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# Getting your foot in the door: A look at entry-level job vacancies in Canada

by Marie Drolet

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# Getting your foot in the door: A look at entry-level job vacancies in Canada

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## Overview of the study

This study uses the 2016 Job Vacancy and Wage Survey (JVWS) to examine job vacancies for entry-level positions (job vacancies that require no work experience) from the employer perspective. The JVWS provides answers to the following questions: How many entry-level job vacancies are available? What are their characteristics? Which occupations offer entry-level positions? Are some education groups more affected than others?

- In 2016, less than one-half (48%) of job vacancies in Canada required no previous work experience. Another 32% required two years or less of experience, and 20% required more than two years of experience.
- For almost one-half of entry-level job vacancies, no education was required. Either a college diploma or a university degree was required for 1 in 5 of such vacancies.
- Employers searching to fill entry-level positions are more likely to offer part-time work (less than 30 hours per week) and temporary employment (with a predetermined end date).
- The highest proportions of entry-level job vacancies were in natural resources, agriculture and related production (73%); sales and service (63%); manufacturing and utilities (60%); and health (58%). The lowest proportions were in natural and applied science occupations (21%) and management (17%).
- Among job vacancies that required no formal education or on-the-job training, about 8 in 10 were entry-level positions. This compared with 1 in 3 job vacancies that required a university education.

## Introduction

Most careers begin with an entry-level job, which essentially require no previous work experience. Job vacancies for entry-level positions are not only open to persons with no previous work experience, such as new entrants to the workforce and recent graduates, but also to those re-entering the labour market or wishing to change careers. These positions enable workers to acquire the skills and experience necessary to advance towards better jobs in the future.

Changes in the economic landscape, including shifts to globalized markets and an emphasis on innovation and technology, have led to changes in how Canadians transition into the labour market. Some Canadians have responded by pursuing higher education: the proportion of employed Canadians aged 25 to 44 with a university degree increased from 18% in 1990 to 38% in 2016.<sup>1</sup>

For other Canadians, a cooperative education facilitates the school-to-work transition and provides an opportunity to acquire marketable skills: the proportion of college graduates who participated in a co-op program rose from 7% in 1986 to 22% in 2010.<sup>2</sup> In response to an increased demand for skilled tradespeople, others have opted for apprenticeship programs that provide on-the-job training: registration in apprenticeship programs increased by 15% between 2008 and 2015, from 390,000 to 451,000.<sup>3</sup>

Understanding whether the skills employers are looking for differ from the ones available in the labour market is important. Some evidence hints that Canadian employers are having difficulty recruiting qualified workers.<sup>4</sup> Employers are looking to recruit employees

who can adapt to changing workplace and industry conditions, as well as those who demonstrate strong “people skills” such as collaboration, communication, functional knowledge and problem-solving skills.<sup>5</sup>

The Job Vacancy and Wage Survey (JVWS), which includes detailed information on job vacancies by occupation, provides a unique opportunity to study the issue of entry-level jobs from an employer’s perspective. More specifically, this article attempts to answer several important questions: Of all posted vacancies, how many are entry-level positions? What are the characteristics of these jobs (e.g., occupation, educational requirements and work hours)? How do the offered wages of entry-level jobs vary by occupation and skill group?

### What is an entry-level job vacancy?

Data on job vacancies are collected as of the first day of the month and provide a snapshot of the number of job vacancies in the month. A job is considered vacant if a specific position exists, there is work to accomplish this month and the employer is actively recruiting from outside the business. An entry-level job, for the purpose of this article, is one for which the employer does not seek a minimum level of work experience for the job vacancy. In other words, previous work experience is not a precondition for employment. Using this definition, job vacancies for entry-level positions would be open to persons such as new entrants or re-entrants to the workforce, recent graduates, those wishing to change careers, or those simply wanting to change jobs.

Several caveats should be kept in mind when interpreting the data. First, some jobs may become vacant and filled within the month. These very short-term vacancies may not be captured in our measure of job vacancies. If these short-term vacancies are more likely not to require any work experience, the proportion of all job vacancies that are considered entry level may be understated. Second, for some job vacancies, recruitment and hiring take place long before the job start date (i.e., long before the condition used to define a job vacancy that work must begin within 30 days). Pools of successful candidates may be created to fill current or future vacancies, and these longer-term vacancies may not be included in this study’s measure of job vacancies.<sup>6</sup> Third, the JVWS collects job vacancy data from workplaces actively recruiting from outside their organizations. Postings reserved for internal candidates only are excluded. This may have some bearing on the interpretation of data for professional occupations. In addition, some available jobs are never advertised, and it is possible that many jobs are filled via networking and “word of mouth” referrals.<sup>7</sup>

This article is a departure from previous work where the characteristics of labour supplied—youth employment or new hires—were often viewed as synonymous with being entry level. In one of those studies, an entry-level worker is defined as one who has been in the workforce long enough to potentially have one to seven years of experience.<sup>8</sup> In this paper, the focus is on the characteristics of the job or the labour demanded, based on job vacancy data.

### Among job vacancies, about 1 in 2 require no previous work experience

In the 12-month period starting in January 2016, of the average 367,000 job vacancies in Canada, about 175,600 of them required no previous work experience (see the [Data sources, methods and definitions](#) section). Otherwise put, about 1 in every 2 job vacancies required no work experience and were considered entry-level positions. In comparison, less than 1 in 3 job vacancies required two years or less of work experience and about 1 in 5 required more than two years of experience (Table 1).<sup>9</sup>

**Table 1**  
Job vacancies by required experience, 2016

	Job vacancies	
	number	percent
<b>Total</b>	<b>367,000</b>	<b>100.0</b>
Required experience		
None (entry level)	175,600	47.8
Two years or less	117,600	32.1
More than two years	73,800	20.1

Source: Statistics Canada, Job Vacancy and Wage Survey, 2016.

### The majority of entry-level jobs require little education

The offered employment arrangements of entry-level jobs differ considerably from those that require two or more years of experience. Employers searching to fill entry-level positions are more likely to offer part-time work (less than 30 hours per week) and temporary employment (with a predetermined end date). About 46% of entry-level job vacancies are for part-time work compared with 7% for vacancies that require over

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two years of experience. Among entry-level job vacancies, 1 in 3 are considered temporary, while 1 in 10 vacancies requiring two or more years of experience were temporary jobs (Chart 1).

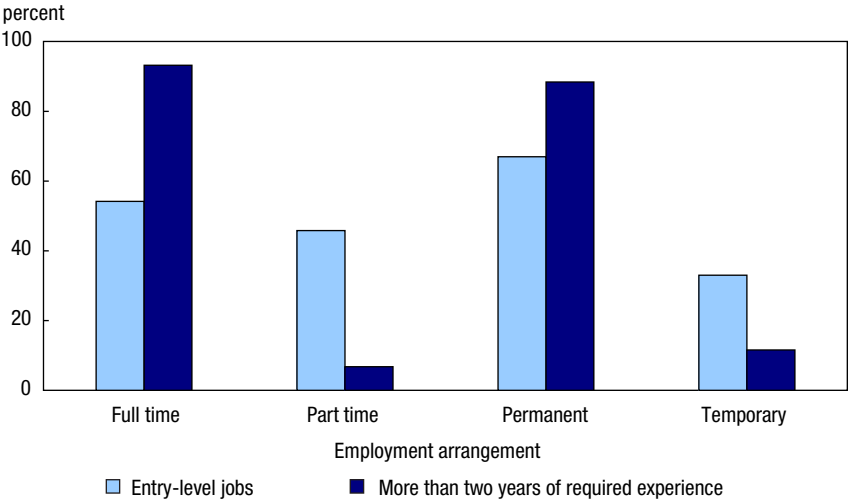
Along with the minimum level of experience required for job vacancies, employers were asked to report the minimum level of education sought for each job vacancy. How are job vacancies that do not require any previous work experience divided among the vacancies that require various levels of education by the employer?

Entry-level positions are largely concentrated in jobs where employers require little or no minimum level of education: about 1 in 2 entry-level jobs did not require a minimum level of education (87,500 vacancies) and a further 1 in 4 entry-level jobs required a high school diploma (48,400 vacancies). Employers requested either a college diploma or a university degree for 1 in 5 entry-level jobs (18,300 and 14,000 vacancies, respectively).<sup>10</sup>

As the experience required to do the job increases, so too does the educational requirement. About 40% of such job vacancies that required more than two years of experience also required a university degree and another 20% required a college diploma (Chart 2).

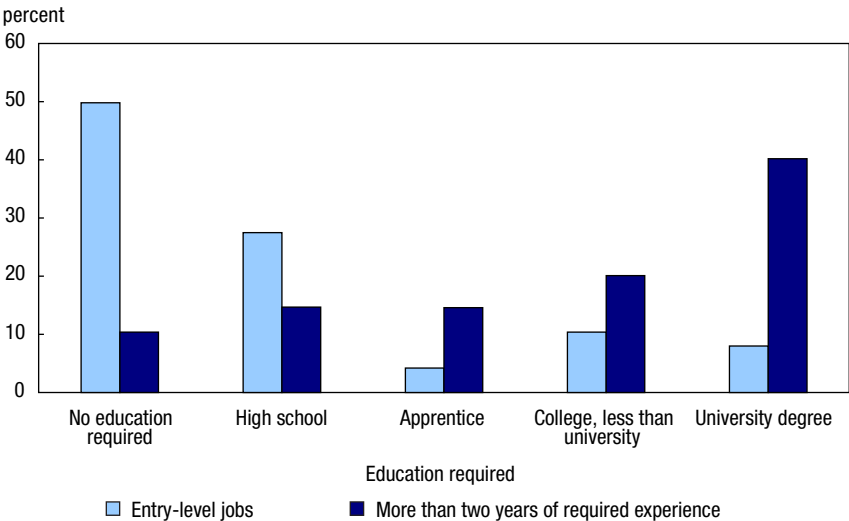
It is important to note that higher education continues to be associated with better labour market outcomes. Another study showed that young men and women aged 25 to 34 with a bachelor's degree were more likely to work full time on a full-year basis than their high school counterparts.<sup>11</sup> This may suggest that postsecondary graduates are more successful in obtaining employment after graduation either because they

**Chart 1**  
Characteristics of offered employment arrangements, by required experience, 2016



Note: Average estimate of four quarters of data from 2016.  
Source: Statistics Canada, Job Vacancy and Wage Survey, 2016.

**Chart 2**  
Job vacancies and education required by employer, by required experience, 2016



Source: Statistics Canada, Job Vacancy and Wage Survey, 2016.

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have prior work experience. It may also be that fewer entry-level jobs requiring a university education fit the criteria that work must begin within 30 days, or that the employer is looking for someone outside the organization—two conditions that are necessary for a position to be considered a job vacancy.

### Small workplaces are less inclined to hire inexperienced workers than large workplaces

The JWWS shows that job vacancies for entry-level positions are found more often in larger workplaces. About 43% of job vacancies in workplaces with less than 25 employees are considered entry level, compared with 53% of job vacancies in workplaces with 500 employees or more (Chart 3).

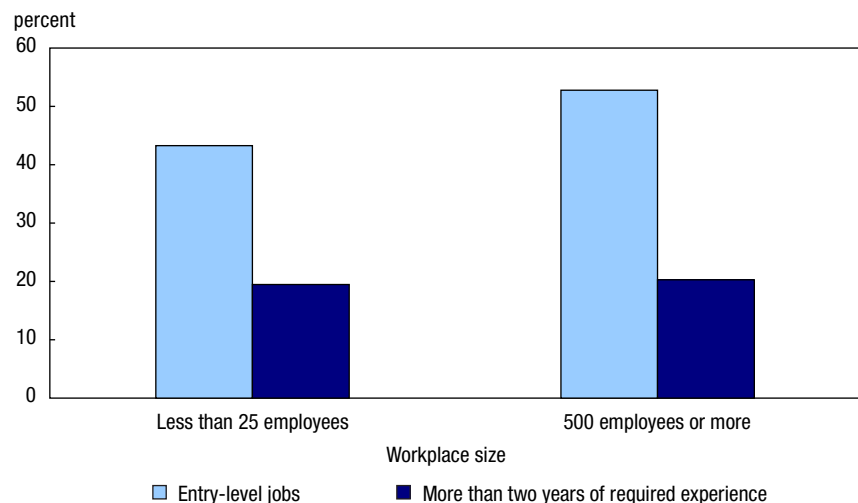
Smaller workplaces often lack the resources for training and may expect workers to make a significant contribution early in their tenure. Larger firms usually devote more resources to training their workforce in the specific skills necessary to advance in the company. These findings are consistent with internal labour market theory, which suggests that workers are hired into entry-level jobs and higher-level positions that require firm-specific knowledge or training are filled from within.<sup>12</sup> However, the JWWS does not allow for the assessment of the relative importance of whether positions are filled more frequently from outside the organization (external labour market) or whether they are filled by incumbents (internal labour market).

The JWWS, however, asked employers to report the number of days a position had been vacant. Employers reported “constantly recruiting” for 1 in 4 entry-level

positions compared with 1 in 10 vacancies that required more than two years of experience (Chart 4). This suggests that entry-level jobs

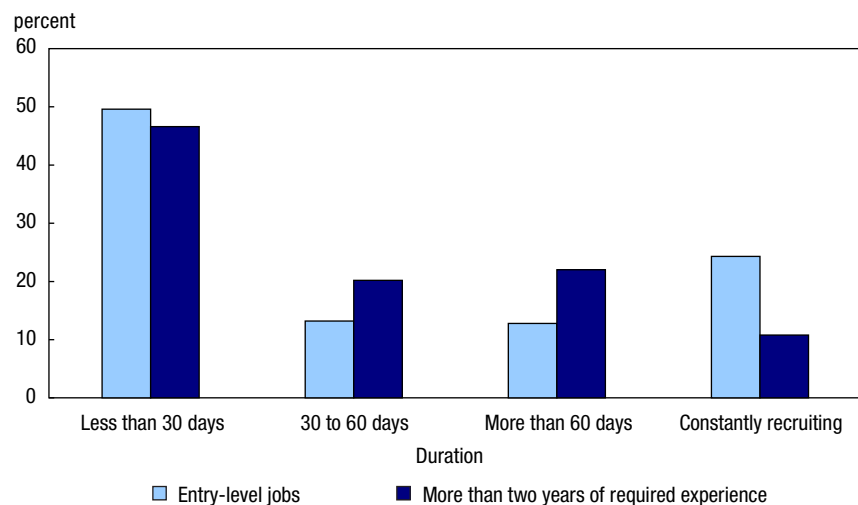
are often occupations characterized by a high turnover, and that employers need to be ready to rehire. The longer (shorter) the job

**Chart 3**  
Job vacancies and workplace size, by required experience, 2016



Source: Statistics Canada, Job Vacancy and Wage Survey, 2016.

**Chart 4**  
Duration of job vacancies, by required experience, 2016



Source: Statistics Canada, Job Vacancy and Wage Survey, 2016.

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is vacant is an indicator of vacant positions that employers are finding difficult (easy) to fill. Vacancies that require more work experience remain unfilled longer than those considered entry level. The JWVS did not ask employers the reasons for long-term vacancies.

### Job vacancies for entry-level positions exist in all occupational categories

Job vacancies for entry-level positions exist in all occupations, but the share of entry-level jobs varied across occupational categories (Table 2). Recall that approximately 1 in 2 job vacancies are considered entry level.

The broad occupation groups of natural resources, agriculture and related production (73%); sales and service (63%); manufacturing and utilities (60%); and health (58%) have the greatest abundance of entry-level jobs in a relative sense. The broad occupation groups related to management and natural and applied sciences have the lowest proportions of entry-level positions (17% and 21%, respectively).

While industries that employ sales and service and natural resources, agriculture and related production occupations are often characterized by lower-skilled jobs and a high degree of labour turnover, the higher entry-level job vacancies in health occupations may be somewhat of a surprise. While this is true for all health occupations, the likelihood is significantly higher for non-professional health occupations. However, it should be kept in mind that the JWVS only counts job openings external to the organization; it may be the case that health workers are hired into entry-level positions and, as they gain specific knowledge or expertise, they move into higher-level positions that are filled through internal promotions.

Occupations can be reclassified to add the skills dimension required to do the job, on the basis of the National Occupational Classification (NOC) (Table 3). While lower-skilled jobs have a higher proportion of entry-level jobs than higher-skilled jobs, there is considerable variation

in the proportion of job vacancies considered entry-level within skill groups.

For professional occupations, or occupations that typically require a university education (skill level A), about one-third (35%) of job vacancies are considered entry-level jobs. In some categories of professional occupations, job vacancies were more likely to require no work experience. These vacancies often require that the candidate have knowledge in the field, a degree or accreditation in the field or other skills honed in school to help them learn on the job. These include professional occupations in health (where 53% of job vacancies are entry-level jobs); education (48%); and business and finance (40%).

Similar conclusions are found for occupations that typically require a college diploma or apprenticeship training, and regroup many technical and paraprofessional occupations (skill level B). For these jobs, over 30% of vacancies were for entry-level positions. This varied from about 58% in technical occupations

**Table 2**  
Job vacancies and entry-level jobs in large occupational categories, by required experience, 2016

	Job vacancies			Composition	
	Total	Entry-level jobs	More than two years of required experience	Entry-level jobs	More than two years of required experience
	number			percent	
<b>All occupations</b>	<b>367,000</b>	<b>175,600</b>	<b>73,700</b>	<b>47.8</b>	<b>20.1</b>
Management	24,400	4,200	14,700	17.2	60.2
Business, finance and administration	42,500	15,700	12,400	36.9	29.2
Natural and applied sciences and related	25,500	5,400	12,800	21.2	50.2
Health	23,100	13,400	1,800	58.0	7.8
Education, law, social, community and government services	20,200	8,200	4,000	40.6	19.8
Art, culture, recreation and sport	8,500	3,600	1,800	42.4	21.2
Sales and service	137,000	85,800	8,900	62.6	6.5
Trades, transport and equipment operators and related	53,400	18,300	14,200	34.3	26.6
Natural resources, agriculture and related production	14,300	10,400	1,000	72.7	7.0
Manufacturing and utilities	17,800	10,700	2,100	60.1	11.8

Source: Statistics Canada, Job Vacancy and Wage Survey, 2016.

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in health to 15% among processing, manufacturing and utilities supervisors and central control operators.

Lastly, among occupations that require a high school education (skill level C) and occupations that require on-the-job training (skill level D), entry-level positions represented the majority of all job vacancies, with the exception of transport and heavy

equipment operation and related maintenance (35%) and office support (40%) jobs. Occupations in the lowest skill category were especially more likely to be entry-level jobs as 8 in 10 positions required no work experience.

### Entry-level wages are higher in jobs that require higher skills

The success of individuals in the labour market can be gauged by the degree to which individuals succeed in securing employment and their earnings. While the previous sections focused on the availability

**Table 3**  
**Job vacancies, entry-level jobs and offered wages, by skill level and detailed occupational category, 2016**

	Job vacancies		Proportion of	Offered wage
	Total	Entry-level jobs	entry-level jobs	
	number		percent	dollar
<b>Management</b>	<b>24,400</b>	<b>4,200</b>	<b>17.6</b>	<b>28.50</b>
<b>Skill level A: Occupations that usually require a university education</b>	<b>49,300</b>	<b>17,000</b>	<b>34.5</b>	<b>29.30</b>
11 Professional in business and finance	13,400	5,400	40.3	25.00
21 Professional in natural and applied sciences	15,300	2,900	19.0	28.90
30-31 Professional in health (including nursing)	9,800	5,200	53.1	31.60
40 Professional in education services	4,400	2,100	47.7	26.70
41 Professional in law and social, community and government services	5,100	1,100	21.6	24.80
51 Professional in art and culture	1,300	300	23.1	20.20
<b>Skill level B: Occupations that usually require a college education or apprenticeship training</b>	<b>99,500</b>	<b>30,000</b>	<b>30.5</b>	<b>18.20</b>
12 Administrative and financial supervisors and administrative	11,100	2,600	23.4	18.10
13 Finance, insurance and related business administrative	2,300	500	19.2	18.90
22 Technical related to natural and applied sciences	10,200	2,500	24.5	19.90
32 Technical in health	6,000	3,500	58.3	24.00
42 Paraprofessional in legal, social, community and education services	7,000	2,600	37.1	16.20
52 Technical in art, culture, recreation and sport	7,200	3,400	47.2	15.20
62 Retail sales supervisors and specialized sales	7,200	2,300	31.9	19.40
63 Service supervisors and specialized service	20,600	7,000	34.0	12.90
72 Industrial, electrical and construction trades	17,200	3,700	21.5	19.20
73 Maintenance and equipment operation trades	8,200	1,500	18.3	19.10
82 Supervisors and technical occupations in natural resources, agricultural and related	1,200	200	16.7	19.70
92 Processing, manufacturing and utilities supervisors and central control operators	1,300	200	15.4	23.10
<b>Skill level C: Occupations that usually require a high school education</b>	<b>120,800</b>	<b>66,800</b>	<b>55.3</b>	<b>14.00</b>
14 Office support	10,400	4,200	40.4	15.30
15 Distribution, tracking and scheduling co-ordination	5,300	3,000	56.6	14.80
34 Assisting in support of health services	7,200	4,600	63.9	18.00
44 Care providers and educational, legal and public protection support	3,300	2,000	60.6	15.90
64 Sales representatives and salespersons – wholesale and retail trade	26,200	15,900	60.7	12.00
65 Service representatives and other customer and personal services	31,700	18,200	57.4	13.20
74 Other installers, repairers and servicers and material handlers	6,300	3,600	57.1	14.40
75 Transport and heavy equipment operation and related maintenance	14,600	5,100	34.9	15.50
84 Workers in natural resources, agriculture and related production	6,900	5,400	78.3	13.20
94 Processing and manufacturing machine operators and related production workers	5,400	2,900	53.7	14.50
95 Assemblers in manufacturing	3,500	1,900	54.3	14.00
<b>Skill level D: Occupations that require on-the-job training or no education</b>	<b>72,200</b>	<b>57,400</b>	<b>79.5</b>	<b>12.70</b>
66 Sales support	16,100	13,900	86.3	11.30
67 Service support and other service	35,200	28,500	81.0	12.20
76 Trades helpers, construction labourers and related	7,000	4,500	64.3	15.90
86 Harvesting, landscaping and natural resources labourers	6,300	4,800	76.2	14.30
96 Labourers in processing, manufacturing and utilities	7,600	5,700	75.0	13.90

Source: Statistics Canada, Job Vacancy and Wage Survey, 2016.



of jobs, this section examines the wages offered by employers for vacant positions.

The determinants of how much workers earn have focused primarily on factors affecting labour supply, such as education and experience. Demand-side factors have not received as much attention. The JWVS fills this data gap by collecting information on the wages that employers offer for job vacancies. Job seekers can observe the offered wage for a given occupation and employers can compare their offered wages to others in their industry and geographic area.

The focus remains on entry-level occupations. The average offered wage can be shown across major skill and occupation groups (Table 3). The skill group refers to the amount and type of education and training required to enter and perform the duties of an occupation. Detailed occupations are classified across groupings representative of certain educational requirements: professional occupations that require a university degree (skill level A); occupations that require a college education or apprenticeship training (skill level B); occupations that require a high school education (skill level C); and occupations that require on-the-job training or no formal education (skill level D).<sup>13</sup>

As these data indicate, there is a positive relationship between the education level required to perform the duties of the occupation and the offered hourly wage. That is to say, employers looking to fill entry-level jobs in occupations that require no education offer lower wages, while employers seeking workers with specialized training or a postsecondary education to fill entry-level positions offer the

highest paid entry-level jobs. Offered wages for entry-level positions in occupations that require a university education (skill level A) average \$29.30 per hour; this compares with \$18.20 in occupations that require a college diploma or apprenticeship training (skill level B); \$14.00 in occupations that require a high school diploma (skill level C); and \$12.70 in occupations that require no education (skill level D). These findings are consistent with the general empirical research on the returns to education.<sup>14</sup>

This pattern also holds within all occupation groups. For example, entry-level jobs that require a university education in applied and natural sciences offer \$28.90 per hour while entry-level jobs that require a college education in applied and natural sciences offer \$19.90 per hour.

Two additional patterns are evident. First, offered wages are highest for entry-level job vacancies in health occupations within each skill group compared to all other occupations. Second, there is little variation in offered wages between occupations that require a high school education and those that do not require a formal education.

### Conclusion

There is ongoing concern about the availability and quality of the jobs held by Canadian workers. This article takes advantage of the unique perspective of the Job Vacancy and Wage Survey (JVWS) data to add to the knowledge on the Canadian labour market.

The JVWS contributes to this knowledge, first, by providing the first-ever estimates of vacancies for entry-level jobs by occupation

in Canada. This study shows that about one-half of job vacancies in Canada require no previous work experience and that most of these jobs are also likely to require no minimum level of education. Entry-level jobs are also more likely to be part-time and temporary jobs.

Second, this paper's findings raise awareness about entry-level jobs in Canada. On one hand, many university graduates who are seeking their first career-related job are competing for a limited number of available skilled positions: in 2010, there were 252,000 graduates from Canadian universities.<sup>15</sup> The demand for entry-level jobs that require a university degree falls short of meeting the available supply of eligible workers. As a result, recent university graduates may be required to accept jobs for which they are overqualified, leading to lower earnings and lower productivity.

On the other hand, to be included in the JWVS, work must start within 30 days, which may not necessarily be the case for many positions available for university-educated workers. Furthermore, postings reserved for internal candidates only are excluded. It is also important to note that the JWVS does not yet cover the public sector, which employs many university graduates. The fact that overqualification rates for young university graduates have remained relatively stable over the past two decades<sup>16</sup> raises the possibility that university graduates find work differently than those with lower levels of qualification.

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### Data sources, methods and definitions

#### Data sources

Statistics Canada collects and disseminates data on many aspects of the Canadian labour market. The main sources of labour market information include the Labour Force Survey (LFS), which collects employment status data from households and produces the unemployment rate; and the Survey of Employment, Payroll and Hours (SEPH), which collects data from businesses and produces employment estimates. The Job Vacancy and Wage Survey (JVWS) completes the labour market picture by collecting job vacancy data from businesses to measure unmet labour demand.

Data from the JVWS were used in this study. The JVWS collects information on the number of job vacancies by occupation for all economic regions on a quarterly basis. Additional information is also available by occupation, for example, the average offered hourly wage, the proportion of job vacancies for full-time and part-time positions, the duration of job vacancies, and the level of education and experience sought for the job.

The JVWS target population includes all business locations in Canada excluding religious organizations, private households, and federal, provincial and territorial as well as international and other extraterritorial public administrations. The JVWS sample of 100,000 business locations is selected from a survey population of approximately 1 million business locations compiled from the Business Register (BR). Sample weights are used to make the analysis representative of the target population. Business locations remain in sample for eight consecutive quarters or two years. Quarterly employment estimates from the JVWS are calibrated to the SEPH employment estimates.

The unit of analysis is the average of the quarterly estimates of job vacancies in 2016. Each quarter is given equal weight. In any given quarter, about 6,200 vacancies were excluded from the analysis since the corresponding occupation could not be classified.

Using the average of quarterly data for 2016 provides more robust estimates by reducing the impact of outliers, smoothing out the potential effects of seasonality and reducing the variance of estimates. In addition, this analysis shies away from changes over time. With such a short times series, it is not possible to formally test the seasonal or cyclical variation in entry-level job vacancies.

#### Definitions

**Job vacancies** are collected as of the first day of the reference month and provide a snapshot of the number of job vacancies in the month. A job is considered vacant if (a) a specific position exists; (b) there is work to accomplish this month; and (c) the employer is actively recruiting from outside the business. The position can be full time or part time and it can be permanent, temporary or seasonal.

An **entry-level job vacancy** is defined as a posting that requires no previous work experience.

**Occupation** classifications are based on the National Occupational Classification (NOC). **Skill level** is defined as the amount and type of education and training required to enter and perform the duties of an occupation. Four skill-level categories are identified in the NOC. The matching of education–occupation is based on the skills matrix developed by Employment and Social Development Canada and Statistics Canada.

#### Description of skill levels

**Skill level A:** University degree (bachelor's, master's or doctorate).

**Skill level B:** Two to three years of postsecondary education at a community college, institute of technology or CÉGEP, or three to four years of high school and more than two years of on-the-job training; occupation-specific training courses or specific work experience; occupations with supervisory responsibilities; occupations with significant health and safety responsibilities.

**Skill level C:** Completion of high school and some short-duration courses or training specific to the occupation, or some high school education, with up to two years of on-the-job training; training courses or specific work experience.

**Skill level D:** Short work demonstration or on-the-job training, or no formal educational requirements.

The **job vacancy rate** is calculated as the number of job openings (on the first day of the month) divided by the sum of employment and job vacancies. Including job vacancies in the denominator allows the rate to reflect the total number of jobs at the location, both filled and unfilled.

**Restrictions in the definition of job vacancies:** The definition of job vacancies may exclude some types of vacancies, for example,

1. Job vacancies that become available and filled during the month are not included.
2. Some active recruiting is done far in advance of when the work actually begins and is not included since the definition requires work to begin within 30 days.
3. Job vacancies that occur in the “internal labour market” are normally filled by promotion except for those at the bottom rung of the promotion ladder, which may skew the statistics towards the availability of entry-level positions and are not included.
4. Job vacancies do not include those in the public sector.

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### Entry-level jobs by industry and province

Job vacancies for entry-level positions exist in all industries. However, there is a significant variation in job vacancies that do not require any experience across industrial categories (Table 4). The proportion of entry-level jobs in each industry reveals industrial patterns of entry-level positions. As mentioned above, approximately 1 in 2 job vacancies are considered entry-level—the standard that should be kept in mind when comparing industries.

**Table 4**  
Job vacancies and entry-level jobs, by industry, 2016

Industry	Job vacancies		Proportion of entry-level jobs
	Total	Entry-level jobs	
	number		percent
11 Agriculture, forestry, fishing and hunting	9,400	6,900	73.4
72 Accommodation and food services	51,500	32,600	63.3
44-45 Retail trade	50,800	31,900	62.8
52 Finance and insurance	19,600	11,700	59.7
71 Arts, entertainment and recreation	8,700	4,600	52.9
56 Administrative and support, waste management and remediation services	30,200	15,900	52.6
62 Health care and social assistance	37,000	18,000	48.6
61 Educational services	9,500	4,100	43.2
31-33 Manufacturing	29,700	11,800	39.7
48-49 Transportation and warehousing	16,800	6,400	38.1
81 Other services (except public administration)	16,100	6,100	37.9
91 Public administration	7,000	2,600	37.1
53 Real estate and rental and leasing	5,000	1,600	32.0
51 Information and cultural industries	7,600	2,300	30.3
41 Wholesale trade	14,700	4,200	28.6
23 Construction	24,000	6,800	28.3
54 Professional, scientific and technical services	24,700	6,800	27.5
21 Mining, quarrying, and oil and gas extraction	2,200	500	22.7
55 Management of companies and enterprises	1,500	300	20.0
22 Utilities	1,100	200	18.2

Source: Statistics Canada, Job Vacancy and Wage Survey, 2016.

Based on these criteria, the broad industry groups of agriculture, forestry, fishing and hunting (73%); accommodation and food services (63%); and retail trade (63%) have the greatest abundance of entry-level jobs in a relative sense. These industries are characterized by lower-skilled jobs and a high degree of labour turnover. The broad industry groups related to utilities, management of companies and enterprises, and mining, quarrying and oil and gas extraction have the lowest proportions of entry-level positions (18%, 20% and 23%, respectively).

The industrial composition and response to varying macroeconomic conditions differs by province. It therefore follows that there is some variation in entry-level job vacancies by province (Table 5).

**Table 5**  
Entry-level job vacancies by province, 2016

	Entry-level job vacancies		Vacancy rate	Unemployment rate
	number	percent		
<b>Canada</b>	<b>175,600</b>	<b>47.9</b>	<b>2.5</b>	<b>7.1</b>
Newfoundland	2,300	65.9	1.8	11.5
Prince Edward Island	800	66.1	1.9	8.9
Nova Scotia	4,600	56.0	2.3	7.9
New Brunswick	3,600	59.5	2.3	8.6
Quebec	28,400	46.5	1.9	6.8
Ontario	72,400	46.2	2.8	6.9
Manitoba	5,200	49.7	1.9	6.8
Saskatchewan	5,100	56.3	1.9	6.3
Alberta	19,200	46.8	2.3	8.6
British Columbia	33,500	48.9	3.6	5.8
Northwest Territories, Yukon, Nunavut	600	44.2	2.8	..

.. not available for a specific reference period

Note: The Labour Force Survey does not capture the Northwest Territories, Yukon or Nunavut.

Sources: Statistics Canada, Job Vacancy and Wage Survey, 2016; Labour Force Survey, three-month average (July, August, September 2016).

### Notes

1. Author's calculations from CANSIM table 282-0004.
2. Rodriguez et al. (2016) report that the number of programs and institutions offering co-op programs rose in the past decade. The proportion of co-op participants among graduates with a bachelor's degree rose from 5% to 12% over the same period.
3. Strong economic growth in areas such as construction and natural resources, combined with an aging population, have contributed to an increased demand for skilled tradespeople in Canada. (Author's calculations from CANSIM table 477-0053.)
4. See Scott (2015).
5. See Business Council of Canada (2016).
6. In addition, the JWVS does not collect public administration job vacancy data. If the public administration sector is more likely to offer jobs that require no work experience, the proportion of all job vacancies that are considered entry level may be understated since public sector vacancies are excluded.
7. A significant portion of job openings would be unlisted (Smith 2014).
8. See Economic Policy Institute (2012).
9. An examination of the quarterly data revealed that job vacancies for entry-level jobs are lowest in the three-month period that includes January, February and March, compared to the remaining quarters for both 2015 and 2016. This finding may be partially explained by seasonal patterns in the composition of entry-level jobs as job vacancies in seasonal industries become available. The time series is currently too short to formally test for both seasonal and business cycle effects.
10. The number of entry-level vacancies that require an apprenticeship or trades certificate is relatively small, most likely reflecting the notion that, in order to complete these programs, students must fulfill specific on-the-job training requirements, after which employers are able to ask for work experience.
11. See Frank et al. (2015). The numbers were 82% and 66%, respectively, for men, and 65% and 41% for women.
12. See Lazear and Oyer (2004).
13. The first digit in the National Occupational Classification (NOC) system refers to the broad occupation group. The second digit refers to the major group. Each major group is assigned to one of four skill levels.
14. Card (2001) reviews a number of studies and places the rate of return to one year of schooling at roughly 10% in terms of annual wages.
15. Data from CANSIM table 477-0062.
16. See Uppal and LaRoche-Côté (2014).

### References

- Business Council of Canada. 2016. *Building the Future: Annual Report 2015/2016*. Ottawa.
- Card, David. 2001. "Estimating the return to schooling: Progress on some persistent econometric problems." *Econometrica*. September. Vol. 69, no. 5. p. 1127–1160.
- Economic Policy Institute. 2012. *The State of Working America, 12th Edition*. Ithaca, New York: Cornell University Press.
- Frank, Kristyn, Marc Frenette and René Morissette. 2015. "Labour market outcomes of young postsecondary graduates, 2005 to 2012." *Economic Insights*. September. Statistics Canada Catalogue no. 11-626-X – No. 050.
- Lazear, Edward P. and Paul Oyer. 2004. "Internal and external labor markets: A personnel economics approach. *Labour Economics*. October. Vol. 11, no. 5. p. 527–554.
- Rodriguez, Carlos, John Zhao and Sarah Jane Ferguson. 2016. "Co-op participation of college and bachelor's graduates." *Insights on Canadian Society*. December. Statistics Canada Catalogue no. 75-006-X.
- Scott, Graham F. 2015. "Canada's small businesses rate hiring as 2015's biggest challenge." *Canadian Business*. January 2.
- Smith, Jacquelyn. 2014. "8 tips for successfully penetrating the hidden job market." *Business Insider*. June 30.
- Uppal, Shanjit and Sébastien LaRoche-Côté. 2014. "Overqualification among recent university graduates in Canada." *Insights on Canadian Society*. April. Statistics Canada Catalogue no. 75-006-X.