Exploring the Perceived Value of an Open Digital Badge for Virtual Collaboration

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Abstract: Despite the recent growth in the development of alternative digital credentials within post-secondary education, students remain uncertain about their value and use. This article presents findings of a study conducted at McMaster University involving the implementation of an open digital badge to validate virtual collaboration within an experiential learning undergraduate-level course. The experience enabled students to demonstrate skills specific to talent acquisition within the human resources management diploma program while working collaboratively and virtually on an industry business project. Students who were successful in acquiring the virtual collaboration digital badge were surveyed both at the end of the course and 6-months following the completion of the course. The two questionnaires revealed that while the value of virtual collaboration as a skill-set was perceived as important, there is still uncertainty as to what an open digital badge is and how it can be of benefit to individuals.

Keywords: Micro-credentials, Soft-skills, Open Digital Badges, Virtual Collaboration

Introduction

The world of academic credentials is going through a rapid change that has seen the emergence of alternative digital credentials (Matkin, 2018). Among these are micro-certificates, digital diplomas, and open digital badges, all of which provide an authenticated digital record of learning. This study specifically focuses on digital badges and aims to investigate student perception of these emerging digital credentials. To that end, the following sections first introduce the concept of digital badges compared with academic certificates, followed by a review of critical digital pedagogy and prior local and international empirical research as the guiding framework for this empirical study. The methodology, results, and discussion are then presented for this empirical study with conclusions for students' views toward digital badges.

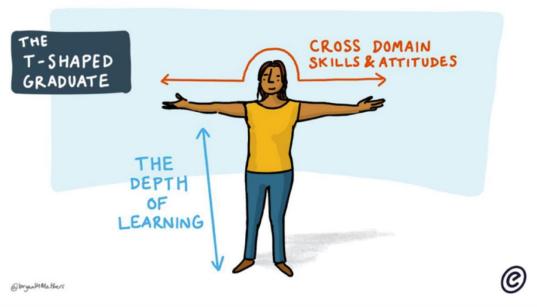
Background

Digital badges have the possibility of not only altering the landscape of academic credentials, but transforming the relationship between institutions of higher education, their learners, and society (Gooch, 2019). Digital badges are a validated indicator of a specific accomplishment, skill, and competency that can be earned in various learning environments (Carey, 2012). They can be added to a digital portfolio or a professional networking site such as *LinkedIn* for others to see. Because they contain metadata (i.e. a series of links that indicate what the badge is for, what criteria were used to award the badge, and any standards associated with the badge including knowledge, skills, or competencies that have been determined by the issuers) about what was accomplished in order to earn the badge, they provide more detailed information about what the recipient learned than traditional paper credentials (Devedžić & Jovanović, 2015). The use of these digital credentials can provide an information-rich record of career relevant skills and competencies, which could in time, render traditional university transcripts increasingly irrelevant and obsolete (Elliott et al., 2014). While earning traditional degrees will remain important to most of those entering the early stages of a career, alternative forms of digital learning verifications are quickly creating a new system of skill and knowledge validation for more seasoned learners looking to go beyond an initial undergraduate degree (Matkin, 2018). These non-traditional learners fall into three categories: they are looking to validate newfound skills to advance in their career, they are displaced workers looking to validate skills to open new employment opportunities, or they are new immigrants seeking to enter the labour force in a field where they may have previously worked or wish to work (Chen, 2017; Kerr, 2011; Schuetze, 2014).

Digital badges are an ideal means by which these non-traditional students can validate not only technical, but also transversal or soft skills - the types of skills that employees must demonstrate to be truly successful in the 21st century (The Conference Board of Canada, 2019). Many of the new skills needed will be proficiencies such as attentive listening, critical thinking, digital fluency, active learning, problem solving, teamwork and flexibility, as well as virtual leadership and collaboration (Bates, 2019; Royal Bank of Canada, 2018). These are skills that automation and artificial intelligence will not replace but will certainly be in high demand in what we now refer to as the new digital economy (Bates, 2019; Hart Research Associates, 2015). In addition, these skills, as depicted in Figure 1, will be even more important in the forthcoming post-COVID world of work in which we find ourselves because of the shift to more and

more virtual communications and the need to collaborate in that domain (Deloite, 2020; Feld et al., 2020; Spitzmuller et al., 2021). Within this context, the vertical stroke of the T in Figure 1 represents the disciplinary specialization and the deep understanding of one or more specific areas of a typical graduate. The defining characteristic of a graduate though is represented by the horizontal bar, which embodies broader generic attributes and the ability to collaborate across a variety of different disciplines. Open digital badges enable individuals to clearly communicate these skills in a certifiable manner which goes way beyond what a traditional transcript or even resume can do (Matkin, 2018).

Figure 1
The T-shaped graduate



Source: eCampusOntario

Theoretical Framework and Rationale for Open Digital Badges

This study is grounded on critical digital pedagogy (Morris & Stommel, 2018; Stommel et al., 2020). Critical digital pedagogy was born from a broader theoretical foundation, namely critical pedagogy. In its purest form, critical pedagogy provides a lens to teaching and learning which is concerned with transforming relationships of power which are repressive and which lead to the subjugation of individuals (Giroux, 2010). Critical pedagogy opposes the banking model of education wherein it is assumed that instructors can simply deposit knowledge into the minds of learners (Freire, 2009). Instead, proponents of critical pedagogy argue in favour of a model which promotes contextual problem solving as a better way to learn (Morris, 2017).

Within a classroom setting, critical pedagogy seeks to humanize and empower learners. Unlike the banking model, it maintains that one of the fundamental tasks of educators is to make sure that the future points to a more socially just world, a world in which the discourses of critique and possibility are partnered with the values of reason, freedom, and equality (Giroux, 2010).

Critical digital pedagogy evolved from critical pedagogy but moves questions around learning into the digital domain, an area which has become commonplace in much of the learning that K-12 and post-secondary education espouses (Morris & Stommel, 2018). Critical digital pedagogy is a main driver in the critique of how institutions recognize learning. The recent growth of open digital badges has provided students with a tangible tool which learners can own, and which can more clearly communicate proficiency, not only in theory and skills related to their chosen subject area, but also in soft skills such as adaptability, curiosity, creativity, collaboration, and teamwork (Matturro, 2013; Randstad Canada, 2019; Tomić et al., 2019).

The traditional academic transcript lacks in its ability to convey such information as to an individual's abilities that are needed in the workplace. It confirms only courses taken and grades associated with them. It lacks the transparent nature and detail available through metadata in open digital badges (Ahn et al., 2014).

The gatekeeper of academic transcripts is the institution. Students must apply to access and share this information whenever they wish to distribute it with another academic institution or a potential employer, even though, one could argue, that it is theirs from the very beginning. The information is guarded and only released upon very specific conditions, including a specific fee which the learner must pay to the institution to release one's own records.

Open digital badges and other forms of alternative digital credentials shift the balance of power of information and ownership (key concepts of critical digital pedagogy) from the academic institution, to the student, to own it and use it with whomever they wish without having to go through a long process of asking for access to what is rightfully theirs (Matkin, 2018). Open digital badges thereby enable the dismantling and rebuilding of the structures, hierarchies, and institutions of education, another principle associated with critical digital pedagogy (Morris & Stommel, 2018).

Overall, an alternative digital credential can liberate students from a history of reliance on traditional credentials and institutional transcripts which lack the rich detail of a digital credential. An open digital credential places the power of achievement with all of its transparent details with the owner and provides a tool for career success not previously available (Matkin, 2020). Consistent with the spirit of critical pedagogy, alternative digital credentials also empower students to be engaged and thoughtful participants in their own learning and career development (Young, 2019).

Examples of How Open Digital Badges are Being Used to Assess Soft Skills

Engineering students at McMaster University, are given the opportunity to work on extra-curricular projects aimed at revitalizing the urban landscape in Hamilton, Ontario while engaging learners with community partners. It is a vibrant example of experiential learning whereby participants may receive an open digital badge recognizing skills in research, entrepreneurship, communication, and collaboration (Lewington, 2019). Other Canadian post-secondary institutions have begun experimenting with micro-credentials and badges as a complement to the academic transcript (eCampusOntario, 2020). These opportunities often link to additional volunteer activities, internships, and other activities that enable the student to build a more well-rounded view of their individual career-related competencies.

In Finland, where the gaming industry has developed enormously over the past decade, the skills and competencies needed for employment in a gaming company are only partially provided by formal academic programs. Many individuals acquire these skills in a very informal manner, often outside of the bounds of academic institutions. However, the fact that the learning occurs outside of the traditional systems surrounding these institutions means that these soft skills are not usually captured properly. As a result, they are not communicated to potential employers adequately. The work of Kuhmonen et al. (2018) proposes that open digital badges are a solution to this challenge. Working with institutions of gaming programs in Finland, their work highlights the important role of project management skills in the gaming industry as well as the ability to capture other related skills and competencies in the form of digital badges.

Similar examples of badges being used to recognize soft skills training within technical programs exist (Malczyk, 2019; Matturro, 2013; Tomić et al., 2019). Malczyk (2019) highlights an example of badges used within a Bachelor of Social Work program to recognize competency in self-care. Students who complete this badge, complete several academic projects which include readings on self-care, self-assessment and worksheets, written self-care plans, and the completion of a final report on the self-care practices.

Matturro (2013) underlined the success of open digital badges in recognizing soft skills training in software engineering programs. His study considered soft skills in demand within the Uruguayan software industry. According to industry feedback, soft skills, such as interpersonal skills, teamwork, problem solving, and customer orientation to name just a few, are as important as traditional qualifications and technical skills (Matturro, 2013).

Skills such as collaboration, solving real-world problems, teamwork, leadership, and communication can be the difference in landing a job (Murgatroyd, 2018). Tomić et al. (2019) indicate that these skills are rarely assessed and acknowledged in regular software engineering programs. Their work describes the results of a small case study

involving an extracurricular Java programming course in which, in addition to knowledge and skills in relevant technologies, students' soft skills were also assessed, and open digital badges were awarded to those who demonstrated success therein. The results of the study by Tomić et al. (2019) suggest that students perceived soft and hard skills as equally important for their future career. In another study, programming students also confirmed the same level of perception towards these skills; among these, real-world problem-solving skill was rated as the most important (Khalil et al., 2018).

Building on prior studies but in the Canadian context, this study reports on a partnership between McMaster University Continuing Education, in Hamilton, Ontario, and Riipen Networks Inc., Vancouver, British Columbia in developing and delivering experiential learning opportunities to students in *HRM 897 Talent Acquisition* (Fall 2019), a core course in the Human Resources Management diploma program. Students demonstrate knowledge and mastery of skills within the course while working collaboratively in virtual teams on real business projects. The projects are provided by corporate partners who also liaise with students to provide coaching. In addition to completing the project work and other assessments towards the completion of course credit, students are provided with an opportunity to acquire an open digital badge validating their mastery in virtual collaboration.

Method: Data Collection and Analysis

McMaster University Continuing Education offers a for-credit diploma in Human Resources Management aligned with the Certified Human Resources Professional (CHRP) and Certified Human Resources Leader (CHRL) designations from the Human Resources Professional Association (HRPATM). A number of courses within this program are designed with experiential learning assessments in mind, part of an overall design strategy to move courses away from traditional assessments into more active and applied learning. In Fall 2019, HRM 897 Talent Acquisition, a core course within the Human Resources Management program, was designated for a pilot to include the embedding of an open digital badge as an option, for those students who wished to be recognized for successful mastery of virtual collaboration. Students were provided with an overview of the process (see Appendix A). The completion of the work involved in acquiring the badge was also laid out for students in detail and involved completing a peer evaluation completed midway through the group project, and the self-reflection assignment/peer evaluation completed at the end of the group project (see Appendixes B and C). Successful completion of these items constitutes the required work towards receiving the McMaster University – Riipen open digital badge for virtual collaboration. The badge itself was issued through CanCred Factory, a secure cloud service that academic institutions can use to issue trusted micro-credentials and other types of portable digital credentials certified to the Open Badge standard (CanCred.Ca, 2020). Students can then use the CanCred Passport, an easy-to-use repository where one can place and share micro-credentials and badges.

Two sections of HRM 897 Talent Acquisition were offered in the Fall 2019 term, one being online (55 students enrolled) and the other being a traditional in-person delivery (11 students enrolled). In the online offering, 53 students were awarded the badge, while 9 of the 11 enrolled in the in-person delivery were awarded the badge.

The industry partner for the online section was *Freedom 55 Financial*, a professional financial planning company. The project involved developing a recruitment strategy focused on a specific financial advisor role. The industry partner for the in-person section was the *Canadian Council on Rehabilitation and Work*, a nation-wide network of organizations and individuals that offer information, education, training, and internet-based services which support the employment of persons with disabilities. The project involved an evaluation of the company's existing recruitment practices and recommendations for revisions.

Following the completion of the course, students who were successful in achieving the virtual collaboration digital badge were invited to complete a questionnaire and asked to provide their opinion on their experiences, the perceived value of the badge, and future plans. The questioning occurred at two points in time so as to provide a picture of perception immediately following the completion of the course as well as at 6-months following the completion of the course, so as to explore what effect the obtaining of the badge may have had on the individual. The exit questionnaire was sent to all 62 students who achieved the virtual collaboration open digital badge. A total of 23 students (37% response rate) answered the questionnaire. The data for 23 students were analyzed and displayed in tables which enabled observations to be drawn.

Findings

Initially, a very small number of students claimed that they were familiar with the concept of open digital badges prior to taking the course. Only two students (8.70%) of the 23 who responded were fully familiar with the idea of digital badges as an academic credential. Only 1 student (4.30%) of the 23 students who responded had ever received an open digital badge prior to their experience in this course.

When asked how they planned to use their badge in the future the answers varied. Students were allowed to select multiple options, but in general the most popular answers included posting their badge on LinkedIn, referencing the badge on their resume, and including the badge when applying for jobs (see Table 1). Only one respondent (4.35%) indicated that he/she would not be using the badge. In addition, 6 respondents (26.09%) indicated that they were not sure how they will use the badge, which again, could be an indication of lack of knowledge and an opportunity to educated students further.

Table 1. How do you plan to use your badge in the future? Check all that apply.

Answer Choices	Responses	
I will include a link to the badge when applying for	30.43% (7)	
jobs.	42 400/ (10)	
I will reference the badge on my resume.	43.48% (10)	
I will post the badge on my LinkedIn profile	69.57% (16)	
I will post the badge on another ePortfolio tool, other than LinkedIn. (eg. Portfolium)	13.04% (3)	
I'm not sure how I will use the badge.	26.09% (6)	
I do not plan to use the badge.	4.35% (1)	
Other (please specify)	0.00% (0)	
n=23		

When asked how much of an impact the badge will have on their career path, one respondent (4.35%) reported a significant impact, 8 respondents (34.78%) indicated a *moderate impact* while 11 (47.83%) respondents indicated that the badge would have *some impact* (see Table 2).

Table 2. How much of an impact do you think this badge will have on your career path?

Answer Choices	Responses
Significant Impact	4.35%
	1
Moderate Impact	34.78%
_	8
Some Impact	47.83%
	11
No Impact At All	13.04%
	3
n = 23	

When asked if they were offered another opportunity to earn a digital badge for a skill or achievement, 18 respondents (78.26%) indicated they would pursue it (see question 5, Appendix D). The questionnaire concluded by asking students if there was anything they would like to share about their experience earning this digital badge (see question 6, Appendix D). While the question was optional, two comments were received, which shed light on the idea of knowledge about open digital badges.

Comment 1: "I think it depends on how many OTHER people know about the digital badges."

Comment 2: "I want to flaunt and grab attention, but I am not sure how much people are aware of this badge. I would suggest there should be enough advertising of this badge, so it reaches to people to be aware of its importance."

The reality is that for any form of digital credentials to succeed, they will need to be fully understood by not only the academic institution that grants them, but by the public, and industry (Gauthier, 2020; Presant, 2020). A recent survey conducted amongst the business sector confirms that employers are supportive of a system such as open digital badges which provides greater detail in terms of specific competencies and skills earned by university and college graduates (Raish & Rimland, 2016). In this study, an online survey sent to employers to gauge perceptions of information literacy of post-secondary graduates revealed that employers would like more detailed depictions of student skills; open digital badges hold the key to such a system. The underlying conclusion revealed by Raish and Rimland (2016) indicates that only 5 percent of 114 employers were not interested in using digital badges as a way to certify an individual's skills. However, a significantly large percentage of respondents indicated they would need to learn more (62%), which accentuates the need for heightened awareness and education about how open digital badges work.

Given all of these findings, McMaster University Continuing Education was interested in the opinion of students who had earned the virtual collaboration badge six-months after the completion of their course. Of particular interest was how the badge might have been used in career-related activity during that time. With this end in mind, a second questionnaire was sent to the same group of students in June 2020 (see Appendix E).

The first section of the questionnaire explored the perceived value of the badge earned toward advancing one's career aspirations and being able to enhance the communication of one's experience and skills. As expected, the number of respondents dropped off significantly with only 10 respondents taking part in the questionnaire. Although it is difficult to make strong conclusions based on such a small sample size, it is possible to arrive at some general observations.

In the case of the first two questions (see Table 3) the most common response was "not sure". When asked if earning a digital badge(s) helped the student to better present oneself and one's skills to prospective employers (over the last 6 months), four respondents (40%) indicated they were not sure. Another three respondents (30%) indicated that the questions were not applicable to their current situation. When asked if earning a digital badge(s) was instrumental in helping one find a job or landing a promotion (over the last 6 months), again, the highest response was "not sure" (four respondents, or 40%). An additional four respondents indicated that the questions did not apply to them.

When asked if in general, digital badges are an effective way to communicate one's experience and skills, only two (20%) respondents indicated that they either agreed or strongly agreed. Another four (40%) respondents expressed that they were "not sure" while another three (30%) indicated that the situation did not apply to them at this time. Regardless of the question, neither garnered an outright positive or negative opinion. The "not sure" response likely indicates that either the individual did not have a chance to weigh the advantages or disadvantages of their open digital badge, or they did not have a chance to use it in career-related activities.

Table 3. Perceived value of the virtual collaboration open digital badge (6-mo after course)

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree	N/A
Earning digital badge(s) helped me to	0.0%	10.0%	40.0%	10.0%	10.0%	30.0%
better present myself and my skills to prospective employers (over the last 6 months).	0	1	4	1	1	3
Earning digital badge(s) was	0.0%	20.0%	40.0%	0.0%	0.0%	40.0%
instrumental in helping me find a job or landing a promotion (over the last 6 months)	0	2	4	0	0	4
In general, digital badges are an	10.0%	10.0%	30.0%	30.0%	10.0%	10.0%
effective way to communicate my experience and skills n = 10	1	1	3	3	1	1

However, when the same respondents were asked to provide input on the importance of specific skills that they would have used in acquiring the virtual collaboration digital badge, the responses revealed much more agreement (see Table 4). Seven respondents (70%) indicated that communication was either somewhat important, or very important skill within their current workplace. Another five respondents (50%) indicated that virtual collaboration was very important within their current workplace. It should be noted that this questionnaire took place several months after the general shut-down of many workplaces due to the ongoing COVID-19 pandemic. It would be interesting to see how virtual collaboration is perceived by employers in the months to come in a workplace which has become more reliant on remote and virtual operations (UN News, 2020).

In terms of problem solving, seven respondents (70%) indicated that the ability to problem solve effectively was either somewhat important or very important. Finally, when asked if the respondents would pursue an opportunity to earn another open digital badge for a skill or achievement, seven respondents (70%) indicated they would.

Table 4. How important are the following skills or competencies in your work?

	Not Important At All	Somewhat Unimportant	Neutral	Somewhat Important	Very Important	N/A
Rate the importance of communication within your current work	0.0%	0.0%	20.0%	10.0%	60.0%	10.0% 1
Rate the importance of virtual collaboration within your current work	0.0%	10.0%	30.0%	0.0%	50.0%	10.0% 1
Rate the importance of problem solving within your current work $n = 10$	0.0%	0.0%	10.0% 1	30.0%	40.0%	20.0%

It appears that two conclusions can be made from the 10 participants' responses to this post-course questionnaire:

- 1. While the value of virtual collaboration as a recognized skill set was not questioned, there is still a great deal of uncertainty as to what an open digital badge is and how it can be of benefit to individuals.
- 2. There is generally support for the concept of a badge and the promise that comes with it, however further research is needed as to how students can leverage their benefits.

Discussion and Conclusion

Despite the previously noted advantages of digital badges, the study conducted within this article, still points to a lack of clarity from students as to what badges are and what they can do with them. While students who received the digital badge for virtual collaboration supported the concept of having their skills and knowledge recognized in this fashion, they seemed not all together sure of how they would use the badge in their near future.

The modern credentialing system was established over two centuries ago, alongside the establishment of modern schools and universities and their interconnected assessment techniques and credentialing systems. It will take some time to raise enough momentum for digital credentials such as badges to comfortably settle into academic institutions of higher learning. Continued research, piloting, and observation with larger samples will clarify what works and what does not on route to finding digital badging systems, policies, and procedures that can be agreed-upon.

The findings presented within this paper, while very small in scale, provide emerging evidence that open digital badges can play a major role in validating soft skills and credentialing alongside traditional academic credit courses, however, institutions need to continue to research learners' views about digital badges and educate them about their benefits.

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APPENDIX A: Virtual Collaboration Badge Overview

What is the Virtual Collaboration Badge?

McMaster Continuing Education is offering students who complete the experiential learning project in HRM 897 Talent Acquisition the opportunity to earn an *Open Badge* that provides evidence of working effectively and virtually with colleagues on a collaborative project, a skill which is increasingly in demand in today's workplace.

What is an Open Badge?

An open badge is a digital credential that recognizes the learning, know-how, achievements, skills and attitudes that are acquired over an individual's life, not only through formal education, but through other forms of training. Essentially, a badge is an electronic representation of your skills or accomplishments documented in a graphical symbol that is embedded with verifiable data and evidence commonly referred to as 'metadata'. The badge enables you to better communicate your achievements and knowledge to others such as prospective employers and professional networks. A versatile and interesting collection of digital badges can therefore be used to better support job applications or admission to educational programs.

Although this technology is relatively new, millions of badges have already been issued around the world. Open badge technology has proven useful for learners, educational institutions, non-profit organizations, and private sector companies alike.

How do I qualify for the badge?

Scores on your peer evaluations as well as your self-reflection assignment will be reviewed by your instructor at the end of the course. You must obtain a minimum score of 80% on the peer evaluations and your self-reflection assignment to be eligible to receive the Virtual Collaboration Badge.

How will I receive the badge?

You will receive an email containing the badge offer. It will then be up to you to accept the badge and decide how to use it. Video: How to accept a badge

How do I share the badge? Can I share it on LinkedIn?

Your badge will be stored on your CanCred Passport page, where you can access it and link to it at any time. You can also display your badge on other portfolio platforms, such as LinkedIn. Video: How to share a badge on LinkedIn

APPENDIX B: Draft Report: Peer Evaluation

Individually, evaluate each of your group members based on their contributions to the group case study thus far. This submission is confidential, your response will not be shared with your peers. Replace the title placeholders with the full names of your group members. You should submit only ONE form to the assignment folder: **Experiential Learning Project - Draft Report: Peer Evaluation**.

For each person, highlight the number that best reflects their contribution to the group project thus far, using a scale of 1-4 (1= strongly disagree; 2= disagree; 3=agree; 4=strongly agree). Once completed, total the scores for each individual. Your instructor will average the marks you obtain from your peers to assign your individual grade for this assignment.

Evaluation Criteria	Full Gro	'	ame Iemb	of er 1	Ful Gro	l N oup M	ame Iemb	of er 2	Full Gro	l N oup M	ame Iemb	of er 3	Full Gro	l N oup M	ame Iemb	of er 4	Ful Gro		ame Mem	
Attends group meetings regularly and arrives on time.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Contributes meaningfully to group discussions.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Completes group assignments on time.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Prepares work in a quality manner.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Demonstrates a cooperative and supportive attitude.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Contributes significantly to the success of the project.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Rationale

For any score equal to or less than 14, please provide a 1-2 paragraph rationale explaining the score.

APPENDIX C: Experiential Learning Project: Final Report Self-Reflection

Complete and submit your self-reflection and the peer evaluation form. For your self-reflection, your instructor will assign each individual group member a mark. For the peer evaluation, your instructor will average the marks from your peers to assign you an individual grade for this assignment.

Self-Reflection

Individually, reflect on your contributions to the group project. Answer the following questions in paragraph format. You should submit your self-reflection to the assignment folder: **Experiential Learning Project: Self-Reflection**.

- a. Describe your participation
 - What was your role(s) and which tasks were you responsible for?
 - What did you learn by working in this team?
 - If there was a conflict, describe what happened. Consider what, where, and when? Who did/said what, what did you do/read/see/hear? In what order did things happen? What were the circumstances?
- b. Reflect on your participation
 - Did you accomplish what you had planned as a group?
 - Did working with the team go the way you expected?
- c. Evaluate what happened
 - What went well and why?
 - What were the challenges?
 - What could be improved?
- d. Plan
 - What have you learned about this experience?
 - What would you do differently next time?
 - How can you support yourself and others better in the future

Peer Evaluation

Individually, evaluate each of your group members based on their contributions to the group case study. This submission is confidential, your response will not be shared with your peers. Replace the title placeholders with the full names of your group members. You should submit only ONE form to the assignment folder: **Experiential Learning Project - Final Report: Peer Evaluation**.

For each person, highlight the number that best reflects their contribution to the group project thus far, using a scale of 1-4 (1= strongly disagree; 2= disagree; 3=agree; 4=strongly agree). Once completed, total the scores for each individual. Your instructor will average the marks from your peers to assign your individual grade for this assignment.

Evaluation Criteria	Full Gro		ame Iembe	of er 1		Full Name of Group Member 2			Full Name of Group Member 3			Full Gro	l N oup M	ame Iemb	of er 4	Full Name of Group Member 5				
Attends group meetings regularly and arrives on time.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Contributes meaningfully to group discussions.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Completes group assignments on time.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Prepares work in a quality manner.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Demonstrates a cooperative and supportive attitude.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Contributes significantly to the success of the project.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Total Score			•							•	•			•	•			•		'

Rationale

For any score equal to or less than 14, please provide a 1-2 paragraph rationale explaining the score

APPENDIX D: McMaster CCE Digital Badging Exit Questionnaire (HRM 897)

Q1 Prior to taking HRM 897, were you familiar with credentials like this? (Digital badges)

ANSWER CHOICES	RESPONSES
Yes	8.70%
	2
No	86.96%
	20
Somewhat	4.35%
	1
TOTAL	23

Q2 Have you received a digital badge before?

ANSWER CHOICES	RESPONSES
Yes	4.35%
	1
No	95.65%
	22
TOTAL	23

Q3 How do you plan to use your badge in the future? Check all that apply.

ANSWER CHOICES	RESPONSES
I will include a link to the badge when applying for jobs.	30.43% 7
I will reference the badge on my resume.	43.48% 10
I will post the badge on my LinkedIn profile	69.57% 16
I will post the badge on another ePortfolio tool, other than LinkedIn. (eg. Portfolium)	13.04%
I'm not sure how I will use the badge.	26.09% 6
I do not plan to use the badge.	4.35%
Other (please specify)	0.00%
Total Respondents: 23	

Q4 How much of an impact do you think this badge will have on your career path?

ANSWER CHOICES	RESPONSES
Significant impact	4.35%
	1

ANSWER CHOICES	RESPONSES
Moderate impact	34.78% 8
Some impact	47.83% 11
No impact at all	13.04%
TOTAL	23

Q5 If you were offered another opportunity to earn a Digital Badge for a skill or achievement, would you pursue it?

ANSWER CHOICES	RESPONSES
Yes	78.26% 18
No	4.35% 1
It depends	17.39% 4
TOTAL	23

Q6 Is there anything you'd like to share about your experience earning this Digital Badge? (Optional)

I think it depends on how many OTHER people know about the digital badges too $1/22/2020\ 7:09\ PM$

I want to flaunt and grab attention, but I am not sure how much people are aware of this badge. I would suggest there should be enough advertising of this badge, so it reaches to people to be aware and its importance. $1/17/2020\ 12:43\ PM$

APPENDIX E: McMaster CCE Digital Badging Questionnaire – 6-mo post completion (HRM 897)

Q1 Indicate if you agree or disagree with the following statements about the value of a digital badge.

	STRONGL Y DISAGREE	DISAGREE	NOT SURE	AGREE	STRONGL Y AGREE	N/A	TOTAL	WEIGHT ED AVERAG E
Earning digital badge(s) helped me to better present myself and my skills to prospective employers (over the last 6 months).	0.00%	10.00%	40.00%	10.00%	10.00%	30.00%	10	3.29
Earning digital badge(s) was instrumental in helping me find a job or landing a promotion (over the last 6 months)	0.00%	20.00%	40.00%	0.00%	0.00%	40.00%	10	2.67
In general, digital badges are an effective way to communicate my experience and skills	10.00%	10.00%	30.00%	30.00%	10.00%	10.00%	10	3.22

Q2 How important are the following skills or competencies in your work?

	IMPORTANT	SOMEWHAT UNIMPORTA NT		AT	IMPORTA	N/A	L	WEIGHTE D AVERAGE
Rate the importance of communication within your current work	0.00%	0.00%	20.00 % 2	10.00%	60.00%	10.00 % 1	10	4.44
Rate the importance of virtual collaboration within your current work	0.00%	10.00%	30.00 % 3	0.00%	50.00%	10.00 % 1	10	4.00
Rate the importance of problem solving within your current work	0.00%	0.00%	10.00 % 1	30.00%	40.00%	20.00 % 2	10	4.38

Q3 If you were offered another opportunity to earn a Digital Badge for a skill or achievement, would you pursue

ANSWER CHOICES	RESPONSES
Yes	70.00% 7
No	20.00%
It depends	10.00% 1
TOTAL	10

Q4 If you have any other comments or feedback, please let us know. (Optional)

No responses