

# Faculty and Student Perceptions of Open Pedagogy: A Case Study from British Columbia, Canada

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## Abstract

A transformation in teaching and learning happens when students move from being consumers to creators of knowledge. While there is a growing body of research available on the use of open education resources by faculty and students, there is comparatively little research available with regards to open pedagogy (OP) in higher education. The few studies that have explored the perceptions of OP have focused on one specific OP practice in a small context (one or two course sections). The present review study surveyed the perceptions of faculty and students at a Canadian university across several courses and a range of types of OP. Quantitative and qualitative analyses revealed students and faculty alike were positive about the benefits and impacts of engaging in OP, but each expressed challenges with needing greater time for OP. Additionally, while students experienced challenges with process, faculty experienced challenges with supports.

Recommendations are provided for ways faculty can support students when engaging in OP and ways institutions can support faculty who engage in OP. Ultimately, knowing more about the experiences and perspectives of students and faculty could help inform the development of best practices for faculty who wish to use OP with students.

**Keywords:** open pedagogy, open educational practices, renewable assignments, perceptions of learning



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## **Introduction**

Rising post-secondary textbook costs have catalyzed the prolific development of open education resources (OERs), which are materials used in teaching and learning that are openly licensed (DeRosa & Jhangiani, 2017). Open licenses provide affordances—known as the 5Rs—for which others may use the openly licensed materials (Wiley, n.d.):

1. Retain – Creators of a work retain copyright of their work
2. Revise – Others may change the original work
3. Remix – Others may create a new product using some or all of the original work
4. Reuse – Others may use the original, revised, or remixed work publicly
5. Redistribute – Others may share the original, revised, or remixed work with others

As OERs grew in popularity, the use of open pedagogy (OP) practices expanded, particularly as students could now help to co-create content for OERs (DeRosa & Robison, 2017). OP gained increased recognition in 2013 when Wiley lamented “disposable assignments...add no value to the world” and “actually suck value out of the world” (Killing the Disposable Assignment section, para 1). That same year, Weller (2013) stressed the open education movement should push beyond OERs to openness in education more generally. Later, Caulfield (2016) suggested more importance be placed on OP and not just on OERs.

Hegarty (2015) describes eight attributes of OP as including: “participatory technologies; people, openness, trust; innovation and creativity; sharing ideas and resources; connected community; learner generated; reflective practice; [and] peer review” (p. 5). These practices are not necessarily new, as Wiley and Hilton (2018) describe how OP practices have been around for decades, albeit it not necessarily under the label of open pedagogy. Sometimes OP assignments are called non-disposable or renewable assignments, which are “any assigned task that adds value to the world [emphasis in original]” (Seraphin et al., 2018, p. 85). These assignments are grounded in openness and allow students’ work to have impacts on people, groups, and communities situated outside of the classroom (Seraphin et al., 2018).

A literature review was conducted to situate the study in the landscape of research on perceptions of open pedagogy and to identify the need for this study.

## **Literature Review**

For this literature review, the following search terms were used:

- open pedagogy AND college or undergraduate or university
- open education practices AND college or undergraduate or university
- experiential learning AND college or undergraduate or university
- OER-enabled pedagogy AND college or undergraduate or university
- open pedagogy AND perception
- open education practices AND perception

- experiential learning AND perception
- OER-enabled pedagogy AND perception
- renewable assignment AND perception

From the results, peer reviewed journal articles and theses describing studies that explored the perceptions of OP generally or of one or more types by one or more instructors and/or by one or more students were included in this review. Geographic location and educational context (K-12 or post-secondary) were not factors for exclusion.

The growth in the creation, adaption, and adoption of OERs led to many studies exploring the costs, outcomes, uses, and perceptions of OERs, resulting in growing institutional investments in OER adoption, adaption, and creation. However, there has not been as much awareness or research on OP, which makes it difficult to motivate institutions to invest in OP to the same degree as OERs (Caulfield, 2016).

There are varying perspectives over whether OP must require the use of OERs or open licenses. Wiley and Hilton (2018) argue open licenses (and OERs) are fundamental to OP and suggest using the term “OER-enabled pedagogy” would be more appropriate. However, others, such as DeRosa and Jhangiani (2017), argue OP is about broadening access to student-centered and student-driven education and should not be tied to open licenses. They, along with DeRosa and Robison (2017), prefer categorizing OP practices as opportunities for students to have impacts beyond their classroom walls. They argue that while this impact can be achieved by leveraging open licenses and OERs, such as students creating or co-creating open resources, open content, H5P resources, blogs, or podcasts, it is not a strict requirement, such as might be the case with students and faculty co-creating assignment rubrics or course syllabi.

OP research has gained a greater foothold within the past five to eight years. Available research in higher education has more often investigated student perceptions of OP (Axe et al., 2020; Baran & AlZoubi, 2020; Borthwick & Gallagher-Brett, 2014; Brunton & Gaffney, 2020; Farzan & Kraut, 2013; Flinn, 2020; Fraile et al., 2017; Gordon, 2017; Hilton et al., 2019; Hilton et al., 2020; Hodgkinson-Williams & Paskevicius, 2012; Hollister, 2020; Kimmons, 2016; Kruger & Hollister, 2020; Marsh, 2018; Paskevicius & Hodgkinson-Williams, 2018; Werth & Williams, 2021) rather than faculty perceptions only (Dermody, 2019; Gumb & Miceli, 2020; Paskevicius & Irvine, 2019). Some studies have investigated faculty and student perceptions concurrently (Al Abri & Dabbagh, 2019; Bonica et al., 2018), whereas others have examined perceptions of academic staff (Cronin, 2017). Overall, while research on student perceptions is growing, the research on faculty perceptions is growing at a much slower pace.

Most studies have focused on a single type of OP, such as co-creating OERs (Al Abri & Dabbagh, 2019; Baran & AlZoubi, 2020; Bonica et al., 2018; Borthwick & Gallagher-Brett, 2014; Brunton & Gaffney, 2020; Flinn, 2020; Gordon, 2017; Gumb & Miceli, 2020; Hodgkinson-Williams & Paskevicius, 2012; Hollister, 2020; Kimmons, 2016; Kruger & Hollister, 2020), co-creating rubrics (Fraile et al., 2017), or editing or writing Wikipedia pages (Farzan & Kraut, 2013). One study compared student perceptions across two different types of OP, which included creating multiple choice questions and co-creating assignments (Hilton et al., 2020). Another explored student perceptions of OP across a few classes using different OP practices (Hilton et al., 2019).

While some studies have been done in a K-12 context (such as Kimmons, 2016), most other studies have been from a post-secondary context. In addition, most studies have taken place in the USA (Al Abri & Dabbagh, 2019; Baran & AlZoubi, 2020; Bonica et al., 2018; Dermody, 2019; Farzan & Kraut, 2013; Gordon, 2017; Gumb & Miceli, 2020; Hilton et al., 2019; Hilton et al., 2020; Hollister, 2020; Kimmons, 2016; Kruger & Hollister, 2020; Marsh, 2018; Werth & Williams, 2021), with a few in Europe (Borthwick & Gallagher-Brett, 2014; Brunton & Gaffney, 2020; Cronin, 2017; Fraile et al., 2017) or South Africa (Hodgkinson-Williams & Paskevicius, 2012; Paskevicius & Hodgkinson-Williams, 2018). Few studies were found to have taken place in Canada (only Axe et al., 2020; Flinn, 2020; and Paskevicius & Irvine, 2019), which is problematic because educational contexts differ around the world, making it more challenging to apply findings from elsewhere.

Despite differences in geography, educational contexts, and target population, research suggests OP is often viewed positively overall by students in part because of opportunities for collaboration (Axe et al., 2020; Baran & AlZoubi, 2020; Farzan & Kraut, 2013; Gordon, 2017; Marsh, 2018), to create work useful to others outside of the class (Baran & AlZoubi, 2020; Brunton & Gaffney, 2020; Kimmons, 2016; Werth & Williams, 2021), and from experiencing deeper learning (Axe et al., 2020; Baran & AlZoubi, 2020; Flinn, 2020; Hilton et al., 2019; Hilton et al., 2020; Hollister, 2020; Kruger & Hollister, 2021). Across many studies, students liked engaging in OP because they had more autonomy, agency, and control over their work (Axe et al., 2020; Baran & AlZoubi, 2020; Fraile et al., 2017; Hodgkinson-Williams & Paskevicius, 2012; Marsh, 2018; Werth & Williams, 2021), and expressed feeling more engaged with their learning and that the work was more relevant as a result (Axe et al., 2020; Flinn, 2020; Hilton et al., 2019; Hodgkinson-Williams & Paskevicius, 2012; Kruger & Hollister, 2021; Werth & Williams, 2021).

These trends are supported by faculty perceptions of students engaging in OP. Faculty have reported student autonomy improves or deepens when engaging in OP (Bonica et al., 2018) and students appear to enjoy having their work have an impact on audiences outside of the classroom (Bonica et al., 2018; Dermody, 2019; Paskevicius & Irvine, 2019). Both faculty and students perceive OP offering opportunities to support inclusivity and to encourage diversity in perspectives and ideas (Hodgkinson-Williams & Paskevicius, 2019; Paskevicius & Irvine, 2019).

Despite trends in students' positivity towards OP, research also has shown some may feel uncomfortable with the process of engaging in OP (Axe et al., 2020; Hilton et al., 2019; Hollister, 2020) and may not feel confident in the quality of their work (Al Abri & Dabbagh, 2019; Brunton & Gaffney, 2020). Many students have experienced challenges in understanding privacy, copyright, and licensing (Axe et al., 2020; Borthwick & Gallagher-Brett, 2014; Paskevicius & Hodgkinson-Williams, 2018; Werth & Williams, 2021); had difficulties using the required technology for OP projects and activities (Hilton et al., 2019; Hollister, 2020); or had problems with managing time (Axe et al., 2020; Hollister, 2020) or working with others while engaging in OP (Baran & AlZoubi, 2020; Hollister, 2020). Some students reported experiencing problems finding, evaluating, and using credible sources in their OP work (Baran & AlZoubi, 2020). In addition, Hilton et al. (2019) found the type of OP could influence the perceptions students have towards OP. For example, co-creating course syllabi or assignments might be seen as more meaningful than creating multiple choice quiz questions (Hilton et al., 2019).

While faculty largely tend to view OP positively, some have found they needed to allocate additional time for supporting students in finding and accurately attributing credible information (Dermody, 2019; Paskevicius & Irvine, 2019). In addition, some faculty perceive OP potentially carrying risks for students when they engage with unknown others in a public sphere (Bonica et al., 2018; Paskevicius & Irvine, 2019). For example, Brown and Croft (2020) discussed how social annotation assignments can be risky, especially for marginalized students.

Additionally, faculty sometimes perceive there are limitations in the institutional technology available (Gumb & Miceli, 2020). Faculty may need more time to plan projects and collaborations with faculty and librarians (Gumb & Miceli, 2020). They may also need to find appropriate ways to respond when a student does not put in the effort that is expected or needed for an OP project (Bonica et al., 2018).

## Methodology

### Research Questions

While existing research suggests that faculty and students alike tend to view OP positively and there are areas where additional supports could be helpful, the existing landscape of literature on faculty and student perceptions of OP is limited (and particularly so on the faculty side). Moreover, there is a gap in the knowledge of perceptions of students and faculty across a wide variety of OP, including comparisons of these perceptions, in a Canadian post-secondary context.

Knowing more about the experiences and perspectives of students and faculty may help inform the development of best practices for faculty who wish to use OP. This information may inform how institutions allocate resources to faculty who want to engage in OP; how institutions could support faculty; what professional development opportunities, educational technologies, and financial supports are needed; and how faculty can structure, construct, and use OP with students in ways that keep the focus on the intended content and learning, rather than what is learned from how the OP was planned.

To begin to address these gaps, the research questions guiding this study were:

1. What are the perceptions of OP by faculty?
2. What are the perceptions of OP by students?

### Sample

Kwantlen Polytechnic University (KPU) is Canada's only polytechnic university (KPU, n.d.). With five campuses situated around Metro Vancouver in British Columbia, there are more than 20,000 students enrolled each year and more than 1,400 employees (KPU, n.d.). There are administrative supports for open education, including an Office of Open Education and significant library support. KPU provides grant funding and other supports for OER adoption, adaptation, and creation and regularly offers workshops on OERs and OP. Open education is embedded in the academic plan for the institution (KPU, 2018). As a result, there are many OP practitioners at KPU, which made this a good setting for this research. The study received

research ethics board approval from KPU. Information gathered through the online surveys were preserved to protect participant anonymity and confidentiality.

The sampling frame consisted of 67 faculty members from five faculties (business, health, arts, science and horticulture, and fashion) and student service areas (such as the library). The list of faculty members was compiled based on registration lists for open education professional development events and workshops held at KPU, which were obtained from the KPU Teaching and Learning Commons. Additional names were added to the list based on personal knowledge about faculty who have expressed interest in open education or OP at KPU or who was known to be engaged or interested in these practices at KPU (such as faculty at KPU who had completed fellowships or participated in faculty learning communities related to open education). A small number of faculty were added based on snowball sampling as referrals from colleagues who responded to initial recruitment emails.

Participation in the study required faculty to be teaching one or more courses at KPU in the Spring 2021 and/or Summer 2021 semesters, and that they would be using one or more OP practices in these courses. As well, participants had to give consent in order to receive a faculty survey in the spring semester and agree to distribute a survey to their students on behalf of the researcher in each class in which they were using OP.

### ***Faculty Participants***

Recruitment attracted 11 of the 67 faculty members to agree to participate in the study. Of the 11 faculty who originally agreed to participate, eight faculty members responded to the faculty survey. Given that the study was taking place in the middle of a global pandemic, it is understandable the participation rate was low. For the eight respondents, the average experience of teaching at the post-secondary level was 13.375 years with four years being the minimum and 30 years being the maximum. Two of the eight of respondents had less than 10 years of teaching experience at the post-secondary level, and four of respondents had between 10-13 years of teaching experience at the post-secondary level. Seven of the eight faculty respondents use multiple OP practices. The average experience of respondents in using OP was 4.875 years with 1 year being the minimum and 10 years being the maximum. All respondents reported using OERs in their teaching.

### ***Student Participants***

There were 55 students who participated in the student survey. Student participants received the survey invitation in the Spring and/or Summer 2021 semesters from their instructor of the class (or classes), where they were engaging in OP. Given the researcher was reliant on faculty to distribute the survey, there is no way to confirm how many students received an invitation to complete the survey. Despite several follow up attempts to confirm how many sections and students would receive the survey, some faculty did not respond. Despite this limitation, based on the responses received, an estimate of at least 800 students received the survey. Given an anticipated lower response rate due to pandemic conditions, the survey was not extended to collect demographic information about the students.

### ***Instrument***

For the surveys, the definition of OP used moved beyond leveraging the 5Rs of retain, revise, remix, reuse, and redistribute, as described by Wiley (n.d.), to the more expansive explanation

provided by Jhangiani and DeRosa (n.d.) whereby OP allows students to have impacts beyond themselves and potentially beyond their classroom walls, regardless of whether it leverages open licensing. In the faculty and student surveys, OP was defined as practices and assignments can include students: creating or co-creating open resources, open content, H5P resources, or open textbooks; creating resources for a community or client; creating teachable content or resources for students; blogging; podcasting; or creating or co-creating a rubric. These examples were sourced directly from faculty early in the survey development stage.

The study used a convergent mixed method design (Creswell & Plano Clark, 2018), and the faculty and student surveys each collected qualitative and quantitative concurrently.

The faculty survey included seven open and seven closed questions (see Appendix A). Some questions in the faculty survey were reused and/or adapted from surveys by Bliss et al. (2013), Paskevicius and Irvine (2019), and Hilton et al. (2019). The questions addressed preparation time; motivations for, benefits of, and challenges in using OP; feedback received from students; and learner characteristics.

The student survey explored in part how students perceived and valued OP in comparison to traditional learning activities, which was a term adopted from the survey developed by Hilton et al. (2019). Based on the work of Hilton et al. (2019), students were provided a definition that traditional learning practices and assignments can include students writing essays or completing tests, quizzes, or exams. The student survey included three open and four closed questions (see Appendix B). Some questions in the student survey were reused and/or adapted from surveys by Hilton et al. (2019) and Hilton and Wiley (2018). The questions addressed the value of experiences with OP, impacts on learning, time requirements, and the benefits and challenges of OP.

### **Data Collection**

In the Fall 2020 semester, three students each received a \$50 honorarium in exchange for providing feedback on a pilot survey. Faculty were sent the survey invitation for students approximately halfway through the Spring 2021 and Summer 2021 semesters. The faculty survey was distributed at the end of the Spring 2021 semester. As compensation for time spent participating in this research, faculty participants were offered the opportunity to enter a draw for one of two Amazon e-gift cards valued at \$50. Student participants were offered the opportunity to enter a draw for one of ten Amazon e-gift cards valued at \$50. Email addresses collected for the purposes of completing the gift card draw were not associated or stored with the survey responses.

### **Data Analysis**

Consistent with a convergent mixed method approach, the quantitative and qualitative data were analyzed separately and then compared (Creswell & Plano Clark, 2018). The quantitative data were analyzed by determining the frequencies of responses to rating-scale questions. The data set did not meet the threshold for any other statistical analyses. Thematic analysis was used to analyze the responses to the open-ended questions (Braun & Clarke, 2006, 2017). The data were coded inductively (Braun & Clarke, 2006, 2017). The frequencies of the patterns were tabulated.

## Results

In this section, key results from the faculty and student surveys are presented. Tables with additional results are available in Appendix C.

### Descriptive Statistics for Faculty Survey

Six faculty participants reported spending more time per week preparing to engage in OP compared to more traditional practices. Additionally, seven faculty respondents perceived that OP works for all levels of courses, whereas one faculty respondent perceived that OP works best for upper level courses only. Seven faculty respondents indicated their OP practices have changed since they first started using OP. As well, all faculty respondents indicated they would use OP in future, with seven respondents stating they would be very likely to do so and one indicating they would be somewhat likely to do so.

### Thematic Analysis for Faculty Survey

#### *Motivations for Initially Using & Continuing to Use OP*

Table 1 shows the eight motivations that faculty respondents shared which prompted them to first start using OP. Comments from some respondents included more than one motivation. Overall, the reasons that motivated faculty to first start using OP were largely related to student experience including beliefs about OP providing an improved experience for students, reasons related to access, equity, inclusion, and/or social justice; and costs. Each source of motivation is presented as a pattern.

**Table 1**

*Theme: Faculty Motivations for Starting to Use OP (n = 8)*

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Pattern	Frequency of pattern
Beliefs about OP providing an improved experience for students	5
Costs	4
Access / equity / inclusion / social justice	4
Interest in collaboration	1
General instructor interests	1
Support of the United Nations Sustainable Development Goals	1
Interest in digital humanities	1
Challenge and learning/self-development	1

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Under the pattern of access, equity, inclusion, and social justice, the respondents specifically stated these areas being motivators for beginning to use OP. One respondent said, "I found it to be more engaging for students and more interesting for me." Another said they were first



motivated by “working towards creating a more equitable, relevant, and meaningful learning experience for students.” Under the pattern of costs, instructors specified they started using OP to limit or reduce textbook costs, and two respondents specifically mentioned costs or lowering costs.

Table 2 shows the eight patterns in the theme of what motivates respondents to continue using OP. Comments from some respondents included more than one pattern. While student experience was an important motivator for a respondent’s initial and subsequent use of OP and issues related to equity, access, and social justice remained an important motivator, students having the ability to share their work with audiences other than the instructor was a motivator for sustaining use but not for initiating first use. Additionally, another difference was that while instructor interests were not a prevalent motivator for initiating OP use, it was more common for sustaining use.

**Table 2**

*Theme: Faculty Motivations for Continuing to Use OP (n = 8)*

Pattern	Frequency of pattern
Improved experience for students (more relevance, meaning, interest, quality, and engagement)	4
Students having the ability to share their work beyond the instructor to other audiences	4
Issues relating to equity, access, and social justice	4
Alignment of OP with an instructor’s teaching practices, philosophies, pedagogies, and interests	4
Instructor expressing general positive emotions/feelings about using OP	2
OP working well with Universal Design for Learning (UDL) and student choice	2
OP supporting digital literacy	1
Costs	1

One faculty respondent said they are motivated to continue using OP because it “helps me to create more equitable classrooms by allowing for student input and choice.” They went on to say OP “offer[s] opportunities for students to apply their knowledge in ways that benefit the communities they care about, and I love that.” Another said they’re motivated because of “engagement for students, keeping things more current and relevant to students, opportunities for experiential learning, and more interest for me.”

Seven of the eight respondents reported having changed their OP practices since they first started using OP. Table 3 shows a summary of patterns in the theme of how respondents have

changed their practices, with comments from some respondents including more than one change. The most common change respondents reported was using OP more frequently and broadly across their classes. Furthermore, many of the additional changes relate to instructors' perceived levels of skill and comfort with curriculum and learning design and ways of implementing OP. For example, one faculty respondent noted, "over the years, my OP practices have become more commonplace in all of my courses." They added, "I have also found engaging in OP has made me think more about scaffolding and being more diligent about those design features in my courses."

**Table 3**

*Theme: How Faculty Have Changed Their OP Practices Over Time (n = 8)*

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Pattern	Frequency of pattern
Use OP more frequently and broadly across all their classes	4
Feel more knowledgeable about OP	3
Pay more attention to and have more experience in course design and scaffolding OP	3
Are more embracing of UDL, flexibility, and including student choice	3
Feel more comfortable experimenting with OP	2
More explicitly orient OP practices to social justice	1

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***Benefits & Challenges in Using OP***

As shown in Table 4, respondents shared many benefits of using OP with the most common one being how OP led to improvement in the quality of student work/assignments and their engagement in the course. One respondent reported "students are more engaged and often do their best work." Another said they experience a "greater sense of joy and happiness in being an educator." Overall, the benefits reported by respondents predominantly related to the experiences of the students, the experiences of the instructors, and the experiences of teaching and learning.

**Table 4**

*Theme: Benefits Faculty Have Experienced in Using OP (n = 8)*

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Pattern	Frequency of pattern
How OP led to improved quality of students' work/assignments and their engagement in the course	5
How OP positively changes the dynamic/relationship of students and their instructor	4

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Expressions of positive emotions about their experiences teaching	3
How instructors get to learn with, from, or alongside students	3
How OP provides opportunities for instructors to professionally develop	3
How OP helps students reshape their perspective on education and assignments	2
How OP led to opportunities to collaborate with colleagues	1
How OP could be grounded in social justice	1
How OP could work with UDL	1

In contrast, the pattern of challenges respondents reported experiencing in using OP (see Table 5) were a mix of experiential challenges, such as overcoming student anxiety related to OP or a lack of support from colleagues, and administration or institutional challenges, such as difficulty in finding partnerships or opportunities or having a lack of funding or compensation. For example, one respondent said OP was “more time consuming,” while another said it was “labour intensive.” Another respondent noted “it takes a while to orient students to open pedagogy, since often it’s different from their normal. I have to work hard to reduce anxiety.”

**Table 5**

*Theme: Challenges Faculty Have Experienced in Using OP (n = 8)*

Pattern	Frequency of pattern
Issues with time (time to prepare / plan projects, time to find / build partnerships, time to complete projects, time to get student buy-in, lack of time in general)	4
Challenges in finding clients / community partners / building partnerships	2
Lack of funding / compensation / recognition for OP work	2
Overcoming student anxiety to OP projects/process/getting student buy-in	2
Lack of support from colleagues	2
Institutional barriers (institutional support and overcoming bureaucratic barriers to experiences outside of the classroom)	1
Challenges in finding open-source materials	1

### **Feedback Received from Students**

Table 6 shows the 11 patterns for types of feedback respondents have received from students about OP, and comments from some respondents included more than one pattern. While there was one pattern that was most frequent—students having expressed positive emotions about OP generally—there were several additional patterns that each had with a low frequency. The patterns in the feedback theme reflected a mix of positive, neutral, and negative comments from students. Several of the patterns included feelings or emotional states, such as confusion, liking something, or feeling resistant. Additionally, some of the patterns pertained to specific features or attributes of OP, as described by Hegarty (2015), including having impacts outside of the classroom and creativity.

**Table 6**

*Theme: Feedback Faculty Have Received from Students about OP (n = 8)*

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Pattern	Frequency of Pattern
Expressed positive emotions about OP projects and classes	5
Expressed initial confusion with/about OP or being unfamiliar with OP	3
Liked that they had choice/flexibility	3
Liked that they could contribute to the broader knowledge base beyond the classroom	2
Liked that they could take risks (or more risks) in their work	2
Found the OP projects to be time and labour intensive	2
Felt more creative when doing OP projects	2
Liked the hands-on/applied nature of the projects	1
Did not trust the quality of their work	1
Expressed resistance to OP more broadly/generally	1
Did not feel any differences between OP and traditional courses	1

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One participant indicated “student generally appreciate the flexibility, creativity, and hands-on nature of open pedagogical practices in my classes” though “they find them labour intensive and (sometimes) confusing because they are not the norm.” Another respondent said “in their final reflections, many students say that they were initially really skeptical or nervous, but ended up loving the approach, were surprised by the amount of work they put in, and were proud of their work.”

## Descriptive Statistics for Student Survey

### *Perceived Value of and Experiences with OP*

Table 7 shows students' level of agreement with various statements about their perceived experience in a course where they are engaging in OP and their perceived value of the OP. A very strong majority of respondents strongly or somewhat agreed that OP is more valuable to their learning and their future career than traditional learning activities. A similarly strong majority of respondents strongly or somewhat agreed OP was more rewarding, enjoyable, and motivating than traditional learning activities. However, the results were varied about whether OP was more difficult or more stressful than traditional learning activities.

**Table 7**

*Students' Perceived Value of and Experience in Engaging in OP (n = 55)*

	Strongly agree (%)	Somewhat agree (%)	Neither agree nor disagree (%)	Somewhat disagree (%)	Strongly disagree (%)	No response (%)
Open pedagogy is more valuable to my learning than traditional learning activities.	47.2	38.2	12.7	1.8	0	0
Open pedagogy is more valuable to my future career than traditional learning activities.	43.6	34.5	18.2	3.6	0	0
Open pedagogy is more rewarding/enjoyable to complete than traditional learning activities.	54.5	25.5	12.7	1.8	1.8	3.6
Open pedagogy is more motivating than traditional learning activities.	52.7	32.7	7.3	5.5	1.8	0
Open pedagogy is more difficult than traditional learning activities.	5.5	16.4	36.4	29.1	12.7	0
Open pedagogy is more stressful than traditional learning activities.	3.6	14.5	30.9	27.3	23.6	0

Table 8 shows that a very strong majority of respondents perceived their level of creativity and level of engagement in their learning increased while completing OP.

**Table 8**

*Perceived Changes in Creativity and Student Engagement in Learning as a Result of OP (n = 55)*

	Increased a lot (%)	Increased somewhat (%)	Stayed the same (%)	Decreased somewhat (%)	Decreased a lot (%)	No response (%)
Creativity	29.1	49.1	18.2	0	0	3.6
Engagement in learning	36.4	52.7	9.1	1.8	0	0

**Perception of Time Requirements**

The results were varied whether students perceived OP to be more time-consuming than traditional learning activities. As shown in Table 9, 43.6% of respondents strongly or somewhat agreed OP was more time-consuming, which is somewhat consistent with results later in the survey (shown in Table 10) where 61.8% of respondents felt the time to complete OP course work increased a lot or somewhat.

**Table 9**

*Perception of OP Being More Time-Consuming to Complete Compared to Traditional Learning Activities (n = 55)*

Response	Percentage of responses
Strongly agree	9.1
Somewhat agree	34.5
Neither agree nor disagree	27.3
Somewhat disagree	16.4
Strongly disagree	12.7

**Table 10**

*Perception of OP Time Requirements Compared to Traditional Learning Activities (n = 55)*

Response	Percentage of responses
Increased a lot	21.8

Increased somewhat	40.0
Stayed the same	30.9
Decreased somewhat	0
Decreased a lot	0

### ***Perceptions on Impacts on Learning***

Table 11 shows that a majority of respondents tended to agree or strongly agree that participating in OP helped them master more of the core academic content and learn more effectively than traditional learning activities. Moreover, a majority of respondents also agreed or strongly agreed that they perceived changes in their collaboration skills, communication skills, and critical thinking and problem-solving skills as a result of engaging in OP compared to traditional learning activities.

**Table 11**

#### *Impact on Learning of Engaging in OP (n = 55)*

	Strongly agree (%)	Somewhat agree (%)	Neither agree nor disagree (%)	Somewhat disagree (%)	Strongly disagree (%)	No response (%)
Participating in open pedagogy helps me master more of the core academic content than traditional learning activities.	36.4	43.6	18.2	1.8	0	0
Participating in open pedagogy helps me learn more effectively than traditional learning activities.	49.1	25.5	25.5	0	0	0
Participating in open pedagogy helps me become a more collaborative learner than traditional learning activities.	58.2	29.1	12.7	0	0	0
Participating in open pedagogy helps me become a more effective communicator	49.1	29.1	20.0	1.8	0	0

than traditional learning activities.						
Participating in open pedagogy helps me become a more critical thinker and better problem solver than traditional learning activities.	50.9	29.1	20.0	0	0	0
I would choose to enroll in a course if I knew the instructor would be using open pedagogy.	40.0	49.1	7.3	1.8	0.0	1.7

These positive impacts on learning are supported by 89.1% of respondents indicating agreement they would choose to enroll in a course if they knew the instructor was using OP.

**Thematic Analysis for Student Survey**

***What Students Liked About Engaging in OP***

In total, 43 students responded to the open-ended question about what they liked about engaging in OP. The two key themes that emerged, what students liked and what they found challenging, are elaborated upon with the patterns in the data summarized in Table 12 and 13. The comments of some respondents included more than one pattern. While most of the patterns related to the experience of students when engaging in OP, such as feeling it was more interesting/fun or generally liking OP, some of the patterns pertained to specific aspects of the OP, such as collaborating with others, having choice in their work, or having their work extend beyond the classroom into the real world.

**Table 12**

*Theme: What Students Like About Engaging in OP (n = 43)*

Pattern	Frequency of pattern
OP improved their creativity or allowed them to use more creativity	10
OP offered more flexibility and choice	7
OP was more interesting / fun	7
The opportunity to collaborate with others	7
Expression of liking OP but not providing any specifics	5
The opportunity to make an impact with their work	5



It provided easier or more access to education	4
Their critical thinking skills improved	3
Ability to apply their learning	2
Felt more engaged with their learning and course material	2

One respondent commented, "I like that I am able to be creative and choose what interests me most to write about. It also allows me to become more engaged and inspired by what I am learning." Another said they liked "knowing that my work is actually being used to help someone or contribute elsewhere instead of being created just to be marked and forgotten." Another said they liked engaging in OP because, "it makes education more accessible and helps to enhance the confidence level by participation." Yet another respondent indicated they liked OP because of "creating a resource that's accessible to larger amounts of people." As well, some respondent comments connected engaging in OP with providing themselves and others with more access to education and learning in general.

In addition, there were several singular, unique responses, including liking OP because it was perceived as being more relevant, inspiring, and inclusive; providing deeper learning; offering higher quality teaching; and improving communication skills. Later in the survey, when provided an opportunity to share any additional comments, 12 student respondents shared overall/general positive feelings towards OP.

### ***What Students Found Challenging About OP***

Table 13 shows the patterns of the challenges student respondents experienced when engaging in OP. While the pattern with the highest frequency pertained to a specific aspect of the OP (time management), the pattern with the second highest frequency pertained to emotions (feelings of discomfort). The rest of the patterns were a mix of challenges pertaining to specific aspects of OP (such as collaboration or technology) or emotional states (such as feeling pressure or doubting the quality of their work).

**Table 13**

*Theme: Challenges Students Experienced When Engaging in OP (n = 43)*

Patterns	Frequency of pattern
Time management / the amount of time required to complete assignments	11
Feeling uncomfortable with the process, the assignment flexibility, and assignment choices	8
Collaborating and working with others	3
OP was perceived to be more cognitively demanding	3
Technology	3

Self-motivation / finding motivation to do the work	2
Knowing if their work is accurate	2
Unclear about course content or course concepts	2
Feeling pressure because their work would have a wider audience or bigger impact than a test or essay	2
No challenges experienced (stated directly)	3

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One respondent said “it [OP] is time consuming, and sometimes reading a chapter/power point [sic] and completing a quiz is easier.” Another respondent wrote “I am not as familiar with assignment expectations as I am the expectations for essays and tests, which I am more used to in my previous education experience. I have to find a way to present information in a way I have not practiced, which stretches my brain.”

### **Discussion**

While there is a growing body of research available on the use of OER by faculty and students in higher education, there is comparatively little research available with regards to OP. The few studies that have explored the perceptions of OP have focused on one specific OP practice in a small context (one or two course sections). This study surveyed the perceptions of OP held by faculty and student respondents across several courses and a range of types of OP at one post-secondary institution.

Overwhelmingly, students indicated in the survey they found OP to be more valuable, engaging, creative, motivating, and enjoyable in comparison to traditional learning activities. The patterns in the qualitative analysis supported the results of the quantitative analysis. In particular, the results tend to align with results by Axe et al. (2020), Baran and AlZoubi (2020), Flinn (2020), Hilton et al. (2019), Hodgkinson-Williams and Paskevicius (2012), Kruger and Hollister (2021), and Werth and Williams (2021). For example, the present study found that students perceived their skills in collaboration, problem solving, and critical thinking improved as a result of engaging in OP, which are benefits reported by students in the study by Axe et al. (2020). As a second example, students in this study reported experiencing deeper learning when engaging in OP compared to traditional learning activities, which echoes findings by Axe et al. (2020), Hilton et al., (2019), and Flinn (2020). As a third example, students reported experiencing higher levels of engagement and more effective learning when engaging in OP compared to traditional learning activities, which aligns with studies by Axe et al. (2020), Hilton et al. (2019), and Kruger and Hollister (2021). Finally, this study found collaboration to be both a source of benefit and challenge for students, which Baran and AlZoubi (2020) also found to be the case.

It is interesting to note that despite three student respondents indicating they found collaborating with others to be challenging, by and large, most students reported having a positive experience in working with others on OP projects. One of the attributes of open pedagogy as described by Hegarty (2015) is peer review. While it is not known whether the participating students engaged in peer review activities, peer review in and of itself involves collaboration, communication, and critical thinking. Therefore, if we assume the instructors' OP practices aligned with the attributes of OP outlined by Hegarty (2015), then it is not surprising to see that student respondents

perceived improvements in their skills in collaboration, communication, critical thinking, and problem-solving. Moreover, these results appear to be consistent with other studies where students reported experiencing challenges in team work and collaboration (Baran & AlZoubi, 2020; Hollister, 2020) and also positive benefits (Axe et al., 2020; Baran & AlZoubi, 2020; Farzan & Kraut, 2013; Gordon, 2017; and Marsh, 2018). Given that many workplaces today involve some degree of collaboration with others, OP could be a way for students to develop teamwork skills they will need and could have a positive impact on their preparation for their future careers.

Under the theme of challenges that students have experienced, it was interesting to note that the perceived time requirements to engage in OP were not a deterrent to how strongly students valued the experience of engaging in OP. The results overall suggest student respondents perceived they learned a great deal and experienced many positive benefits from engaging in OP irrespective of the challenges they experienced. Interestingly, despite the large number of students who reported having issues with time when engaging in OP, surprisingly few faculty respondents shared this as feedback they've received from students. There were some faculty who mentioned this, but not as many as the student comments might have suggested. I have no hypotheses to explain this difference, though I note that challenges with time mentioned by students were in alignment with the results by Axe et al. (2020) and Hollister (2020).

Under the theme of feedback, faculty reported receiving from students about engaging in OP, it was interesting to see a pattern relating to how much students care about the environment and others because the connection between this and learner compatibility with engaging in OP is not apparent from my perspective. However, without follow up surveys or interviews, it is difficult to say what connection the faculty respondents may have perceived.

Student reports of feeling uncomfortable with the process of engaging in OP was not unexpected and was consistent with results of Axe et al. (2020), Hilton et al. (2019), and Hollister (2020). Similarly, some students reporting a lack of confidence in the quality of their work also aligned with previous research (Al Abri & Dabbagh, 2019; Brunton & Gaffney, 2020). Furthermore, while a few students mentioned having challenges with technology, this result is not surprising and is consistent with prior studies (Hilton et al., 2019; Hollister, 2020). No faculty mentioned student feedback on challenges with technology.

In the present study, neither students nor faculty expressed any comments or concerns about privacy or open licensing when engaging in OP where work is being shared beyond the classroom. This finding differs from previous research (Axe et al., 2020; Borthwick & Gallagher-Brett, 2014; Paskevicius & Hodgkinson-Williams, 2018; Werth & Williams, 2021). Importantly, recent work on the intersection of social justice, equity, and open pedagogy has revealed that marginalized students may face greater risk in publicly sharing work (Bali, 2019; Bali et al., 2020; Brown & Croft, 2020), and some faculty recognize this risk (Bonica et al., 2018; Paskevicius & Irvine, 2019). In this study, is not known why students and faculty did not comment on this issue.

On the faculty side, patterns within the theme of what motivated faculty to begin using OP are consistent with the patterns in the theme of what sustains faculty in continuing to use OP. It was interesting to note several instructors stating they started using OP in order to limit or reduce textbook costs. In fact, two respondents directly mentioned costs or lowering costs. However, without doing follow-up interviews or surveys, it is difficult to tell whether respondents

misunderstood what the questions were asking or if they simultaneously began using OP at the same time as they began using OER.

Most faculty stated they now use multiple forms of OP and are motivated to do so because of student experience. This finding suggests there could be a link between an instructor's use of OER and changes they make to their pedagogy, which would be consistent with the results of Jung et al. (2017). Therefore, the results of this study may lend support for the recommendation made by Jung et al. (2017) to further investigate the connection between OER use and pedagogy changes.

While there were similarities in what first motivates a faculty member to start using OP and what continues to motivate them now, some differences did exist. In particular, Universal Design for Learning (UDL) emerged as something that sustains the motivation of faculty to engage in OP. UDL is a set of guidelines based on principles of engagement, representation, and action and expression to ensure all students are included in the learning (Cast, n.d.). Engagement refers to supporting student interest and motivation in learning via several ways (Cast, n.d.). Representation refers to providing several ways for students to learn the material (Cast, n.d.). Action and expression refer to allowing students to demonstrate or express their learning in several ways (Cast, n.d.). Key to each of these principles is student choice and agency. The faculty comments highlighted how students having choice and autonomy with OP is a central feature of UDL.

Despite faculty indicating they experience challenges, none appeared to be significant enough to dissuade them from engaging in OP. The challenges faculty cited were administrative or institutional, not student or classroom management issues. Nevertheless, the time-related challenges faculty experienced are consistent with prior research (Dermody, 2019; Paskevicius & Irvine, 2019).

While many faculty indicated their OP practices and usage have changed over time, the comments provided were not necessarily specific to OP and could instead be an indicator of an instructor gaining more experience in teaching in general. It would be interesting to explore why other faculty who may have previously expressed interest in OP did not begin using it or may have stopped using it.

An interesting pattern that emerged in the theme of what sustains faculty members in continuing to use OP was how the use of OP positively changed the dynamic or relationship between them and their students. Faculty mentioned how they liked moving from being positioned as *the* source of knowledge to being someone who is collaborating with, learning with, and learning from students. Additionally, one faculty member said they have developed a "renewed relationship with students that isn't 'top-down' but [is] more collaborative and supportive." It is possible faculty indicating they perceived changes in their relationships with their students could be the result of students shifting from being consumers of information to being creators of knowledge while engaging in OP. However, the present study does not provide insights into the student perspective on this pattern, and further research to explore the changing instructor-student dynamic could be insightful.

Overall, many of the results about student perceptions are consistent with the results from faculty respondents about the perceived benefits of OP, as well as the feedback faculty received from students about OP. In particular, students and faculty respondents noted students may

experience discomfort with the processes involved in OP; may feel uncertain about the accuracy of their work; and appear to like having choice and flexibility in what they do, having broader impacts with their work, and engaging in creative processes. This pattern suggests that the faculty in the study could be attuned to potential issues in their specific use of OP and adapt accordingly. This alignment in perceptions between faculty and students is consistent with previous research (Bonica et al., 2018; Dermody, 2019; Paskevicius & Irvine, 2019). Overall, the complementarity of faculty and student results and consistency with past studies continues to lend support that OP may have a significant positive learning impact on students and faculty alike. Moreover, with a majority of student respondents indicating they would choose to enroll in a course if they knew the instructor was using OP, this could have clear potential impacts on course, program, and institutional enrollments, particularly if classes where instructors are using OP fill faster than classes that use traditional learning activities.

### Limitations

There are a number of limitations with the study. First, because the timing of the study coincided with the COVID-19 pandemic, I acknowledge there are aspects I would modify if circumstances had been different. For example, I would collect demographic information of the student respondents. As well, I would likely track which specific OP activities student respondents reported they engaged in (to better determine participation across classes) and to aggregate responses according to the various OP types.

Second, while one of the positive features of my study was that it grouped together a number of classes using different OP practices, there was unknown and potentially uneven participation between the classes. This relates to a third limitation of the study, which is that what type of OP each student respondent may have engaged in was not known. Therefore, the results could not be grouped with types of OP. This is important because, as Hilton et al. (2019) have expressed, different types of OP could influence the perceptions students have towards OP. It remains possible the OP in one class may have been seen as less meaningful or relevant or more challenging compared to other classes. It is also possible that a large number of respondents may have come from the same class, rather than across a variety of classes and OP types.

A fourth limitation was the sampling methods. Eligible faculty members potentially may have been excluded. For example, it is possible there were faculty members who were using OP in their classes, but who may not have attended open education professional development events and workshops, and, as a result, were not included on the registration lists provided by the KPU Teaching and Learning Commons. Similarly, faculty who were using OP in their classes, but who had not shared this with their colleagues, may have been excluded too.

Fifth, because I was reliant on participating faculty to distribute the survey to their students, I did not have full control over the timing of the distribution of the surveys. Different instructors may use OP at different times in the semester, so I do not know if students were receiving the survey in the middle of the completing their projects (when stress may have been higher) or at the end of their projects.

Sixth, as mentioned earlier, the study was done during the COVID-19 pandemic, so it is difficult to discern whether some of the challenges described by students are a result of completing all coursework at a distance, the OP project parameters, issues of technology and internet access from being located off campus or even outside of Canada, or other reasons unrelated to the OP

practices. Sixth, another limitation is that the data was self-reported, so the responses could be exaggerated. This relates to a seventh limitation, which is that respondents may not have felt comfortable disclosing unsatisfactory experiences with OP, despite the precautions of informed consent, and this could have led to an over-reporting of positive experiences.

The eighth limitation pertains to the limitations of perception. Student perceptions can provide some indication of a potential impact on learning, but are not by themselves enough to show impact on learning. A learning experience that is perceived by students to be unenjoyable or without relevance or application could potentially lead to a reduced level of student motivation for and engagement in learning, which in turn could have a negative impact on a student's level of learning. Therefore, I advocate that considering perceptions still has value.

Last, this study was done at one institution, and a very unique one at that in BC, so it is unknown how transferrable and applicable the results might be to other institutions in Canada.

### **Conclusions and Recommendations**

Based on my results, several recommendations begin to emerge. First, overall, students perceive that OP approaches are helping them learn, apply, and have an impact with course material. The results for the benefits and challenges of OP provided by faculty and students, as well as the motivations for using OP by faculty, were generally consistent with each other and the results of past studies.

Second, it was a significant take-away from this study that students could potentially benefit from having more time to complete OP projects. Therefore, faculty who want to use OP could consider building in even more time for OP to take place, which is consistent with previous research (Axe et al., 2020; Baran & AlZoubi, 2020; Flinn, 2020). Additionally, faculty could potentially benefit from having schedule or release time support in prepping and planning OP approaches, as well as having institutional supports to find opportunities to make an impact outside of the classroom. This is consistent with results from a study by Hodgkinson-Williams and Paskevicius (2012) where faculty reported they engaged in OER creation with students because they did not have sufficient time to create an OER on their own. Third, based on student comments and their agreement with statements about OP being more stressful than traditional learning opportunities, students could potentially benefit from having more up-front discussions with their instructors about the process and navigating other uncertainties posed by OP approaches that aren't typically encountered with traditional learning activities. This recommendation is consistent with previous studies (Axe et al., 2020; Baran & AlZoubi, 2020; Hilton et al., 2019; Werth & Williams, 2021). Faculty should be aware of how they can support building student confidence in decision-making relating to content accuracy, such as by building in additional checkpoints, partnering with librarians on copyright issues and information literacy, or partnering with their institution's Teaching & Learning Centre staff on digital literacy, which is consistent with prior research (Axe et al., 2020; Baran & AlZoubi, 2020; Hilton et al., 2019; Werth & Williams, 2021).

Fourth, with students having expressed appreciation for the agency involved in OP in this study, which is consistent prior research (Axe et al., 2020; Baran & AlZoubi, 2020; Flinn, 2020; Hilton et al., 2019; Werth & Williams, 2021), faculty should consider providing students with more opportunity for flexibility and choice, as well as opportunities to collaborate with others. For example, instead of having students blog on their own (hoping that others might encounter their blogs), they could potentially peer review each other's blogs.

Fifth, as a result of sentiments expressed by faculty in this survey about the lack of support they have received, institutions could consider providing instructors more professional development opportunities in areas relating to open education, OP, and learner-centred instruction. For example, this could include workshops and opportunities to network and collaborate with others engaged in similar practices at the institution.

Last, institutions could provide recognition for faculty who engage in OP, including providing administrative support, resources, and funding or compensation. OP practices have impacts on students, on faculty, on the class as a whole, and potentially on communities outside the walls of the classroom. Based on the impact of OP work plus the fact that 89.1% of student respondents said they would enroll in a course if they knew the instructor was using OP, it is clear that OP could have significant impacts on course, program, and institutional enrollments. This work needs to be supported in ways that are proportional to the investment faculty and students make to engage in OP.

### **Author's Contributions**

MA conceptualized, planned, and carried out the research study, including collecting and analyzing the data and preparing the research manuscript.

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### **Ethics Statement**

The study received research ethics board approval from KPU (Approval Number 2020-13).

### **Conflict of Interest**

The author does not declare any conflict of interest.

### **Data Availability Statement**

The data from this study are not publicly available. At the time of obtaining research ethics board approval (the start of the COVID-19 pandemic), I did not include the condition that data

be publicly available. As a result, study participants did not provide informed consent to participate under those terms.

### References

- Al Abri, M.H., & Dabbagh, N. (2019). Testing the intervention of OER renewable assignments in a college course. *Open Praxis*, 11(2), 195–209.  
<http://doi.org/10.5944/openpraxis.11.2.916>
- Axe, J., Childs, E., DeVries, I., & Webster, K. (2020). Student experiences of open educational practices: A systematic literature review. *Journal of E-Learning and Knowledge Society*, 16(4), 67-75. <https://doi.org/10.20368/1971-8829/1135340>
- Bali, M. (2019, June 14). The other side of student empowerment in a digital world #FOEcast – join me June 24 to chat. *Reflecting allowed*. <https://blog.mahabali.me/uncategorized/the-other-side-of-student-empowerment-in-a-digital-world-foecast-join-me-june-24-to-chat/>
- Bali, M., Cronin, C., & Jhangiani, R.S. (2020). Framing open educational practices from a social justice perspective. *Journal of Interactive Media in Education*, 2020(1), 10.  
<http://doi.org/10.5334/jime.565>
- Baran, E., & AlZoubi, D. (2020). Affordances, challenges, and impact of open pedagogy: Examining students' voices. *Distance Education*, 41(2), 230-244.  
<https://doi.org/10.1080/01587919.2020.1757409>
- Bliss, T.J., Robinson, T.J., Hilton, J., & Wiley, D.A. (2013). An OER COUP: College teacher and student perceptions of open educational resources. *Journal of Interactive Media in Education*, 2013(4). <http://doi.org/10.5334/2013-04>
- Bonica, M. J., Judge, R., Bernard, C., & Murphy, S. (2018). Open Pedagogy Benefits to Competency Development: From Sage on the Stage to Guy in the Audience. *The Journal of Health Administration Education*, 35(1), 9-27.  
<https://www.ingentaconnect.com/contentone/aupha/jhae/2018/00000035/00000001/art0003>
- Borthwick, K., & Gallagher-Brett, A. (2014). Inspiration, ideas, encouragement: Teacher development and improved use of technology in language teaching through open educational practice. *Computer Assisted Language Learning*, 27(2), 163-183.  
<https://doi.org/10.1080/09588221.2013.818560>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297-298. <http://dx.doi.org/10.1080/17439760.2016.1262613>
- Brown, M., & Croft, B. (2020). Social annotation and an inclusive praxis for open pedagogy in the college classroom. *Journal of Interactive Media in Education*, 2020(1), 8.  
<http://doi.org/10.5334/jime.561>
- Brunton, J., & Gaffney, M. (2020, April 2). *Exploring the influence of an open pedagogy assignment on online learner perceptions of knowledge production in society* [Conference presentation]. OER20. <https://youtu.be/Rp9KjC3wXtw?si=pfAMy5w0x-Wftk8U>
- CAST. (n.d.). *The UDL guidelines*. <https://udlguidelines.cast.org/>
- Caulfield, M. (2016, September 7). *Putting student-produced OER at the heart of the institution*. Hapgood. <https://hapgood.us/2016/09/07/putting-student-produced-oer-at-the-heart-of-the-institution/>
- Creswell, J.W., & Plano Clark, V.L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publishing.



- Cronin, C. (2017). Openness and praxis: Exploring the use of open educational practices in higher education. *The International Review of Research in Open and Distributed Learning*, 18(5). <http://dx.doi.org/10.19173/irrodl.v18i5.3096>
- Dermody, R. (2019). Open pedagogy for teaching structures. *Building Technology Educator's Society*, 2019(3). <https://doi.org/10.7275/s9xd-h436>
- DeRosa, R., & Jhangiani, R. (2017). Open pedagogy. In E. Mays (Ed.), *A guide to making open textbooks with students*. Rebus Community. <https://press.rebus.community/makingopentextbookswithstudents/chapter/open-pedagogy/>
- DeRosa, R., & Robison, S. (2017). From OER to open pedagogy: Harnessing the power of open. In R. Jhangiani & R. Biswas-Diener (Eds.), *Open: The philosophy and practices that are revolutionizing education and science*. (pp. 115–124). Ubiquity Press. <https://doi.org/10.5334/bbc.i>
- Farzan, R., & Kraut, R.E. (2013). Wikipedia classroom experiment: Bidirectional benefits of students' engagement in online production communities. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems 2013*. <http://dx.doi.org/10.1145/2470654.2470765>
- Flinn, C. (2020). *Trades students' perceptions of their experiences in the co-creation of OER* [Master's thesis, Royal Roads University]. <http://dx.doi.org/10.25316/IR-15317>
- Fraile, J., Panadero, E., & Pardo, R. (2017). Co-creating rubrics: The effects on self-regulated learning, self-efficacy and performance of establishing assessment criteria with students. *Studies in Educational Evaluation*, 53, 69–76. <https://doi.org/10.1016/j.stueduc.2017.03.003>
- Gordon, L. (2017). Students as co-designers: Peer and instructional resources for novice users of ePortfolio. *International Journal of ePortfolio*, 7(2), 113–127. <https://www.theiejep.com/pdf/IJEP279.pdf>
- Gumb, L., & Miceli, H. (2020). Library support for scaffolding OER-enabled pedagogy in a general education science course. In A. Clifton & K. Davies Hoffman (Eds.), *Open pedagogy approaches: Faculty, library, and student collaborations*. (pp. 173–189). Milne Publishing. <https://milnepublishing.geneseo.edu/openpedagogyapproaches/>
- Hegarty, B. (2015). Attributes of open pedagogy: A model for using open educational resources. *Educational Technology*, 55(4), 3–13. <http://www.jstor.org/stable/44430383>
- Hilton, J., Hilton, B., Ikahihifo, T. K., Chaffee, R., Darrow, J., Guilmett, J., & Wiley, D. (2020). Identifying student perceptions of different instantiations of open pedagogy. *The International Review of Research in Open and Distributed Learning*, 21(4), 1-19. <https://doi.org/10.19173/irrodl.v21i4.4895>
- Hilton, J., III., Wiley, D., Chaffee, R., Darrow, J., Guilmett, J., Harper, S., & Hilton, B. (2019). Student perceptions of open pedagogy: An exploratory study. *Open Praxis*, 11(3), 275–288. <http://doi.org/10.5944/openpraxis.11.3.973>
- Hodgkinson-Williams, C., & Paskevicius, M. (2012). The role of postgraduate students in co-authoring open educational resources to promote social inclusion: A case study at the University of Cape Town. *Distance Education*, 33(2), 253-269, <https://doi.org/10.1080/01587919.2012.692052>
- Hollister, C.V. (2020). Using open pedagogy to engage LIS students: A case study. *Journal of Librarianship and Scholarly Communication*, 8, 2357. <https://doi.org/10.7710/2162-3309.2357>
- Jung, E., Bauer, C., & Heaps, A. (2017). Higher education faculty perceptions of open textbook adoption. *The International Review of Research in Open and Distributed Learning*, 18(4). <https://doi.org/10.19173/irrodl.v18i4.3120>
- Kimmons, R. (2016). Expansive openness in teacher practice. *Teachers College Record*, 118, 1–34.

- [https://www.researchgate.net/publication/309118315\\_Expansive\\_openness\\_in\\_teacher\\_practice](https://www.researchgate.net/publication/309118315_Expansive_openness_in_teacher_practice)
- Kruger, J. S., & Hollister, C. (2021). Engaging undergraduate public health students through a textbook creation project. *Pedagogy in Health Promotion*, 7(3), 226–234.  
<https://doi.org/10.1177/2373379920962416>
- Kwantlen Polytechnic University (KPU). (n.d.). *Why choose KPU*. Kwantlen Polytechnic University. <https://www.kpu.ca/why-choose-kpu>
- Kwantlen Polytechnic University (KPU). (2021, April 13). *Student profile: Students who studied in the 2019/20 academic year*. Office of Planning & Accountability, Kwantlen Polytechnic University.  
<https://www.kpu.ca/sites/default/files/Institutional%20Analysis%20and%20Planning/KPU%20Student%20Profile%20-%20April%2013%202021.pdf>
- Kwantlen Polytechnic University (KPU). (2018). *Open education*. Kwantlen Polytechnic University. <https://www.kpu.ca/vp-academic/academic-plan-2023/open-education>
- Marsh, J. (2018, April 27). *What open education taught me: A Keene State College undergraduate reflects on her experiences with open education*. Open Pedagogy Notebook. <http://openpedagogy.org/program-level/what-open-education-taught-me/>
- Maxwell, J.A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). SAGE Publications.
- Paskevicius, M. & Hodgkinson-Williams, C. (2018). Student perceptions of the creation and reuse of digital educational resources in a community development-oriented organisation. *Journal of Learning for Development*, 5(1).  
<https://doi.org/10.56059/jl4d.v5i1.253>
- Paskevicius, M., & Irvine, V. (2019). Open education and learning design: Open pedagogy in praxis. *Journal of Interactive Media in Education*, 2019(1), 10.  
<http://doi.org/10.5334/jime.512>
- Seraphin, S. B., Grizzell, J. A., Kerr-German, A., Perkins, M. A., Grzanka, P. R., & Hardin, E. E. (2019). A conceptual framework for non-disposable assignments: Inspiring implementation, innovation, and research. *Psychology Learning & Teaching*, 18(1), 84–97. <https://doi.org/10.1177/1475725718811711>
- Weller, M. (2013). The battle for open - a perspective. *Journal of Interactive Media in Education*, 2013(3), 15. <http://doi.org/10.5334/2013-15>
- Werth, E., & Williams, K. (2021). Exploring student perceptions as co-authors of course material. *Open Praxis*, 13, 53-67. <http://dx.doi.org/10.5944/openpraxis.13.1.1187>
- Wiley, D. (n.d.). *Defining the "open" in open content and open educational resources*.
- Wiley, D. (2013, October 21). *What is open pedagogy*. Improving learning.  
<https://opencontent.org/blog/archives/2975>
- Wiley, D., & Hilton, J. L., III. (2018). Defining OER-enabled pedagogy. *The International Review of Research in Open and Distributed Learning*, 19(4).  
<https://doi.org/10.19173/irrodl.v19i4.3601>

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## Appendix A

### Faculty Survey Questions

1. How long (in years) have you been teaching at the post-secondary level?
2. How long (in years) have you been using open pedagogy? Open pedagogy practices and assignments can include students: creating or co-creating open resources, open content, H5P resources, or open textbooks; creating resources for a community or client; creating teachable content or resources for students; blogging; podcasting; or creating or co-creating a rubric.
3. What open pedagogy practices do you use in your teaching and for how long (in years) have you been using these practices?
4. Have you been using OER in your courses? OER or open education resources are resources that have an open license (such as a Creative Commons or public domain license), providing permissions for others to use, reuse, remix, revise, and/or to redistribute the resources. [Response options: Yes, no]
5. On average, how much time does it take you each week to prep for a course in which you are using open pedagogy, compared to a course that uses more traditional practices? [Response options: Significantly more time, somewhat more time, about the same amount of time, somewhat less time, significantly less time]
6. What first prompted you to start using open pedagogy?
7. What motivates you now to use open pedagogy?
8. What challenges have you experienced in using open pedagogy?
9. What benefits have you experienced in using open pedagogy?
10. What feedback, if any, have you received from students about the open pedagogy practices you have used?
11. Do you think there are particular levels of courses that work better for open pedagogy? [Response options: Yes – upper level courses, Yes – lower level courses, No – it works for all levels of courses]
12. What learner characteristics do you think influences learner perceptions of open pedagogy?
13. Have your practices in open pedagogy changed since you first started using it? [Response options: Yes, No]
14. In future courses, how likely are you to use open pedagogy? [Response options: Very likely, somewhat likely, unsure/undecided/it depends on the course, somewhat unlikely, very unlikely]

## **Appendix B**

### Student Survey Questions

1. Please indicate your level of agreement with the following statements: [Response options: Strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree]

Open pedagogy is more valuable to my learning than traditional learning activities.

Open pedagogy is more valuable to my future career than traditional learning activities.

Open pedagogy is more rewarding/enjoyable to complete than traditional learning activities.

Open pedagogy is more difficult than traditional learning activities.

Open pedagogy is more time-consuming than traditional learning activities.

Open pedagogy is more stressful than traditional learning activities.

2. Please indicate your level of agreement with the following statements: [Response options: Strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree]

Participating in open pedagogy helps me master more of the core academic content than traditional learning activities.

Participating in open pedagogy helps me become a more collaborative learner than traditional learning activities.

Participating in open pedagogy helps me become a more critical thinker and better problem solver than traditional learning activities.

Participating in open pedagogy helps me become a more effective communicator than traditional learning activities.

Participating in open pedagogy helps me learn more effectively than traditional learning activities.

3. Please indicate how the following attributes have been affected by your engagement in open pedagogy. [Response options: Decreased a lot, decreased somewhat, stayed the same, increased somewhat, increased a lot]

Your creativity

Your engagement in your learning

The amount of time you spend completing course work

4. What do you like about engaging in open pedagogy?
5. What do you find challenging about engaging in open pedagogy?
6. Please indicate your level of agreement with the following statement. [Response options: Strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree]  
  
I would choose to enroll in a course if I knew the instructor would be using open pedagogy.
7. Is there anything else you would like to share about your experiences with open pedagogy?

### Appendix C

**Table C1**

*Faculty Preparation Time*

Response	Frequency of response
Significantly more time	2
Somewhat more time	4
About the same amount of time	1
Somewhat less time	1
Significantly less time	0

**Table C2**

*Faculty Perceptions of Learner Characteristics Suited for Engaging in OP*

Theme	Frequency of theme
The degree to which students were curious, comfortable with uncertainty, adaptable, and/or have an open mind	4
Whether students have experience with or a preference for a more “traditional” (more structured) educational system	4
Cultural factors relating to educational experiences	3
The degree to which students care about the environment and others	1
No single characteristic	1