 (the last interview was completed on July 18, 2016). The average questionnaire length was 8.3 minutes.

#### **1.5 Summary of Outcomes**

A total of 126 web interviews were completed by supervisors who were referred from 967 graduates who participated in the GOS and agreed to provide their employers' contact information. Only graduates from Alberta's publicly-funded post-secondary institutions were asked to refer their supervisors for the ESS.

## 2. Background and Introduction

Leger presented their final field report regarding the Employment Success Survey (ESS) to Alberta Advanced Education (AE).

AE seeks to promote and foster lifelong learning in Alberta. Since 1998, the Government of Alberta and publicly-funded post-secondary institutions have collaborated to conduct a biennial survey of graduates to assess outcomes such as graduate satisfaction, achievement of personal goals, employment status and compensation. The ongoing collection of this important research reflects AE's continued commitment to ensuring that the post-secondary system promotes Albertans' success through personal development and enhanced employability.

AE contracted Leger Marketing Alberta Inc. in December 2015 to conduct the Graduate Outcomes Survey (GOS) with 2013/14 graduates of parchment programs from Alberta's universities, private university colleges, colleges and technical institutes. The findings from this study will help inform AE and institutional planning, and are used in results reporting.

A newly introduced component in the surveys for the 2013/14 graduates is the pilot version of the ESS with graduates' supervisors (employers). The ESS survey population consists of all the 2013/14 graduates from Alberta's publicly-funded post-secondary institutions' credit parchment programs.

The ESS's purpose is to acquire information about how well the post-secondary institutions prepare graduates' skills and knowledge, and to what extent their skills and knowledge match employers' (as represented by the recent graduates' direct supervisors) requirements and expectations.

AE provided a questionnaire for the newly introduced ESS. Based on this draft questionnaire, the content includes:

- ✓ Identifying the minimum educational requirements for the jobs currently held by graduates from Alberta's post-secondary institutions;
- ✓ Determining the importance of the graduates' fields of study to their jobs;
- ✓ Understanding the importance of certain skills and abilities to the type of work graduates perform in their employment, and exploring to what extent graduates have these skills and abilities;
- ✓ Ascertaining the degree to which employers and the post-secondary system are responsible for preparing and training graduates (from the employers' perspective);
- ✓ Assessing how well graduates are prepared for employment, and the degree to which work experience is required; and
- ✓ Describing the organizations that employ recent graduates, and differences in their opinions and experiences based on their size, private/public/not-for-profit sector, industry, and the number of graduates hired.

This ESS pilot was conducted as a census, requiring a reasonable effort to follow up with graduates on their supervisors' completion of the ESS, to ensure a suitably robust response.

A pilot pre-test was conducted in March 2016 as a means of testing and, as necessary, fine-tuning the survey methodology and questionnaire to be used for completing the study. Pre-tests provide early indications of data quality and potential survey issues so that data collection strategies can be adapted to ensure the research is effective in fully addressing the intended objectives.

### 3. Survey Methodology

The ESS was conducted with supervisors of graduates from Alberta's publicly-funded post-secondary institutions. The ESS pilot survey was conducted online only, and a census approach was used to maximize survey response.

The employer participants were obtained through referrals from the employed graduates participating in the GOS, therefore it was necessary to conduct the GOS and ESS surveys concurrently.

For the survey's pre-test, graduates were asked if they would forward a separate ESS invitation to their supervisor. Once a graduate agreed to forward the survey link to their employer, Leger collected the graduates' and their employers' emails (to help monitor and avoid duplicate records) and sent the ESS email invitation immediately to the graduate after the interviewer ended the call, or after the graduate ended the online survey. Having the ESS invitation immediately follow the completion of the GOS survey helped to avoid lag effect between the response to the GOS and the response to the ESS, in hopes of maximizing the ESS completion response rate.

After the pre-test's conclusion it was found that the ESS response was very low, which prompted Leger and AE to change the ESS's methodology. Following the pre-test, graduates were asked to provide their employers' name, title, company and email address, resulting in Leger receiving permission to send their employer the ESS email invitation with a link to access the online survey. This revised methodology provided Leger with the opportunity to monitor ESS completion and send reminders accordingly.

The number of employers in the ESS sample frame was expected to be less than GOS's sample, since not all graduates are employed. As well, it was anticipated that some graduates could work for the same employer and share the same supervisor. Furthermore, not all employers would necessarily agree to complete the study.

## **4. Questionnaire Preparation**

### **4.1 Questionnaire Length**

The average questionnaire length for the ESS is 8.3 minutes.

### **4.2 Questionnaire Content**

A questionnaire for the newly introduced ESS was provided by AE.

### **4.3 Questionnaire Versions**

The survey is conducted online, therefore, it only includes a Computer Aided Web Interviewing (CAWI) version.

### **4.4 DCaR Verification**

Leger utilized AE's DCaR software by sending simulation data files before the pre-test's launch to ensure that all skip paths and limits were properly programmed. This process proved very effective in verifying the survey programming and resulted in no major errors in the pre-test data when it was verified.

### **4.5 Questionnaire Programming**

Once the questionnaire was finalized and approved by AE, Leger programmed the survey for CAWI (web) using Conformat's Interviewer software. One programmer was assigned to complete the programming.

Once the survey's programming had been completed, it was thoroughly tested by the research team to ensure language, skip logic and consistency were accurate between each survey when compared to the approved questionnaires.

For the 2015 survey, AE developed their DCaR validation software, in which the programmed survey could be uploaded and validated, to ensure all skips were programmed correctly. This was the first year that Leger had experience with the DCaR program and found it very useful for verifying the survey's programming.

Leger performed data extracts on a weekly basis to allow for regular validation of the data using AE's DCaR validation software, and issues/errors that arose were dealt with as they occurred.



## 5. Pre-Test

### 5.1 Pre-Test Objectives

Prior to collecting data for the survey, Leger conducted a pre-test of the questionnaire with the goal of completing interviews with at least 25 employers.

Prior to conducting the pre-test, Leger generated a fixed-width simulation data file<sup>3</sup> based on the survey programming and verified the data structure through AE's DCaR validation program. Revisions to the programming were made as necessary to obtain an error free result.

Any issues that needed to be addressed in the survey instrument or validation were handled in a manner that allowed the project to progress with data being collected in a valid and accurate manner, and with proper functioning of DCaR validation.

### 5.2 Sample Frame

Leger released a sample of 907 graduate records for use in the GOS/ESS pre-test and completed the GOS pre-test with 124 graduates. The number of sample records utilized allowed for the completion of the required number and composition of interviews for the GOS. From this number of graduates, a total of three completes were collected during the ESS's pre-test.

### 5.3 Pre-test Timing

The pre-test was conducted between March 2<sup>nd</sup> and March 8<sup>th</sup>, 2016 for the GOS and until May 11<sup>th</sup>, 2016 for the ESS.

### 5.4 Data Collection

#### 5.4.1 Call Centre / Web

Leger conducted all the ESS interviews online using Confirmit Computer Aided Web Interviewing (CAWI) software. Confirmit is capable of providing real time data collection updates, dispositions and survey results for web interviews.

#### 5.4.2 Achievement of Targets

Given the low response to the ESS during the GOS pre-test, the ESS pre-test was extended past the data collection launch for GOS, until the targeted 25 ESS completes were achieved, which occurred on May 11<sup>th</sup>, 2016.

#### 5.4.3 Maximization of Response Rate

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<sup>3</sup> Definition of a fixed-width simulation data file: A file with the correct column labels and size to be compliant with the DCaR validation program.

Email reminders were sent to employers on a bi-weekly basis to maximize the ESS response rate. Efforts were also made to maximize the response rate for GOS, providing as many referrals of employers to the ESS as possible.

### **5.5 Questionnaire Changes after Pre-Test**

After the pre-test, minor revisions were made to the questionnaire and DCaR verification programming, ensuring the verification process ran more smoothly between Leger and AE's respective software.

The methodology for gathering employer information for ESS was changed to the graduates being asked to provide Leger with their supervisor's name, title, company and email address, allowing Leger to control when the ESS invitations and reminders were sent, and to monitor individual completes and avoid any possibilities of duplicate submissions. The GOS script pertaining to the ESS portion of the study and the ESS invitation email were adjusted accordingly.

## 6. Data Collection

Data collection was conducted between April 5<sup>th</sup> and September 19<sup>th</sup>, 2016, with the final interview being completed on July 18<sup>th</sup>, 2016.<sup>4</sup>

### 6.1 Call Centre / Web

Leger conducted all interviews from its Conformat CAWI software, allowing for online respondents to move back and forth between questions to revise answers. Online respondents could also stop filling out a questionnaire, save responses and resume filling it out at a later date. One of Conformat CAWI's key strengths is its functionality and flexibility across a full range of devices and platforms, from iPhones to tablets to PC desktops, which were used to respond to surveys. The survey adapts to the device and the screen size to provide the most effective and best looking survey. Conformat also provides a broad range of options in terms of how to present and layout questions in an online survey and the ways to respond (e.g., everything from check boxes and text fields to sliders and sorting).

### 6.2 Achievement of Targets

Only graduates who were employed and not self-employed were asked if they would be willing to forward the ESS link to their employers. Of these, 967 out of 10,952 qualified graduates who completed the GOS (8.8% referral rate) agreed to provide their employers' contact information, which led to 126 survey completions. This represents a completion rate of 13.0% based on the referrals gathered from graduates.

From March 2<sup>nd</sup> to April 7<sup>th</sup>, 2016, during the early stages of the pre-test, ESS achieved three completes. On April 7<sup>th</sup>, 2016 the methodology for ESS was changed to asking the graduates to submit their employers' contact information, giving Leger consent to contact employers directly via email to complete the ESS. By April 13<sup>th</sup>, 2016, the number of completes doubled to seven, and by May 11<sup>th</sup>, 2016, the ESS had 30 completes and the pre-test was complete having surpassed its target of 25 completes.

Results were categorized as 'complete' when the respondent successfully completed the survey and clicked the completion arrow provided at the end of the survey, or 'touched' when the respondent successfully completed the survey but did not click the final arrow to be recognized as a 'complete'. A 'touched' respondent is still recognized as a complete entry as long as the final question was answered.

### 6.3 Maximization of Response Rate

Bi-weekly web reminders were sent to employers in an effort to increase the online response rate. On May 30<sup>th</sup>, 2016, due to the increased communication from respondents (graduates only) to not receive any more emails, Leger decided to put a temporary pause on sending further reminders until June 20<sup>th</sup>, 2016 in hopes of yielding an increase in web completes by the end of June without an unreasonable inconvenience or annoyance to respondents.

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<sup>4</sup> The online link remained active until September 19<sup>th</sup>, 2016, however, no completes were attained after July 18<sup>th</sup>, 2016.

## 7. Data Cleaning/Analysis and Reporting

### 7.1 Data Cleaning

To ensure the survey was being completed correctly, Leger's data analysts examined each survey's results in detail after the first night's results were available. Upon completion of data collection, our data analysts and data processing department cleaned the data thoroughly, ensuring:

- ✓ Skip patterns were followed correctly;
- ✓ The data was complete, except where it was intentional and within client expectations; and
- ✓ Information was consistent and logical across questions, with no contradictions in the data.

Some of the data cleaning procedures were completed concurrently with data collection, with a thorough final check performed once all interviewing had been completed. Detailed checks were also made following the pilot test and initial interviews (e.g., first hundred completes) to ensure the survey was working effectively prior to the bulk of the data collection.

### 7.2 Final Data File

Clean, labeled and DCaR verified data files, in SPSS and CSV, have been prepared and delivered to AE to produce overall files for the combined surveys.

## 8. Survey Results

A total of 126 surveys were completed (13.0% gross response rate, based on total completes/total population of employers invited to participate; 8.8% referral rate).

**Figure 8.1.1: Summary of ESS Completed Interviews**

	Total
Total Complete	126
Total GOS Asked	10,952
From WEB	4,942
From TEL	6,010
Total GOS Referral	967
From WEB	271
From TEL	696
% of GOS Referring	8.8%
% of EMPLOYERS Completing	13.0%

## 9. Observations and Recommendations

The ESS questionnaire is a reasonable length at just over eight minutes (on average). Supervisors did not appear to have difficulty with the questionnaire, since Leger did not receive any negative feedback or any clarification questions from those responding.

Employer participation was low for both of the attempted referral approaches. The first approach was to have graduates forward invitations to their supervisors. The second approach was to collect supervisors' emails from the graduates and send invitations to the employers directly. Both of these approaches demonstrated limited ability to motivate graduates to make the referrals to their employers and motivate the employers to respond.

Challenges with the initial approach of having graduates forward the invitations to their supervisors are as follows:

- Graduates who agreed to forward the invitations to their supervisors did not necessarily follow through with this (there was no way to verify whether or not they forwarded the invitations to their supervisors),
- Graduates did not necessarily remind their supervisors to complete the survey, and
- Some graduates may have had the same supervisor; therefore, the size of the population of employers to survey was unknown.

Leger's second approach to collecting the supervisors' email addresses had the benefit of ensuring that all of the referred employers were sent the invitation and reminders to participate. It also identified supervisors of more than one graduate. However, response from the employers was still low.

Leger offers the following suggestions to increase the ESS response rate in the future:

- Obtaining mailing addresses and mailing letters to the employers to encourage them to participate in the study (a link to the online survey could be provided in the letter),
- Obtaining telephone numbers and following up with them and employers by phone, and
- Offering a telephone completion option to employers.

In our experience with collecting data from employers, we have found that telephone data collection can be more effective than online, at least in regards to making first contact. Making first contact by phone can give a study more legitimacy and result in more completed interviews at first contact, rather than having the invites potentially getting lost or being filtered out in an inbox.

Even if all of the above suggestions were implemented, the revised approach would still not increase the number of referrals of employers from graduates. Providing graduates with an incentive to provide the referrals could improve this process. Providing employers with an incentive could also motivate them to complete the survey.

## APPENDIX A: SURVEY INSTRUMENT – EMPLOYMENT

Employment Success Survey Instrument

### *Introduction (Online only)*

This survey is being sent to you on behalf of the Ministry of Advanced Education and \_\_\_\_\_ (name of institution). This is a survey of supervisors of recent post-secondary graduates. (The term recent post-secondary graduate is being used here to mean someone who has completed his or her post-secondary education in the past two years.) The purpose of the study is to provide the Ministry and \_\_\_\_\_ (name of institution) with information about how well its programs meet the needs of the employers, as well as ideas about how to improve its programs.

The questions in the survey are about your experiences supervising recent post-secondary graduates. The questions are general in nature so that you will be providing feedback regarding post-secondary preparation for employment, not the individual employee or employees you supervise. The entire survey should take about 7-12 minutes to complete.

In addition, we can send you a copy of the survey results once they are finalized so that you can see the results for your industry, sector and company size. If you are interested in this, please provide us with your email address.

**[Record email address, if applicable.]**

Your personal information is collected in accordance with the *Freedom of Information and Protection of Privacy Act* (“*FOIP Act*”) and will only be used and disclosed in accordance with that Act. Your responses will be shared with participating post-secondary institutions upon request. When survey results are published, only summary or aggregated information will be provided. If you have any questions about the study or the *FOIP Act* please contact (add contact info).

**BASE QUESTIONS**

1. Do you currently supervise one or more recent post-secondary graduates? **EB100**  
 1. Yes → **GO TO Q3**  
 2. No
2. How long has it been since you supervised a recent post-secondary graduate? **EB101**  
 1. Less than one year → **GO TO Q3**  
 2. One to three years → **GO TO Q3**  
 3. Over three years  
 88. Don't know  
 99. No response

**GO TO END SURVEY**

3. How many recent post-secondary graduates do you supervise? **EB102**  
**[Record number]**  
 88. Don't know  
 99. No response
4. For how many months have you been supervising a recent post-secondary graduate or graduates? **EB103**  
**[Record number]**  
 88. Don't know  
 99. No response

**JOBS**

Thinking of the recent post-secondary graduates you supervise and the minimum credentials required for their current jobs, how important is the field of study related to these credentials, for the jobs? For example, if a degree is required, does it need to be in commerce, education, nursing, or another specialized field? (1-4 scale) Job that requires...

		not at all important		very important		NA	DK	NR	
5.	High school completion	1	2	3	4	87	88	99	<b>EJ101</b>
6.	College certificate	1	2	3	4	87	88	99	<b>EJ102</b>
7.	College diploma	1	2	3	4	87	88	99	<b>EJ103</b>
8.	Undergraduate degree	1	2	3	4	87	88	99	<b>EJ104</b>
9.	Graduate degree	1	2	3	4	87	88	99	<b>EJ105</b>
10.	Other (describe) <u>          [EJ106 O]          </u>	1	2	3	4	87	88	99	<b>EJ106</b>



## SKILLS & ABILITIES

There are certain skills and abilities that may be required for the type of work that post-secondary graduates that you supervise perform. Rate the following skills and abilities according to how important they are in performing the type of work you oversee.

Please use a four-point scale where 1 equals "not at all important", 2 equals "not very important", 3 equals "important" and 4 equals "very important"

		not at all important		very important		DK	NR	
		1	2	3	4	88	99	
11.	Job-specific knowledge gained during post-secondary education	1	2	3	4	88	99	<b>SA100</b>
12.	Verbal communication skills	1	2	3	4	88	99	<b>SA107</b>
13.	Specialized tool, machine, equipment or software skills	1	2	3	4	88	99	<b>SA125</b>
14.	Research skills	1	2	3	4	88	99	<b>SA118</b>
15.	Intercultural communication skills	1	2	3	4	88	99	<b>SA116</b>
16.	Ability to learn independently	1	2	3	4	88	99	<b>SA110</b>
17.	Written communication skills	1	2	3	4	88	99	<b>SA108</b>
18.	Critical thinking skills	1	2	3	4	88	99	<b>SA124</b>
19.	Ability to work well with others	1	2	3	4	88	99	<b>SA122</b>
20.	Ability to take initiative	1	2	3	4	88	99	<b>SA112</b>
21.	Effective time management skills	1	2	3	4	88	99	<b>SA123</b>
22.	Ability to work independently	1	2	3	4	88	99	<b>SA121</b>
23.	Problem-solving skills	1	2	3	4	88	99	<b>SA106</b>
24.	Work-related computer skills	1	2	3	4	88	99	<b>SA117</b>
25.	Mathematical skills	1	2	3	4	88	99	<b>SA119</b>
26.	Other (please specify) <u>          [SA126_O]          </u>	1	2	3	4	88	99	<b>SA126</b>

[If supervisor responds with a 1, 2, DK, or NR, the skill should be skipped in questions 29-44.]

27. In your opinion, to what extent is the post-secondary system responsible for producing job-ready graduates, vs. the extent to which employers are responsible for on-the-job specific training? **EB106**
1. Entirely a post-secondary system responsibility
  2. Mainly a post-secondary system responsibility
  3. Shared equally between employers and post-secondary system
  4. Mainly an employer responsibility
  5. Entirely an employer responsibility
  88. Don't know
  99. No response
28. For what proportion of recent graduate employees is on the job training provided in your organization? **EB107**
1. Provided for 90% or more of employees
  2. Provided for 50% to 90% of employees
  3. Provided for less than 50% of employees
  4. Do not provide on the job training
  88. Don't know
  99. No response

### PREPAREDNESS

Now please indicate how prepared the post-secondary graduates you supervise are for the skills you just assessed. If you supervise more than one graduate, make an overall assessment based on your experience.

Please use a four-point scale where 1 equals "not at all prepared", 2 equals "not very prepared", 3 equals "prepared" and 4 equals "very well prepared."

**[If supervisor responds with a 1, 2, DK, or NR in the Skills & Abilities section, the skill should be skipped.]**

		not at all prepared		very well prepared		DK	NR	
		1	2	3	4			
29.	Job-specific knowledge gained during post-secondary education.	1	2	3	4	88	99	<b>EP100</b>
30.	Verbal communication skills	1	2	3	4	88	99	<b>EP107</b>
31.	Specialized tool, machine, equipment or software skills	1	2	3	4	88	99	<b>EP125</b>
32.	Research skills	1	2	3	4	88	99	<b>EP118</b>
33.	Intercultural communication skills	1	2	3	4	88	99	<b>EP116</b>
34.	Ability to learn independently	1	2	3	4	88	99	<b>EP110</b>
35.	Written communication skills	1	2	3	4	88	99	<b>EP108</b>
36.	Critical thinking skills	1	2	3	4	88	99	<b>EP124</b>
37.	Ability to work well with others	1	2	3	4	88	99	<b>EP122</b>
38.	Ability to take initiative	1	2	3	4	88	99	<b>EP112</b>
39.	Effective time management skills	1	2	3	4	88	99	<b>EP123</b>
40.	Ability to work independently	1	2	3	4	88	99	<b>EP121</b>
41.	Problem-solving skills	1	2	3	4	88	99	<b>EP106</b>
42.	Work-related computer skills	1	2	3	4	88	99	<b>EP117</b>
43.	Mathematical skills	1	2	3	4	88	99	<b>EP119</b>
44.	Other (please specify) _____ [EP126 O] _____.	1	2	3	4	88	99	<b>EP126</b>
45.	Overall, how prepared for employment are the recent post-secondary graduates you supervise? (1-4 scale)							<b>EB108</b>
	1. Not at all prepared							
	2. Not very prepared							
	3. Prepared							
	4. Very well prepared							

- 88. Don't know
- 99. No response

- 46.** For the types of jobs that you supervise, how much work experience do you expect recent post-secondary graduates to have at the time of graduation? **EB109**
- 1. None
  - 2. A year or less
  - 3. More than one year
  - 88. Don't know
  - 99. No response

#### COMPANY INFORMATION

The following questions relate to the company or organization that you work for to help us better assess employer needs.

- 47.** How many employees are there in your organization? **CI100**
- 1. Fewer than 9
  - 2. 10-19
  - 3. 20-49
  - 4. 50+ employees
  - 88. Don't know
  - 99. No response
- 48.** Is your organization: **CI101**
- 1. A private sector firm
  - 2. A non-profit organization
  - 3. A public sector organization
  - 88. Don't know
  - 99. No response
- 49.** Which industry does your organization belong to? **CI102**
- 01. Agriculture, Forestry, Fishing and Hunting
  - 02. Mining, Oil and Gas
  - 03. Utilities
  - 04. Construction
  - 05. Manufacturing
  - 06. Wholesale Trade
  - 07. Retail Trade
  - 08. Transportation and Warehousing
  - 09. Telecommunications and Information
  - 10. Finance and Insurance
  - 11. Real Estate, Rental, and Leasing
  - 12. Professional, Scientific and Technical Services
  - 13. Management of Companies and Enterprises
  - 14. Administrative and Support
  - 15. Waste Management and Remediation Services
  - 16. Education Services
  - 17. Health Care and Social Assistance
  - 18. Arts, Entertainment and Recreation
  - 19. Accommodation and Food Services
  - 20. Public Administration
  - 77. Other services (please specify) \_\_\_\_\_ [CI102 77] \_\_\_\_\_.
  - 88. Don't know
  - 99. No response

50. About how many recent post-secondary graduates did your organization hire this year? **CI103**  
**[Record number]**  
88. Don't know  
99. No response

[End Survey]

Thank you for your time today. Your responses will contribute towards a better post-secondary education system for Albertans.

*Addendum: Skills & Abilities / Preparedness Descriptors*

Provide definitions in pop-up when respondent hovers over terms...	
Job-specific knowledge gained during post-secondary education	Offer examples such as knowledge of statistics, patient care, teaching methods, etc.
Verbal communication skills	Provide the following definition of spoken communication skills: The ability to effectively listen and use speech to give and exchange thoughts and information.
Specialized tool, machine, equipment or software skills	Provide examples of knowledge of a particular software program, or of how to operate machinery specific to a particular job.
Research skills	Provide the following definition of research skills: The ability to identify a problem, determine what sorts of informational resources are needed to respond to the problem, find those resources efficiently, evaluate the gathered information for quality and relevance, and use the information effectively to address the problem.
Intercultural communication skills	Provide the following definition of intercultural skills: The ability to communicate effectively and appropriately with people of other cultures, so that cultural rules, norms, and expectations of the relationship are not violated significantly.
Ability to learn independently	Provide the following definition of the ability to learn independently: The ability to self-identify knowledge or skills gaps and proactively seek to solve them. This ability may include the following types of learning: <ul style="list-style-type: none"> <li>• Training in job-related health and safety;</li> <li>• Obtaining and updating credentials; and learning about new equipment, procedures, products and services.</li> </ul>
Written communication skills	Provide the following definition of written communication skills: The ability to effectively read and write to give and exchange thoughts and information.
Critical thinking skills	Provide the following definition of critical thinking skills: Critical thinking means making reasoned judgments that are logical and well thought out. It is a way of thinking in which you don't simply accept all arguments and conclusions you are exposed to but rather have an attitude involving questioning such arguments and conclusions.
Ability to work well with others	Provide the following definition of ability to work well with others: The set of abilities enabling a person to interact positively and work effectively with others.
Ability to take initiative	Provide the following definition of ability to take initiative: In a workplace setting, this means the ability to identify work that needs to be done without instruction, and doing that work without being asked to do so.
Effective time management skills	Provide the following definition of time management skills: The Ability to meet work targets in a timely manner. Also includes coming to work on time.
Ability to work independently	Provide the following definition of ability to work independently: The self-discipline to meet work targets while working alone.
Problem-solving skills	Provide the following definition of problem-solving skills: The ability to work through the details of a difficult or complex problem to find a solution.
Work-related computer skills	Provide the following definition of work-related computer skills: The knowledge and ability to utilize computers and related technology efficiently, with a range of skills covering levels from elementary use to programming and advanced problem solving.

Mathematical skills	Provide the following definition of mathematical skills: Mathematical skills refers to the use of numbers and the ability to think in quantitative terms.
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