The Project

During the spring and summer of 2013, 41 Canadian universities conducted a survey of their baccalaureate graduates six or seven years following graduation (i.e. 2006 and 2007 graduates). Over 21,000 graduates provided information about their current employment situation, educational activity following their bachelor's program and their current social and civic involvement; and they assessed various elements of their academic program and university experience overall and the impacts these have in their lives today.

This report is the first in a series that will report the key findings of the survey. Future reports will cover other survey topics, including the relationship between current occupation and academic program, educational activity following baccalaureate graduation, graduates' assessments of the strengths, weaknesses and impacts of their academic program, and discipline-specific analyses (e.g. for the STEM disciplines, Humanities and Liberal Arts, etc.).

The Canadian University Baccalaureate Graduate Outcomes Project began at the University of British Columbia under the direction of Walter Sudmant, Director of Planning and Institutional Research. Following pilot-testing at UBC, the survey instrument was revised for web-based administration at multiple universities. Mosaic Research Solutions built the online survey interface and conducted fieldwork. Several universities were involved in project setup, response post-coding (for NOC and NAICS) and data validation.

This first report in the series was prepared by Chris Conway and Sara Montgomery at Queen’s University’s Office of Institutional Research and Planning. Questions can be addressed to either walter.sudmant@ubc.ca or conwayc@queensu.ca.

Un rapport en français se trouve en ligne bientôt à www.queensu.ca/irp. Once released, all reports in this series (and any technical notes) will also be available at the Queen’s website above.

Key Findings

Labour Market Outcomes Summary

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Labour Force Participation

Ninety-three percent of respondents were in the labour force. Explanations for non-participation included full-time study (the majority), with illness/disability and not/no longer seeking work comprising a small minority. Participation varied from 86% to 98% by academic discipline, demographic characteristics and other factors.

Employment Rate

Employment rate (percentage of the labour force employed) was 95.7%; 93.3% of these were employed full-time and 6.7% part-time. Reasons for unemployment were split about evenly between job-market related and personal factors. Across academic disciplines and demographic factors, the employment rate varied from 90% to 97.6%.

Income

Median reported annual income was $63,000 for those employed full-time (25th-75th percentile range $50,000 - $80,000) and $25,000 for those employed part-time (25th-75th percentile range $15,000 - $38,000). The greatest income variations occurred by academic discipline and several demographic characteristics – particularly gender.

Program-Employment Relatedness

Three-fourths of all respondents reported that their employment was "very related" (44%) or "somewhat related" (31%) to their academic program. Relatedness ranged from 55% for Humanities disciplines to 91% for Health Sciences disciplines. Job-program relatedness is positively, but loosely associated with both income level and program satisfaction.
Labour Force Participation

Despite variation in labour force participation, the rate exceeds 85% across all major demographic groups and academic disciplines. The slightly lower participation rate for those with subsequent masters and doctoral credentials is likely the result of their recent graduation and/or continuing graduate-level education (41% pursued university-level study, and 9% college-level study, following graduation).

Mature students (those whose age at baccalaureate graduation was 25 or more) may show a higher participation rate because of a return to employment held prior to the baccalaureate degree. Graduates with a disability or health condition show substantially lower labour force participation than those without. Further analysis may reveal an explanation for relatively low participation among Science program graduates: one contributing factor appears to be their higher rate of current full-time PSE activity.

Several demographic attributes are not strongly associated with varying labour force participation: visible minority status vs. not (92.5% vs. 93.0%); first generation (first-in-family to attend PSE) status vs. not (94.6% vs. 92.3%); regional location within Canada (92.5% to 93.6%); and mother tongue - English, bilingual, French (90.9% to 94.3%).

Notes on Survey Sample and Administration

University samples consisted primarily of 2007 and (in some cases also 2006) first- and second-entry baccalaureate graduates. Provinces and universities differ with respect to classification of second-entry programs; as a result second-entry program graduates were not consistently included. (They are a minority of the sample in any case.) Gross sample was about 110,000, with 21,120 completions, for a response rate of about 20%. The cooperation rate was significantly higher - about 35% - given the large number of undeliverable email invitations. The response data set has not been weighted by university gross sample size or program mix. There is no evidence of significant response bias. Both labour force participation rate and employment rate calculated from the survey results align closely with other data sources for a reasonably matched age/educational attainment cohort. Income reported in this survey is higher than that obtained by an appropriate adjustment to the 2011 NHS results for the national 25-29 year old baccalaureate group. However, reported incomes are quite consistent with a tax-record verified sample of university graduates generated by a participating university in cooperation with Statistics Canada.
Employment Rate

Variation in Employment Rate by Academic Discipline, Demographic Characteristics and Subsequent PSE

Employment rate by academic discipline and demographic characteristic generally lies within 2% of the overall employment rate, except for students with disabilities, whose employment rate is substantially lower at about 90%. (Language-based data are generated from a subset of universities in the sample.)

Respondents who are in the labour force but not currently employed provided a number of explanations for not currently working. Almost half involved involuntary loss of employment due to labour market/business conditions. About the same proportion cited personal reasons for unemployment including care of a child or other family member, recent completion of school or international travel and personal preference. 11% of respondents did not provide a response or indicated “other”.

The Canadian University Baccalaureate Graduate Outcomes Project

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Respondents provided wages/salary and commission income from their main job (in the vast majority of cases, their only job); responses were annualized and validated. Median income for those reporting full-time employment was $63,000, with 50% of all respondents earning between $50,000 and $80,000. Graduates of Engineering and Health Sciences programs earned the highest median incomes; those in Humanities and Social Sciences the lowest ($50,500 and $57,000).

Full-time employment income varies somewhat with several demographic characteristics, but is most pronounced with respect to gender. The overall median salary of $63,000 reflects a male median of $70,000 and a female median of $60,000 for a M:F ratio of 1.167. At the academic discipline level, this ratio varies little (from 1.10 in the Humanities to 1.25 in the Non-Health Professions). However, variation by general-level National Occupation Classification (NOC) code is substantial (from 0.913 and 0.957 in Trades & Transportation and Art & Culture respectively) to 1.48 and 1.85 in Manufacturing & Utilities and Natural Resources respectively. A future report in this series will explore academic discipline/program, NOC and NAICS mappings and incomes in greater detail.

Median annual incomes for those working part-time (less than 30 hours per week) are shown below. As noted above, about 7% of respondents report part-time employment. Respondents were asked to rate employment-program relatedness, without differentiating between program content and general skills. Even the least-related programs (Humanities and Social Sciences) are seen as related by more than half of all respondents; the professional programs are seen as employment-related by 80% - 90% of their graduates.