Student Perspectives on Employability Skills in Liberal Arts Programs: A Canadian Case

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Abstract

The purpose of the study was to gain further understandings of undergraduate students' perspectives on employability skill development in the liberal arts programs, as well as the perceived influence of the identification of employability skills in course curricula on undergraduate students' self-efficacy. Building on the results of a prior study on faculty perspectives in the liberal arts on employability skills, we also explored the ways students' and faculty members' perspectives were in alignment. Purposive sampling was used to select the undergraduate courses from three different undergraduate programs at the research site. Three relatively high enrolment courses were selected based on two key criteria: must be a second or third level undergraduate course and must be in a non-professional program in the liberal arts. Non-professional programs were considered programs where the students do not graduate with a specific professional designation or applied program. Two methods were used to collect the data for this project: an employability skill inventory and a survey distributed to students (N = 131). Course syllabi were also obtained to map employability skills. The findings of this study provide further insights with respect to the ways that employability matters to students and the ways in which students expect their instructors and institution to play a role in their employability development. Conclusions of this study underscore the need to consider bridging the disconnect between expectations of the students, the institution, and the faculty regarding employability development.

Introduction

'*What can I do with my degree?*' Anecdotally, staff in career services at Canadian universities are commonly asked this question by students. There is not a straightforward answer, especially for students from non-professional programs where their degree does not lead to an accredited designation and their program of study is not connected with a professional association. Prior research has shown that academics hold divisive perspectives on the topic of employability (Römgens et al., 2020), especially those in the non-professional programs, on what role (if any) employability should have in higher education (Gregory & Kanuka, 2022). While many academics in the non-professional programs do not see a role for employability in their programs, most Canadian institutions, nevertheless, provide some form of career services for their students.

A review of the literature on employability shows there is a great deal of research on this topic within the higher education sector. The perspectives of government, academics, employers and graduates are the focus of most research on this topic (Tymon, 2013); we know less about undergraduate students' perspectives on employability, including the extent to which it even matters to them and their ability to articulate these skills (Tomasson Goodwin et al., 2019; Tymon, 2013). Some related literature (e.g., Tomlinson, 2017) has indicated that students may be displaying increasingly consumer orientated attitudes toward their education and are more concerned about getting financial value from their studies with a focus on employability upon graduation. While a somewhat limited number of studies have focused on student perceptions on employability (e.g., Clark, 2020; Lock & Kelly, 2022; Pew Research Center, 2016) given students are primary stakeholders further research is warranted on student perspectives. The purpose of this study aimed to explore at least part of this gap in the literature.

Employability and Higher Education

Canadian universities are ranked based on graduate employability (among other criteria), similar to other universities internationally (Pereira et al., 2020). Employment rates are also used by Canadian universities as a way to attract new students. Rees (2021) maintains further that the focus on the labor market is driving students to regard employability potential as 'the most important factor in deciding to go to university' (p. 664). Though on this point, Durrazi (2021) provides evidence that 'the higher education market – not the labor market – is the key driver for universities to engage in employability and skills initiatives' (p. 386), contending that this is caused by the competitive market in higher education. Durrazi (2021) also cites evidence showing a weak link between higher education and the active labor market.

Whatever the reasons, many institutions of higher education (HEI) are advertising to prospective students in a way where they are encouraged to believe that by enrolling in their programs they will be furthering their generic skills demanded by the labor market, ensuring future employment opportunities (Lundgren-Resenterra & Kahn, 2020). By way of example, in Canadian Universities, employability is front and center for prospective students with websites that advertise their employment rates (e.g., Brown, 2018). Employability is a prominent part of a narrative by which HEIs sell their programs. These narratives influence policy statements and mission objectives that impact student choices in terms of program prospects and the marketisation of HEIs. Lundgren-Resenterra and Khan (2020) argue further that these kinds of 'post-truth arguments' (p. 416) on the marketisation of HEI

> [M]ake use of a narrow view of what constitutes academic knowledge to serve the interests of corporations for their own financial interests over social aspects relevant for the wider society … [and] stakeholders such as employers, HEIs or politicians who use marketization tools to serve primarily their own economic and political agendas, and this in a context of rising unemployment. Giving priority to programmes of education that are perceived to open up access for students to employment prospects with a high economic value, results in the commodification of knowledge … commodified knowledge refers to learning experiences that have been selected with a commercial need in mind to the exclusion of other experiences retaining a critical dimension, thereby constraining the possibilities for students to enhance their capacity for critical reflexion about their own needs or about the interests of others. (p. 416)

Osborne and Grant-Smith (2017) push this perspective further arguing that as students take on considerable financial debt to further their education, an effective way for HEIs to rationalise this debt load is to view their education as an investment in employability. Education for its own sake, 'becomes untenable. Taking on a non-vocationally-oriented degree, or any kind of study not explicitly tied to enhancing future employment prospects becomes characterised as a luxury or irresponsible indulgence' (p. 60).

As these views illustrate, employability is tied to, and heavily influenced by, human capital theory and the knowledge-based economy. On this front, Rees (2021) observes that employability is also typically considered an aspect of governmental regulatory systems, which reinforces a neoliberal position of higher education as a source of economic productivity. Rees (2021) maintains that

> *Employability becomes a legitimisation strategy used by education policy makers to encourage more vocationally-orientated education approaches, underpinning a hegemonic capitalist view of the social system which restricts exploration of alternative sociologies. To achieve this, [higher education] is often historically aligned with specific industry sectors where graduates are seen as human capital to be developed to support particular economies* (p. 664).

These kinds of views appear in much of the literature indicating there tends to be a consensus on the theory of employability that is based on the view that human capital, introduced through generic skills development, will ensure employability of students, and enhance career development for graduates (Ng et al., 2021). Human capital theory, then, suggests that economic success (via employability) is dependent on the education of its workforce (Knight & Yorke, 2002). In an economy that requires innovation, flexibility, high levels of education and lifelong learning, according to human capital theory, higher education is viewed as an economic resource (Bridgstock, 2009; Molla & Cuthbert, 2015).

For these reasons many higher education institutions in Canada, and elsewhere, are experiencing pressure to address employability, and provide evidence that their graduates are skilled and can seamlessly transition into the workforce post-graduation (Artess et al., 2017; Campbell et al., 2019). Higher education has faced persistent criticisms for decades (e.g., Jacobus, 1973) with respect to how, for example, 'employers can't get the talent they want, and individuals can't get the jobs they want … universities are failing to prepare their students for the workforce' (Collins, 2021, p. 1). In some countries (e.g., United Kingdom; Australia), as well as some universities in Canada, funding has become contingent upon demonstrable graduate outcomes and employment levels of graduates (Bridgstock, 2009; Yorke, 2006). It has also been argued further that poor employability skills may be a major cause of increasing unemployment rates among graduates.

Defining Employability

At a basic level, employability can be viewed as graduates' readiness to enter the labour market. However, the concept of employability is considerably more complex and multi-variant than being work-ready. Throughout the literature conceptions, and definitions, of employability varies. Employability can be viewed narrowly, for example as the ability to secure and maintain employment (Fenesi & Sana, 2015). Broader views incorporate skills and identity, such as Dacre Pool and Sewell's (2007) definition. Yorke's (2006) definition of employability is frequently used in the literature as it addresses individual and societal aspects of employability. Neither York's (2006) nor Dacre Pool and Sewell's (2007) definitions suggest employability is developed solely through a program of studies. Rather, an individual's employability will be shaped by their experiences in their programs of study, as well as by other factors such as work experience, confidence, and socio-economic status. Yorke (2006) also distinguishes between the ability to secure a job and employability, accounting for external factors that contribute to employment levels. Employability also comprises the capacity to function in a job. It is a multi-faceted characteristic of an individual that can be developed (Yorke, 2006). Additionally, conflating employability with employment is problematic; employment can be measured whereas employability is an individual attribute which varies between individuals and is dependent on multiple factors.

Theoretical Models and Conceptual Framework

Various theories have been used in theoretical models and/or conceptual frameworks to underpin employability research (Ng et al., 2021). Models and theories of employability typically include concepts of self, with perhaps self-efficacy being most prominent (Dacre Pool & Sewell, 2007; Knight & Yorke, 2002; Turner, 2014). Self-efficacy is the 'belief in one's capabilities to organise and execute the course of action required to produce given attainments' (Bandura, 1997, p. 3). Self-efficacy beliefs do not reflect actual ability; rather, they are personal beliefs about one's ability. Self-efficacy theorises, in part, why individuals with the same skills perform differently, and why an individual performs differently under varied circumstances. Self-efficacy also affects career interests as it influences what careers we will consider attainable (Bandura, 1997). Acknowledging that self-efficacy theory is not linked to actual career ability it can, and has, been applied to employability. Both self-efficacy and employability are individual constructs that vary between individuals. Several models of employability also suggest efficacy beliefs play a mediating role between knowledge, skills, attributes and employability (Dacre Pool & Sewell, 2007; Knight & Yorke, 2002). Based on the literature, there appears to be a relationship between employability and self-efficacy, but this relationship is not well understood.

Objectives of the Study

The objectives of this study were to gain further insights about (1) undergraduate students' perspectives in non-professional faculties on employability skill development in their course work and (2) the perceived influence of the identification of employability skills in course curricula on undergraduate students. The theoretical framework used as the underpinning lens for this study was self-efficacy theory. Building on the results of a prior study (Gregory & Kanuka, 2022) which explored faculty members' perspectives in non-professional disciplines in the liberal arts on employability skill development, we included another objective: (3) to examine the alignment between students' and faculty members' perspectives about employability skill development.

Research Design

Two methods were used to collect the data for this project: an employability skill inventory for three purposively selected courses in non-professional programs in the liberal arts and a survey distributed to students in these courses. Institutional research ethics was approved for this study. To commence data collection, course syllabi were obtained from each course instructor. Using the Conference Board of Canada's (2022) inventory of employability skills, each syllabus was analysed to identify the employability skills that could be addressed in each course. The Conference Board of Canada's (2022) inventory of employability skills was selected for this study because it is commonly used by career services in Canadian postsecondary institutions, is not discipline specific, provides a succinct, description of each skill, and uses familiar language that is easy to understand. The inventory includes 56 skills organised into three categories: fundamental skills, personal management skills, and teamwork skills. A unique inventory for each course was created. The instructors of the courses selected for this study were invited to provide input on the employability skills inventory and, ultimately, made the final decision as to which skills were included in their inventory.

The survey was based on the self-efficacy questionnaire and the employability experience questionnaire, both developed by Yorke and Knight (2007). Both questionnaires included a series of statements with a Likert-type scale of twenty-seven statements. A six-point Likert-type scale from strongly disagree to strongly agree was used. Modifications of the statements used in Yorke and Knights' (2007) questionnaires were made to reflect the Canadian language use and the Canadian higher education context. In addition to these statements, demographic questions and three open-ended questions were included. The open-ended questions collected additional student comments on

employability. The survey was piloted with undergraduate students at the research site, with invitations sent to 30 students; 13 responses were received. Based on the students' feedback minor revisions were made to the survey.

Sampling procedure

Purposive sampling was used to select the undergraduate courses from three different undergraduate programs at the research site. Three courses were selected based on two key criteria: must be a second or third level undergraduate course (i.e., courses typically taken in second or third year of a degree program) and must be in a non-professional faculty. Non-professional programs were considered programs where the students do not graduate with a specific career or professional designation. Sampling began by soliciting input from colleagues around the research site who would know of interested faculty members. This resulted in the recruitment of students in three second level, relatively high enrolment courses. Two courses were in the sciences (animal science and geoscience) and one course was in the humanities (early modern English literature).

Data analysis

Yorke and Knight (2007), who developed the questionnaires used in this study, argue that self-efficacy and employability cannot be measured or generalised due to their context-specific nature. For example, a student may have strong beliefs in their ability to do well in a class, while also believing they will struggle to get a job after university. As such, we cannot assume high self-efficacy beliefs can be generalised to other contexts or individuals within the same sample population. Consequently, Yorke and Knight (2007) did not aim to develop a measurement instrument that could be used for generalisations. Rather their questionnaires, used in this study, aimed to provide insight to local groups of students, and to encourage reflection among these students (Yorke & Knight, 2007). Likewise, our aim was to gain insights rather than generalisability. The data analysis was limited to descriptive statistics and filtered by demographics to determine significant differences between gender, year of study, discipline, and employment status. A 1-tailed t-test of equal variance was conducted to determine significance between subjects. Employability skills inventories were analysed for frequency of skills to determine which skills were included in all courses, and if there were skills not included.

Results

The number of skills varied between each course. Course one had 48 skills, and both courses two and three had 31 skills. Twenty-three common skills were identified in all three courses. Eight skills were not included in any of the courses. Appendix A lists the skills identified for each of the three courses. In total, 195 students were registered across the three courses. One hundred and thirty-one students responded to the survey (67% response rate). To ensure anonymity the same survey instrument was used across the three classes and the students were not asked in which class they were enrolled. The majority of the respondents, 117 (91.41%), were between the ages of 18-24. Although all three courses were at the second-year level, the year of study varied between the respondents. The majority, 44 respondents (34.92%) identified as being in their second year. Twenty-seven respondents (21.43%) were in their first year, 36 respondents (28.57%) were in their third year, and 15 (11.90%) were in their fourth year. Only five respondents (3.17%) were in their fifth year. Students were also asked about their work situation (Table 1).

Table 1: Students Current Work Situation

	N	Percent
I work during the academic year and summer.	42	32.56
I only work during the academic year.	2	1.55
I only work during the summer.	70	54.26
I am not working, during the academic year or summer, while attending university.	14	10.85
Other	1	0.78

Note. Other response was self-employed.

The students were asked to indicate their level of agreement to a series of statements on a six-point Likert-type scale, from strongly disagree to strongly agree. Fourteen of the 27 statements were selected for statistical analysis. Statistical analysis was not conducted on all of the statements in order to avoid type one and type two errors (Table 2).

Table 2: Level of Agreement to Self-Efficacy and Employability Statements

	Strongly Disagree	N	Moderately/ Mildly Disagree	N	Mildly/ Moderately Agree	N	Strongly Agree	N	Mean	STD	Variance
My grades are reflective of the amount of work I put into my studies.	0.78%	1	8.60%	11	69.53%	89	21.09%	27	4.78	1.027	1.054
I've developed new skills through higher education.	1.56%	2	2.34%	3	51.56%	66	44.53%	57	5.21	.953	.908
Chance is influential in what I achieve in employment.	4.72%	6	34.65%	44	51.97%	66	8.66%	11	3.72	1.356	1.840
An individual can't change their intelligence by much.	22.05%	28	60.63%	77	15.75%	20	1.57%	2	2.41	1.243	1.545
I know what skills I have developed through my academic program.	1.57%	2	14.96%	19	67.71%	86	15.75%	20	4.54	1.060	1.123
I feel confident in my academic work.	0.78%	1	14.06%	18	67.19%	86	17.97%	23	4.52	1.101	1.212
I know what general skills employers expect of university graduates.	3.91%	5	28.91%	37	59.38%	76	7.81%	10	3.96	1.245	1.550
Through my academic program, I have enhanced my employability skills.	0.78%	1	7.81%	10	71.88%	92	19.53%	25	4.55	.995	.989
I expect that I will secure a job that requires a degree when I finish my degree.	0.78%	1	11.72%	15	55.47%	71	32.03%	41	4.70	1.161	1.347
I have developed employability skills in this course.	0.78%	1	8.60%	11	73.44%	94	17.19%	22	4.56	.994	.988
As a result of this course, I am more aware of the employability skills I have.	1.59%	2	26.19%	33	66.67%	84	5.56%	7	3.94	1.030	1.061
As a result of this course, I am more aware of the employability skills I need to work on.	0.78%	1	32.04%	41	60.15%	77	7.03%	9	3.91	1.080	1.166
I expect the U of A to support the development of my employability.	0.79%	1	11.81%	15	48.82%	62	38.58%	49	4.85	1.196	1.430
My employability matters a great deal to me.	0.79%	1	0.00%	0	29.37%	37	69.84%	88	5.61	.712	.507

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In addition to descriptive statistics, t-test of equal variance and ANOVA were conducted to determine significance between subjects. T-tests were conducted for gender (Table 3); ANOVA was conducted for categories with two or more options: year of study (Table 4) and work situation (Table 5). The ANOVA test for 'work situation' was calculated for the top three selected categories: I work during the academic year and summer; I only work during the summer; I am not working, during the academic year or summer, while attending university. Results were considered significant at α .05 level.

Table 3: Test of Between Subject Effects: Gender

	df	*F*	*p*
My grades are reflective of the amount of work I put into my studies.	42.410	9.159	0.003*
I developed new skills through higher education.	123	1.893	.171
Chance is influential in what I achieve in employment.	122	.443	.507
An individual can't change their intelligence by much.	41.195	22.021	.000*
I know what skills I have developed through my academic program.	43.969	4.447	0.37
I feel confident in my academic work.	123	.069	.793
I know what general skills employers expect of university graduates.	123	2.252	.136
Through my academic program, I have enhanced my employability skills.	123	.796	.374
I expect that I will secure a job that requires a degree when I finish my degree.	123	0.45	.833
I have developed employability skills in this course.	123	.485	.487
As a result of this course, I am more aware of the employability skills I have.	121	.008	.929
As a result of this course, I am more aware of the employability skills I need to work on.	123	.123	.727
I expect the U of A to support the development of my employability.	122	.062	.804
My employability matters a great deal to me.	37.800	5.416	.022

*significant at 0.05

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Table 4: Test of Between Subject Effects: Year of Study

	df	Mean	F	p
My grades are reflective of the amount of work I put into my studies.	4	.766	.709	.587
I developed new skills through higher education.	4	1.469	1.640	.169
Chance is influential in what I achieve in employment.	4	4.975	2.930	.024*
An individual can't change their intelligence by much.	4	.728	.469	.758
I know what skills I have developed through my academic program.	4	2.284	2.064	.090
I feel confident in my academic work.	4	1.989	1.668	.162
I know what general skills employers expect of university graduates.	4	1.045	.669	.614
Through my academic program, I have enhanced my employability skills.	4	1.962	2.046	.092
I expect that I will secure a job that requires a degree when I finish my degree.	4	.307	.220	.927
I have developed employability skills in this course.	4	2.207	2.322	.061
As a result of this course, I am more aware of the employability skills I have.	4	1.988	1.962	.105
As a result of this course, I am more aware of the employability skills I need to work on.	4	.416	.355	.840
I expect the U of A to support the development of my employability.	4	1.927	1.357	.253
My employability matters a great deal to me.	4	.208	.396	.811

*significant at 0.05

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Table 5: Students Current Work Situation Test of Between Subject Effects: Work Situation

	df	Mean	F	p
My grades are reflective of the amount of work I put into my studies.	2	3.248	3.142	.047*
I developed new skills through higher education.	2	1.207	1.327	.269
Chance is influential in what I achieve in employment.	2	6.544	3.807	.025*
An individual can't change their intelligence by much.	2	3.830	2.637	.076
I know what skills I have developed through my academic program.	2	.955	.843	.433
I feel confident in my academic work.	2	.471	.382	.683
I know what general skills employers expect of university graduates.	2	4.241	2.777	.066
Through my academic program, I have enhanced my employability skills.	2	3.924	4.093	.019*
I expect that I will secure a job that requires a degree when I finish my degree.	2	.282	.205	.815
I have developed employability skills in this course.	2	5.135	5.470	.005*
I know what general skills employers expect of university graduates.	2	4.241	2.777	.066
Through my academic program, I have enhanced my employability skills.	2	3.924	4.093	019*
I expect that I will secure a job that requires a degree when I finish my degree.	2	.282	.205	.815
I have developed employability skills in this course.	2	5.135	5.470	005*
As a result of this course, I am more aware of the employability skills I have.	2	3.324	3.167	.046*
As a result of this course, I am more aware of the employability skills I need to work on.	2	1.002	.853	.428
I expect the U of A to support the development of my employability.	2	.667	.458	.634
My employability matters a great deal to me.	2	1.764	3.542	.032*

*significant at 0.05

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Open-Ended Survey Questions

The survey also included three open-ended questions. Students were asked: what is your perspective on your own employability? In what ways has your university education enhanced your own employability? Please provide any suggestions for how employability skills can be further integrated into your undergraduate program course work. The open-ended questions received 101, 104, and 86 responses respectively. The responses were analysed thematically. The following key themes emerged: self-efficacy, the role of higher education in employability, skill enhancement, real-world focus, employer expectations, and career education.

Self-efficacy

When asked for perspectives on employability many of the students' comments reflect their self-efficacy. These comments were categorised as high self-efficacy and low self-efficacy. Some students seemed confident that they will find work when they complete their studies. Others also seemed confident, but recognised they still need to enhance their skills and experience. Whereas other students' responses did not suggest they are confident about finding employment after graduation.

High self-efficacy: In the context of employability, high self-efficacy involves positive beliefs in one's ability to secure a job and develop a career following graduation. Fifty-four students provided comments that reflect a high degree of self-efficacy about their employability. One comment suggested that employability correlates to education: 'I believe that the knowledge I have gained … has significantly increased my employability. I think I am very employable.' Other comments echoed this sentiment: 'I believe that through my dedication to my academic career as well as life experiences I have gained both in and outside of classrooms makes me fairly employable in today's market.' Other comments attributed employability to personal attributes, which highlight that employability is developed through multiple avenues: 'I believe that I am a strong candidate. I am hard working, dedicated and make sure my possible employers know this when I am searching for a job.' These students demonstrated high self-efficacy in their abilities to find work.

Low self-efficacy: Thirty-five students provided comments that reflect low self-efficacy about their employability. One student described their perspective on employability as 'not ideal - not sure what kind of place would hire me.' Another student's comment suggests uncertainty about their employability: 'I really do not know much about how employable I am. I think that arts gives you some good soft skills, but I don't think they are unique.' These comments highlight a degree of precariousness about employability from some students. For other students, their low self-efficacy relates to competition in the job market. As one student explained: 'Despite my own abilities and arts degree I feel my employability will be low since many people have bachelors … employers don't really care that you have a degree in arts.'

Low self-efficacy may also relate to limited experience. One student explained, 'I do not have much experience to show employers that I have the skills they are looking for.' Other comments highlight that some students recognise they are developing employability skills, yet they feel their limited experience will still hold them back. One student wrote: 'I think I have a good work ethic and the capabilities to succeed in a workplace, however because of my age and experience level I am unsure that I would be labelled employable when I graduate.'

The role of higher education in employability

Students were asked how their university education has enhanced their employability. The responses from this question highlighted the diversity in perspectives about the role of higher education. One

student described employability as a personal responsibility, and not something expected from higher education: 'It is ultimately our own skills and motivation that will determine whether or not we will be employable upon or shortly after graduating. For example, networking and 'inside' connections seem critical for just an entry level position'. Another student stated: 'Didn't come to university for employability skills. I came for … things like work ethic, teamwork, leadership, humility and communication.'

Other comments suggest some students recognise the role the university has played in developing employability. As one student stated, 'It is paramount that my employability is maximised in university, which myself and the university play a part in doing.' This was echoed by another student: 'It has taught me skills that I can use towards a future career.' Another student expressed that it will help to advance their career: 'It has prepared me to go to graduate school, which will hopefully open up more avenues to employment.' These responses highlight that students do not all share the same.

Skill enhancement

Many students described the skills they have learned thus far in their academic program and how this skill development relates to their employability. The following comment illustrates this point: 'I've learned many new skills. It has taught me leadership and teamwork skills as well as public speaking skills. This makes me more confident in approaching future employers.' Another identified the value of their skill development: 'My field is specialised and learning skills that I've acquired through school is fundamental in making me an appealing prospective employee.'

Real-world focus

Students were asked for suggestions on how employability skills could be further integrated into their course work. Many students commented that they would like to see practical, or real-world, applications of their work: 'I think that learning real-world job duties would be extremely helpful so that you know what you will be doing when you get a job in your field.' Another suggested hands-on experience: 'One thing would be more opportunities where individuals can go to get more hands-on experience rather than just textbook and talking'. Students may also not know how to transfer what they are learning to other contexts, as this student illustrates: 'I think that sometimes in these classes it is not always clear how one would apply the skills in a job.' This comment suggests that identifying transferable skills in a course may help students to identify the skills they are developing and translate what they are learning to different contexts.

Employer expectations

Forty-seven students provided comments relating to employer expectations and the need to provide additional practical applications in course work. The comments indicate that many students are unsure what employers look for when hiring. 'I have no idea if my skills make me competitive in an employer's eyes. I also am not sure what employers look for when they hire individuals fresh out of school.'

Career education

Some students commented that they need more support related to career education. Career education includes learning about what they can do with their degree, work search strategies and support, mock interviews, skills translation, events with employers and other opportunities to network, and work experience opportunities. One student commented that they want '… more discussion of potential careers that are available for each program after graduation, and the best ways to go about getting jobs.' Several other students also suggested offering a course that would address

career education: 'allow an OPTIONAL course that can be taken for credit, which will support skills (interviews, cover letters, resume, internship, etc.).' Although career education services are available to students at the research site where this study was conducted, these comments suggest students may be looking for career support within their courses and from the faculty members who teach in these programs.

Discussion

The findings of this study add to the literature with respect to the notion that employability matters a great deal to students in non-professional undergraduate degree programs. The majority of survey participants also agreed or strongly agreed that they expect their institution to play a role in their employability development. These results align with the Canadian University Survey Consortium (2016) surveys that highlight that students' primary motivations for attending university are career related, even in the non-professional programs.

Employability development in higher education can play a crucial role in preparation for the world of work. But it can also be perceived as a threat to academic freedom and capitulation to neoliberalism. In our prior study, that this study builds on (Gregory & Kanuka, 2022), faculty views on employability were not in alignment with the students who participated in this study. In our prior study, faculty who participated acknowledged that their students will eventually move into the world of work. However, they did not agree on who is responsible for preparing them for that transition. Prior literature from the perspectives of liberal arts faculty members are consistent with our prior findings. For example, Osborne and Grant-Smith (2017) argue that although employability is

> …undoubtedly an important outcome, we do not consider it our primary purpose or the yardstick by which the quality of education (and our teaching) should be measured. To do so would be to cede ground on what the role of higher education is and can be, potentially impacting negatively on both students and those who teach them (p. 59)

This example highlights that leaders at higher education institutions, governments and students cannot assume that faculty will address employability in their teaching. The findings from this study suggest that students expect to develop employability skills in their academic courses, whereas the faculty in our prior study had no intentions of addressing employability in their courses. As one faculty member in our prior study (Gregory & Kanuka, 2022) stated: 'Most of us have had a few crap jobs when we were students and then moved into this environment [academia], which is very specific and it's not like other jobs'. As this quote illustrates, faculty in non-professional programs cannot be expected to teach about employability without appropriate awareness of employability, interest in helping their students develop employability skills, and support from those with employability expertise.

Acknowledging that not all faculty can, or will, address employability for their students the results of this study indicate that integrating employability skills in courses may, with support and resources from someone with employability expertise, help provide students with a vocabulary about employability. Specifically, while the survey results indicated that students believe they are enhancing their employability skills through their course work and academic program, fewer believe they are aware of the skills they have and the skills they need to work on. This inconsistency could result from limited awareness or language about specific skills, or may suggest that students are hopeful that they are developing something through their education but do not know exactly what skills they are developing. These results are similar to what Jackson (2012) found when students were asked to self-report their skill levels. Students reported themselves to be reasonably capable, but gave themselves lower scores on critical thinking and self-awareness. Jackson's results, as well as the results in this study, may also

relate to employers' perspectives about a skills mismatch. New graduates claim they can do something, but from the perspectives of employers, do not meet their expectations (Moore & Morton, 2017). Tymon (2013) recommends explaining to students, explicitly, what skills employers want, encouraging students to reflect on this skill development. However, encouraging students to reflect on their skill development in non-professional programs is not straightforward given employment post-graduation is usually quite varied between students. Relatedly, the results from this study also showed students who worked at some point while studying demonstrated a greater awareness of employability development than students who were not working while attending university. The results from this study highlight the need for student support in identifying and assessing what skills they are developing in their academic courses. Students cannot be presumed to simply know.

Students also addressed several ways that employability skills can be further integrated into their course work. However, our prior study indicates this presents a challenge for faculty in non-professional programs where they may not have connections to industry (Gregory & Kanuka, 2022) and/or related experience. Alternatively, Brown (2015) has suggested that faculty can help students recognise the importance of soft skill development and can include learning opportunities that encourage career exploration and relate to future work, such as professional writing. But this requires faculty to be aware of the soft skills practiced in their courses, to be familiar with the career options for their students, and to know what employers expect of graduates. The results from our prior research indicates it is unreasonable to expect faculty in non-professional programs to have the time, resources, motivation and expertise to independently address employability in their courses – in addition to the fact that many faculty in the liberal arts are hostile to the idea of employability skill development (e.g., Lundgren-Resenterra & Khan, 2020). Our prior research also revealed faculty in the non-professional programs were not receptive to including employability in their courses. If universities make the decision to lean into preparing students for the world of work in the non-professional programs, resources and support needs to be offered at an institutional level. As the results of this study show, universities can support students in the non-professional programs by assisting them to identify their employability skills and how these translate to employability development.

Additional insights could also be attained through further research on additional characteristics of the students. For example, exploring relationships between self-efficacy and cultural capital might reveal further insights into employability. Additionally, building on the open-ended data, further research could explore correlations between undergraduates who were employed in some way during their studies and the impact on their self-efficacy.

Concluding remarks

Employability's role in higher education is contested, yet it is, nevertheless, expected that HEIs will help prepare students for future work. The topic of employability in HEI is certainly not new. In 1973, for example, Jacobus wrote a report entitled *Liberal arts: Education and Employability* for the Office of Equal Opportunity at Pennsylvania State University. In this report Jacobus notes,

> *The liberal arts have always been considered the purest form of education and its proponents have vigorously defended it against the encroachments of 'practicalism.' But if we can legitimately claim that liberal arts are truly an education for life, we must remind ourselves that work is the most significant ingredient of our post-educational experiences. We must re-open the liberal arts curriculum to its fullest extent.* (p. 1)

Jacobus argues further that while some faculty may be loath to admit it, '… inevitably the vast majority of undergraduates will have to confront the job market. It is incumbent upon our colleges and universities to prepare them for this role' (p. 8). The findings in our prior research revealed that faculty acknowledged the importance of employability but did not consider employability and employability skill development to be their responsibility. From their perspective, to use a quote from our prior study, 'students need to own their responsibility and not expect their instructors will enhance their employability' (Gregory & Kanuka, 2022). This is consistent with Hemmy and Mehta's study (2021) which showed that perhaps it is, '… not so much the value of a liberal arts degree, which remains undeniable, but the processes whereby students themselves could be made aware of this connection between academic pursuit and professional opportunities accorded or available to them' (p. 290). Similarly, the report by Jacobus (1973) suggests that upon graduation students should be told: 'You're in the real world now; no mollycoddling or handholding allowed' (p. 40).

It is also important to note in our concluding comments that according to Statistics Canada (2011), graduates with liberal arts degrees do, in fact, get jobs. The National Household Survey (Statistics Canada, 2011) reported that almost 40,000 employed Canadians have a bachelor's degree in history. Eighteen percent of these graduates work in management occupations and 23% work in business, finance and other administrative positions. Additionally, graduates with degrees in geography in 2011 earned, on average, above $72,000 annually; this salary is similar to earnings of graduates with degrees in biological and biomedical sciences from Canadian universities. While graduates in the social sciences and humanities tend to have a more difficult time transitioning into the job market than graduates of applied programs (Giles & Drewes, 2002), more recent data shows that the average earnings of social sciences bachelor's graduates begin at around $40,000 (which is lower than most applied program graduates' salaries in Canada) but within 13 years almost double to just under $80,000, which is well above most applied program graduates' salaries and similar to average earnings for math and natural science graduates at the same point in their careers. Moreover, once established in the job market, and beyond the age of 45, social sciences and humanities graduates face fewer unemployment weeks on average than graduates of applied programs (Giles & Drews, 2002). Based on additional data from Canada's largest employers, when evaluating entry-level hires, 'Employers value soft skills over technical knowledge. The soft skills most often listed as desirable by employers include relationship-building, communication and problem-solving skills, analytical and leadership abilities – attributes developed and honed through studies in the social sciences and humanities' (Universities Canada, 2016). According to Hemmy and Mehta (2021), many employers also prefer liberal arts graduates because they are 'more capable of delivering creative solutions and adapting to an ever-changing economy' (p. 278). These studies along with Canadian statistics illustrate there is value in liberal arts and humanities degrees, beyond 'knowledge for knowledge's sake' – and flies in the face of a quote by President Barack Obama who remarked while at a General Electric plant in 2014, 'I promise you, folks can make a lot more, potentially, with skilled manufacturing or the trades than they might with an art history degree' (Madhani, 2014).

Arising from the findings from this study, the prior literature and employment statistics, a final conclusion of this research project is that the responsibility for employability skill development cannot fall solely to one group, and in particular it cannot fall on the faculty who teach in these programs. These results are also consistent with the findings of other studies that a shared responsibility is needed (e.g., Ferns et al., 2019).

References

Artess, J., Hooley, A. J., & Mellors-Bourne, R. (2017). Employability: A review of the literature 2012 to 2016. *Higher Education Academy.* https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/hea/private/resources/employability_a_review_of_the_literature_1568037358.pdf

Bandura, A. (1997). *Self-Efficacy: The Exercise of Control.* W.H. Freeman.

Bridgstock R (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development, 28*(1), 31-44. https://doi.org/10.1080/07294360802444347

Brown, K. E. (2015). Employability and the liberal arts: A career readiness initiative. *Thought & Action: The NEA Higher Education Journal*. ERIC EJ1072089. https://web.archive.org/web/20160322053236/https://www.nea.org/assets/docs/g-KatherineBrown_SF.pdf

Brown, M. (2018, September 11). *U of A grads maintain highest employment rate in Canada, according to latest survey*. Folio, University of Alberta. https://www.ualberta.ca/folio/2018/09/u-of-a-grads-maintain-highest-employment-rate-in-canada-according-to-latest-survey.html

Campbell, M., Cooper, B., Rueckert, C., & Smith, J. (2019). Reimagining student employability: a case study of policy and practice transformation. *Journal of Higher Education Policy and Management, 41*(5), 500-517. https://doi.org/10.1080/1360080X.2019.1646379

Canadian University Survey Consortium (2016). 2016 First-year university student survey. http://www.cusc-ccreu.ca/publications/CUSC_2016-First-Year-Report-EN.pdf

Clark, J. (2020, July 14). *College alumni see room for job-skill improvement*. Gallup Education https://news.gallup.com/poll/315500/college-alumni-room-job-skill-improvement.aspx

Collins, M. (2021, May). *Ensuring more equitable future: Addressing skills gap through multiple, nuanced solutions*. Postsecondary Value Commission. https://www.postsecondaryvalue.org/wp-content/uploads/2021/07/PVC-Collins-FINAL-7.2.pdf

Conference Board of Canada (2022). *Employability Skills*. https://web.archive.org/web/20220524100852/https://www.conferenceboard.ca/edu/employability-skills.aspx

Dacre Pool, L. & Sewell, P. (2007). The key to employability: Developing a practical model of graduate employability. *Education + Training, 49*(4), 277-289. https://doi.org/10.1108/00400910710754435

Durazzi, N. (2021). Opening universities' doors for business? Marketization, the search for differentiation and employability in England. *Journal of Social Policy, 50*(2), 386–405. https://doi.org/10.1017/S0047279420000276

Fenesi, B. & Sana, F. (2015). What is your degree worth? The relationship between post-secondary programs and employment outcomes. *Canadian Journal of Higher Education, 45*(4), 383-399. https://journals.sfu.ca/cjhe/index.php/cjhe/article/view/183604

Ferns, S., Dawson, V., & Howitt, C. (2019). A collaborative framework for enhancing graduate employability. *International Journal of Work-Integrated Learning, 20*(2), 99-111. https://files.eric.ed.gov/fulltext/EJ1226180.pdf

Giles, P. & Drewes, T. (2002). Liberal Arts Degrees and the Labour Market. *Perspectives, Autumn 2002,* 27-33. https://www150.statcan.gc.ca/n1/en/pub/75-001-x/00701/5883-eng.pdf?st=zhK1veCR

Gregory, E. & Kanuka, H. (2022). Employability skill development: Faculty members' perspectives in non-professional programs. *Canadian Journal of Career Development, 21*(1), 4-16. https://doi.org/10.53379/cjcd.2022.120

Hemmy, K. & Mehta, S. R. (2021). The role of liberal arts in a skilled economy: A case study in Oman. *Arts and Humanities in Higher Education, 20*(3), 274-294. https://doi.org/10.1177/1474022220949432

Jackson D (2012). Business undergraduates' perceptions of their capabilities in employability skills: Implications for industry and higher education. *Industry and Higher Education, 26*(5), 345-356. https://doi.org/10.5367/ihe.2012.0117

Jacobus, P. E. (1973). Liberal arts: Education and Employability. *Office of Equal Opportunity Pennsylvania Department of Education*. https://files.eric.ed.gov/fulltext/ED116508.pdf

Knight, P. T. & Yorke, M. (2002). Employability through the curriculum. *Tertiary Education and Management, 8*, 261-276. [online]. https://doi.org/10.1023/A:1021222629067

Lock, E. & Kelly, K. (2022). Gateways Not Pathways: Student Perceptions of the Portals to Employability. *Journal of Teaching and Learning for Graduate Employability*, *13*(1), 65–78. https://doi.org/10.21153/jtlge2022vol13no1art1499

Lundgren-Resenterra, M. & Kahn, P. E. (2020). Higher education in a post-truth era: whose agency is triggered by a focus on employability? *Journal of Critical Realism, 19*(4), 415-431. https://doi.org/10.1080/14767430.2020.1805277

Madhani, A. (2014, February 19). *Obama apologizes for joking about art history majors*. USA Today. https://www.usatoday.com/story/theoval/2014/02/19/obama-apologizes-to-texas-art-history-professor/5609089/

Molla, T. & Cuthbert, D. (2015). The issue of research graduate employability in Australia: An analysis of the policy framing (1999-2013). *The Australian Association for Research in Education, 42*, 237-256. https://doi.org/10.1007/s13384-015-0171-6

Moore, T. & Morton, J. (2017). The myth of job readiness? Written communication, employability, and the 'skills gaps' in higher education. *Studies in Higher Education, 42*(3), 591-609. https://doi.org/10.1080/03075079.2015.1067602

Ng, P. M. L., Chan, L. J. K. Y., Wut, T. M., Lo, M. F., & Szeto, I. (2021). What makes better career opportunities for young graduates? Examining acquired employability skills in higher education institutions. *Education and Training, 63*(6), 852-871. https://doi.org/10.1108/ET-08-2020-0231

Osborne, N. & Grant-Smith, D. (2017). Resisting the 'employability' doctrine through anarchist pedagogies & prefiguration. *Australia Universities' Review, 59*(2), 59-69. https://files.eric.ed.gov/fulltext/EJ1157049.pdf

Pereira, E. T., Vilas-Boas, M., & Rebelo, C. F. C. (2020). University curricula and employability: The stakeholders' views for a future agenda. *Industry and Higher Education, 34*(5), 321–329. https://doi.org/10.1177/0950422220901676

Pew Research Center (2016, October 6). *The value of a college education*. https://www.pewsocialtrends.org/2016/10/06/5-the-value-of-a-college-education/

Rees, S. (2021). Re-imagining employability: an ontology of employability best practice in higher education institutions. *Teaching in Higher Education, 26*(5), 663-678. https://doi.org/10.1080/03075079.2019.1623770

Römgens, I,, Scoupe, R., & Beausaert, S. (2020). Unraveling the concept of employability, bringing together research on employability in higher education and the workplace. *Studies in Higher Education, 45*(12), 2588-2603. https://doi-org/10.1080/03075079.2019.1623770

Statistics Canada (2011). National Household Survey. https://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/index.cfm?Lang=E

Tomasson Goodwin, J., Goh, J., Verkoeyen, S., & Lithgow, K. (2019). Can students be taught to articulate employability skills?. *Education + Training*, *61*(4), 445-460. https://doi.org/10.1108/ET-08-2018-0186

Tomlinson, M. (2017). Forms of graduate capital and their relationship to graduate employability, *Education + Training, 59*(4), 338-352. https://doi.org/10.1108/ET-05-2016-0090

Turner, N. K. (2014). Development of self-belief for employability in higher education: Ability, efficacy and control in context. *Teaching in Higher Education, 19*(6), 592-602. https://doi.org/10.1080/13562517.2014.901951

Tymon, A. (2013) The student perspective on employability. *Studies in Higher Education, 38*(6), 841-856. https://doi.org/10.1080/03075079.2011.604408

Universities Canada (2016, March). *Quick Facts on the Value of Liberal Arts*. https://www.univcan.ca/wp-content/uploads/2016/03/liberal-arts-quick-facts-2016-1.pdf

Yorke, M. (2006). *Employability in higher education: What it is - what it is not*. Learning and Employability Series One. Enhancing Student Employability Co-ordination Team (ESECT) and The Higher Education Academy. https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/hea/private/id116_employability_in_higher_education_336_1568036711.pdf

Yorke, M. & Knight, P. (2007). Evidence-informed pedagogy and the enhancement of student employability. *Teaching in Higher Education, 12*(2), 157-170. https://doi.org/10.1080/13562510701191877

Appendix A: Employability Skills Identified for Participating Courses

	Course 1 Science (applied)	Course 2 Science	Course 3 Arts and Humanities
Fundamental Skills			
Communication			
Read and understand information presented in a variety of forms (e.g., words, graphs, charts, diagrams)	X	X	X
Write and speak so others pay attention and understand	X	X	X
Listen and ask questions to understand and appreciate the points of view of others	X		X
Share information using a range of information and communications technologies (e.g., voice, e-mail, computers)	X	X	X
Use relevant scientific, technological, and mathematical knowledge and skills to explain or clarify ideas	X	X	X
Manage Information			
Locate, gather, and organize information using appropriate technology and information systems	X	X	X
Access, analyse, and apply knowledge and skills from various disciplines (e.g., the arts, languages, science, technology, mathematics, social sciences, and the humanities)	X	X	X
Use Numbers			
Decide what needs to be measured or calculated	X	X	
Observe and record data using appropriate methods, tools, and technology	X	X	
Make estimates and verify calculations	X	X	
Think and Solve Problems			
Assess situations and identify problems	X	X	X
*Seek different points of view and evaluate them based on facts			
Recognize the human, interpersonal, technical, scientific, and mathematical dimensions of a problem	X	X	X
Identify the root cause of a problem	X		X
Be creative and innovative in exploring possible solutions	X		X
Readily use science, technology, and mathematics as ways to think, gain, and share knowledge, solve problems, and make decisions	X	X	
*Evaluate solutions to make recommendations or decisions	X		
Implement solutions			
Check to see if a solution works, and act on opportunities for improvement			

Personal Management Skills			
Demonstrate Positive Attitudes and Behaviours			
*Feel good about yourself and be confident			
Deal with people, problems, and situations with honesty, integrity, and personal ethics	X	X	X
Recognize your own and other people's good efforts	X		
*Take care of your personal health			
Show interest, initiative, and effort	X	X	X
Be Responsible			
Set goals and priorities balancing work and personal life	X	X	X
Plan and manage time, money, and other resources to achieve goals	X	X	X
*Assess, weigh, and manage risk			
Be accountable for your actions and the actions of your group	X	X	X
*Be socially responsible and contribute to your community			
Be Adaptable			
Work independently or as part of a team	X	X	X
Carry out multiple tasks or projects	X	X	X
Be innovative and resourceful: identify and suggest alternative ways to achieve goals and get the job done	X		
Be open and respond constructively to change	X		
Learn from your mistakes and accept feedback	X	X	X
Cope with uncertainty	X	X	X
Learning Continuously			
*Be willing to continuously learn and grow			
Assess personal strengths and areas for development	X	X	
Set your own learning goals	X		
Identify and access learning sources and opportunities	X	X	X
Plan for and achieve your learning goals	X		
Work Safely			
Be aware of personal and group health and safety practices and procedures, and act in accordance with them	X	X	
Teamwork Skills			
Work With Others			
Understand and work within the dynamics of a group	X		X
Ensure that a team's purpose and objectives are clear	X		
Be flexible: respect, and be open to and supportive of the thoughts, opinions, and contributions of others in a group	X		X
Recognize and respect people's diversity, individual differences, and perspectives	X		X

Accept and provide feedback in a constructive and considerate manner	X		X
Contribute to a team by sharing information and expertise	X	X	X
Lead or support when appropriate, motivating a group for high performance	X	X	
Understand the role of conflict in a group to reach solutions	X		X
Manage and resolve conflict when appropriate	X		
Participate in Projects and Tasks			
Plan, design, or carry out a project or task from start to finish with well-defined objectives and outcomes	X	X	X
Develop a plan, seek feedback, test, revise, and implement	X		
Work to agreed-upon quality standards and specifications	X	X	X
Select and use appropriate tools and technology for a task or project	X	X	
Adapt to changing requirements and information	X	X	X
Continuously monitor the success of a project or task and identify ways to improve	X	X	X

* Skills that were not identified in any of the courses