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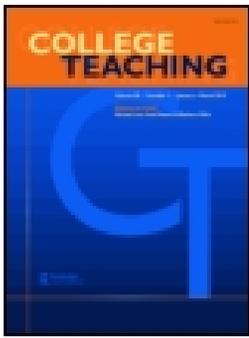
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Understanding Student Experiences of Renewable and Traditional Assignments

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ABSTRACT

Renewable assignments are student created artifacts that have value outside of courses. However, more empirical inquiry in renewable assignments grounded in theoretical frameworks is necessary. In this study, students (N = 69) engaged in renewable assignments and were asked to report on their perceptions based on the self-determination theory of motivation and social justice principles. Overall, students reported higher levels of motivation as well as more opportunity to represent their identities for renewable assignments than traditional assignments. Students who opted to publicly share reported higher levels of competence and relatedness than did students who did not opt to publicly share.

Student assignments are often very transactional in nature, seen only by the instructor for the purpose of demonstrating content mastery and achievement of learning objectives. This closed feedback loop between the student and instructor has been coined "disposable" by scholars Wiley and Hilton (2018) as the assignments are no longer used after the course has concluded. However, the underlying principles of which the term is built upon is not new but stems from educational theorists such as Seymour Papert and his theory of Constructionism, where educators facilitate rather than drive student learning, believing that knowledge construction is most productive when students are creating tangible and shareable learning objects that they perceive as meaningful (Ackerman et al 2009). The recent movement in the open education community that encourages student assignments to have value outside of the course (Wiley et al. 2017) has been coined "renewable" or "nondisposable," because these assignments can freely and legally be used, adapted and expanded upon by the student or others outside of the course (Seraphin et al. 2019). Examples of renewable assignments include creating websites, editing and contributing to Wikipedia articles, co-creating syllabi with instructors, and creating ancillary material like test bank items (Clinton-Lisell 2021; Wiley and Hilton 2018).

The research on renewable assignments is nascent, but it has been found that students tend to have positive experiences with renewable assignments (Clinton-Lisell 2021), while some students still prefer the 1-1 exchange between themselves and their teachers (Bloom 2019). However, more research, particularly theoretically-grounded research, is needed to guide further development of renewable assignments (Wiley 2021). In this study, student perceptions of renewable assignments are compared to those of traditional assignments using two theoretical frameworks: self-determination theory, which is a well-established theory of motivation (Deci and Ryan 2000), and the social justice principles of redistributive, recognitive, and representational justice (Lambert 2018).

Renewable assignments are often synonymous with open pedagogy practices (Baran, Al Zoubi, and Jovanović 2021). Open pedagogy, also referred to as OER-enabled pedagogy (Wiley and Hilton 2018) and open education practices, is an instructional approach in which the affordances of open licensing are embraced (Clinton-Lisell 2021; Cronin and MacLaren 2018). Open licensing builds upon traditional copyright using Creative Commons licenses to allow for the "5 R" activities of retain, reuse, revise, remix, and redistribute materials (Wiley and Hilton 2018). Unlike traditional copyrights, open licensing allows for materials to be accessed, kept, changed, and shared without financial costs (such materials are termed open educational resources, OER; Green 2017). Renewable assignments are student-created OER if they are

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licensed accordingly (i.e., shareable; Wiley and Hilton 2018), which is what distinguishes them from Papert's concept of constructionist assignments (public facing but not necessarily openly licensed). Therefore, in this study, we examined student perceptions of their understanding of the unique aspects of renewable assignments in terms of privacy, licensing, and value of sharing. We also used the frameworks of self-determination theory and social justice to compare students who opted to publicly share their materials with those who did not as well as examine their rationales for decisions to publicly share.

Self-determination theory

According to self-determination theory, motivation to engage in tasks, such as course assignments, is based on the individual's perceived levels of the innate psychological needs of autonomy, competence, and relatedness (Deci and Ryan 2000; Ryan and Deci 2017). Autonomy refers to feelings of independence and choice (often to pursue one's interests and values) and freedom from external control (Liu, Wang, and Deci 2016). Competence refers to feelings of skill and a sense that one can improve and succeed (Deci et al. 1991). Relatedness in educational settings refers to feelings of acceptance and support from one's peers and instructors (Ryan and Niemiec 2009). Self-determination theory was initially developed to examine intrinsic motivation, which is the desire to engage an activity due to feelings of inherent enjoyment or interest (Deci and Ryan 2000). Intrinsic motivation has been well established as benefiting student learning as students who inherently enjoy a learning task are more likely to meaningfully engage in the content (Howard, Chong, and Bureau 2020; Taylor et al. 2014).

There are reasons to expect that autonomy, competence and relatedness and subsequently intrinsic motivation would be higher with renewable assignments compared to traditional assignments. With renewable assignments, students are often given options regarding what they create. Indeed, interviews of students engaging in open pedagogy indicated themes of autonomy due to the choices available to them for their assignments (Werth and Williams 2021). However, as with traditional assignments, students would be required to follow certain guidelines, which could yield similar levels of perceived pressure from external control (in this case, the instructor). Similar levels of perceived pressure would subsequently lead to similar feelings of autonomy between traditional and renewable assignments (Niemiec and

Ryan 2009). Promoting student autonomy is considered a central component of open education as power dynamics are shifted when students are knowledge creators (Paskevicius and Irvine 2019a).

Because renewable assignments are likely unfamiliar to most students, it is possible that there would be concerns about competence relative to traditional assignments with which students may have more experience. Peer collaboration and feedback are considered attributes of open pedagogy practices such as renewable assignments (Hegarty 2015). Therefore, it is anticipated that feelings of relatedness would be higher for renewable assignments compared to traditional assignments (Butz and Stupnisky 2017). Overall, renewable assignments are anticipated to be more supportive of the basic psychological needs of autonomy, competence, and relatedness which would indicate higher levels of intrinsic motivation in terms of interest and enjoyment relative to traditional assignments (Ryan and Deci 2017).

Self-determination may be useful in understanding student decisions as to whether or not to publicly share their renewable assignments. Students who do not perceive autonomy in their renewable assignment may also feel they do not have a choice or are pressured to share it (Croft and Brown 2020). Conversely, students who experience high levels of autonomy may wish to share because they feel ownership in what they created (Ryan and Deci 2020). Student competence is likely critical as students who feel competent in creating their renewable assignment likely view it as a quality product that should be shared publicly. Because renewable assignments are often created through peer collaboration (Seraphin et al. 2019), relatedness may be key to decisions about sharing as groups would need to come to a consensus to publicly share their materials. Even if students are individually creating artifacts that they'll publicly share, relatedness may still come into play as many students might be anxious regarding the lack of traditional structure and expectations (Paskevicius and Irvine 2019b).

Social justice

A critical issue to consider in all instructional practices is social justice (Ladson-Billings 1996, 2014). Social justice is "… an ideal condition in which all members of a society have the same rights, protections, opportunities, obligations, and social benefits. Implicit in this concept is the notion that historical inequalities should be acknowledged and remedied through specific measures" (Barker 2003, p. 405). Furthermore, as open pedagogy develops as a field

and seeks to be inclusive and equitable, social justice principles must be purposefully examined (Bali, Cronin, and Jhangiani 2020; Croft and Brown 2020). The social justice principles of redistributive justice, recognitive justice, and representational justice have been thoughtfully applied to open education (Lambert 2018).

Redistributive justice is providing materials to those who typically would be under-resourced (Rawls 1971). Open education addresses this through public sharing and open licensing, allowing materials to be accessed and retained without financial cost (Clinton-Lisell et al. 2021). Indeed, students who have been historically underserved by higher education, such as first-generation students, students of color, and low-income students, appear to benefit more from access to freely-available course materials (OER) relative to their peers (Colvard, Watson, and Park 2018; Jenkins et al. 2020; Nusbaum, Cuttler, and Swindell 2020).

Recognitive justice is "recognition and respect for cultural and gender differences" (Lambert 2018, 227; Fraser 1995) with the goal of recognition being "a difference-friendly world, where assimilation to majority or dominant cultural norms is no longer the price of equal respect" (Fraser 1998; p. 1). The recognitive justice demonstrated in course materials can be ascertained by the diversity of content to "widen participation" and combat stereotypes (Bracken and Wood 2019; Lambert and Czerniewicz 2020). Content analyses comparing open educational resources to commercial resources found that neither were strong in recognitive justice based on the diversity of topics and examples (Brandle 2020). However, unlike commercial resources, instructors can legally edit OER due to their licensing structure to support recognitive justice by removing content that is exclusionary and adding inclusive content (e.g., replacing "consumer tribe" in a marketing textbook to "consumer fan club"; Clinton-Lisell et al. 2021).

Representational justice is equitable opportunities for self-expression by peoples who have been historically underserved and marginalized by educational systems (Fraser 2008; Lambert 2018). Representational justice is necessary because groups of people who have been historically underserved and marginalized have had their experiences shared by others rather than having the autonomy to speak for themselves (Lambert 2018). Renewable assignments may be designed to provide students opportunities to create materials that express their identities and tell their stories (Clinton-Lisell et al. 2021). For example, rather than having a lesson on microaggressions experienced by minoritized individuals prepared by non-minoritized individuals, those who experience microaggressions themselves would have the opportunity and choice to create the materials. This allows for materials about groups to be created by students identifying as members of these groups allowing for self-determination in sharing their stories and experiences.

Representational and recognitive justice may be important factors in students' decisions to publicly share their renewable assignments. Logically, if students view representational justice (opportunity for self-expression) in the renewable assignments they created as high, they could be more inclined to publicly share their materials so that they may have their voices heard. In terms of recognitive justice (diversity of content), students who do not see their identities represented in their course materials may feel that their identities are not valued and respected and may be dissuaded from sharing their renewable assignments.

These questions guided this study:

1. How does intrinsic motivation, autonomy, competence, and relatedness for renewable assignments compare for traditional assignments?
2. How does representational justice for renewable assignments compare to traditional assignments?
3. What are the differences in intrinsic motivation, autonomy, competence, and relatedness between students who publicly shared and students who did not publicly share their renewable assignments?
4. What were the differences in representational and recognitive justice in course materials between students who publicly shared and students who did not publicly share their renewable assignments?
5. What reasons did students state for opting to publicly share or not share?

Method

Context

The setting for this study is institutions served through the New England Board of Higher Education (NEHBE). NEHBE serves to promote greater education opportunities and services for the residents of New England and its more than 270 colleges and universities. Advancing and scaling open education in New England is a priority for NEBHE and in 2020 through generous funding through the William and Flora Hewlett Foundation, the organization joined the

three other higher education regional compacts – the Midwestern Higher Education Compact, the Southern Regional Education Board, and the Western Interstate Commission for Higher Education – to establish the National Consortium for Open Educational Resources (NCOER). NCOER is focused on increasing access, affordability, and quality of OER with the intent of assisting and promoting the adoption and scaling of open education across the 50 states, the District of Columbia, territories, and freely associated states that may participate in the NCOER Network.

As a partner in the collaborative, NEBHE sought to explore the impact that open pedagogy (also referred to as OER-enabled pedagogy; Wiley & Hilton III, 2018) may have on student learning and success, particularly on those historically underserved and marginalized by postsecondary education. In order to get a sample of students who had participated in OER-enabled pedagogy, a regional faculty community of practice was formed in the spring of 2021. Faculty were selected based on a variety of factors including their discipline, institution sector and type, percentage of Pell-eligible students at their institution, minority-serving institution status, and their prior knowledge of and commitment to open education and social justice. These 8 faculty members taught at institutions in the six New England states (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont), New York, and New Jersey. Three taught at 2-year community colleges, two at 4-year independent universities, and three at 4-year public universities. Three of the represented institutions were minority-serving, which was a strong determining factor in the selection process. The disciplines taught by these faculty members included Political Science, Education, Mathematics, Biology, Business, Criminal Justice, Social Work, and English Literature.

These eight faculty members received training in OER-enabled pedagogy through a community of practice, where they learned how to support and engage students in the design and completion of renewable assignments. Faculty were encouraged but not required to develop a renewable assignment that focused on a social justice issue within the course discipline.

The data that support the findings of this study are openly available in Open Science Framework (Clinton-Lisell 2022).

Participants

Sixty-nine of the students enrolled in the courses with renewable assignments completed enough of the survey measures to be included in at least one of the analyses to answer research questions. Sixty-four students completed all of the measures necessary to answer research questions. Reporting demographics was optional and twenty-one students opted to do so. Of the students who reported demographics, the average age was 21.70 (SD = 3.53). Nine students reported being first-generation students. Most of the students (15) reported identifying as women, four as men, and one as agender. Two students reported disability accommodations for their learning and six reported receiving Pell grants to finance their education. Fifteen students reported growing up only speaking English in the home, two students reported growing up in bilingual households with English and another language, and four students had languages other than English spoken in the home growing up. For racial and ethnic identities, the majority (15) reported being white (non-Hispanic), four reported being Latina/o/x or Hispanic, one reported being Black Hispanic, and one reported being Middle Eastern.

Measures

Intrinsic motivation scales

Participants were asked their intrinsic motivation for assignments using items grounded in self-determination theory (Deci et al. 1994). Parallel items were developed for both renewable and traditional assignments (numbers of items reported reflect the number for renewable or traditional, but not both). Prior to the items on renewable assignments, participants were reminded that they created a renewable assignment and given an explanation of what a renewable assignment was. Prior to the items on traditional assignments, there was an explanation of traditional assignments with examples. Participants were asked to indicate how true of themselves each item was on a Likert scale of 1-5 (1 being not at all true and 5 being very true). The subscales were interest/enjoyment (7 items), pressure (4 items), perceived choice (6 items), and perceived competence (5 items). Choice is indicative of autonomy and pressure is indicative of lack of autonomy. In a relatedness measure (4 items), participants were asked to indicate how strongly they agreed with the items while working on their renewable or traditional assignments on a Likert scale of 1-5 (1 being strongly disagree and 5 being strongly agree). Relevant to competence, pride was assessed by adapting Pekrun's achievement emotion's questionnaire (Pekrun et al. 2011) with 3 items asking for participants' level of agreement for each statement about renewable or traditional assignments on a Likert scale of 1-5.

Social justice measures

Representational justice. A measure of students' perceived opportunities to express their voice and stories, known as representational justice (Fraser 1995; Keddie 2012; Young 1997; Lambert 2018), was developed by the authors of this study. Participants were asked to indicate their level of agreement for six items on a Likert scale of 1-5.

Recognitive justice. A measure of students' perceptions of the materials in the course being inclusive and diverse, known as recognitive justice (Fraser 1995; Keddie 2012; Young 1997; Lambert 2018), was developed by the authors in this study. Participants were asked to indicate whether their materials in their current course were worse than in the other courses, about the same as in other courses, or better than in other courses with 11 items on a three-point Likert scale.

Public sharing

Students were asked if they opted to publicly share their renewable assignments. If they indicated they had, they were then prompted to answer an open-response question about why they publicly shared. If they indicated they did not publicly share their renewable assignments, then they were prompted to answer an open-response question about why they did not publicly share.

Procedure

In the final two weeks of the semester, instructors were asked to email their students an invitation to participate in the survey. The email included a Qualtrics link for students to complete the survey on their own devices at their convenience. Students who completed the survey could submit a request on a separate form to receive a $10 gift card for a major retailer as a thank you for their participation. This request was not connected to their survey responses to allow for deidentified survey data.

Results

How does intrinsic motivation for renewable assignments compare for traditional assignments?

To answer the first research question, paired sample t-tests were conducted for the subscales relevant to intrinsic motivation: interest/enjoyment, pressure,

Table 1. Intrinsic motivation and representational justice comparisons between renewable and traditional assignments.

Construct	Renewable assignments M(SD)	Traditional assignments M(SD)	t-test	p value
Interest/ enjoyment	3.84(.84)	2.98(1.07)	6.71	<.001
Pressure	2.03(.82)	2.70(.90)	−5.67	<.001
Choice	3.52(.81)	2.74(1.02)	6.29	<.001
Competence	4.11(.74)	3.86(.80)	3.27	.002
Relatedness	3.74(.87)	3.49(.58)	6.99	<.001
Pride	4.11(.63)	3.76(.82)	3.78	<.001
Representational justice	4.05(.72)	3.52(.98)	4.28	<.001

Note. N = 69 except for pride which is N = 68. All measures are on a 5-point scale with a minimum of 1 and maximum of 5.

perceived choice, perceived competence, relatedness and pride. As can be seen in the results in Table 1, renewable assignments had higher levels of reported interest/enjoyment, perceived choice, perceived competence, relatedness, and pride than did traditional assignments. Traditional assignments had higher levels of reported pressure. Overall, the findings indicate more intrinsic motivation for renewable assignments than traditional assignments.

How does representational justice for renewable assignments compare to traditional assignments?

To answer the second research question, paired-sample t-tests were conducted to compare students' levels of representational justice with renewable and traditional assignments. As can be seen in Table 1, students reported higher levels of representational justice with renewable than with traditional assignments. This indicates students perceived more opportunities to express their identities and share their voice with renewable assignments.

What are the differences in intrinsic motivation between students who publicly shared and students who did not publicly share their renewable assignments?

Students self-reported whether they chose to publicly share their renewable assignments (46 publicly shared and 22 did not publicly share). To answer the third research question, independent-sample t-tests were conducted with publicly sharing as the independent variable and interest/enjoyment, pressure, choice, perceived competence, pride, relatedness as dependent variables. As can be seen in Table 2, there were no reliable differences in interest/enjoyment, pressure, choice, or pride. However, students who publicly

Table 2. Comparisons of study variables between students who publicly shared and students who did not publicly share their renewable assignments.

Construct	Publicly shared M(SD)	Not Publicly Shared M(SD)	t-test	p value
Interest/enjoyment	3.89(.79)	3.69(.94)	.89	.38
Pressure	2.02(.80)	2.05(.89)	−.11	.91
Choice	3.47(.84)	3.62(.79)	−.68	.50
Competence	4.24(.61)	3.81(.91)	2.32	.02
Relatedness	3.90(.85)	3.42(.85)	2.02	.03
Pride	4.16(.57)	3.98(.74)	1.04	.30
Representational justice	4.20(.67)	3.75(.75)	2.50	.02
Recognitive justice	2.28(.15)	2.44(.19)	3.47	<.001

Note. N = 68 except for N = 64 for recognitive justice and N = 67 for pride. Measures are on a 5-point scale with a minimum of 1 and maximum of 5 with the exception of recognitive justice which is on a 3-point scale with a minimum of 1 and maximum of 3.

shared reported higher levels of perceived competence and relatedness than their peers who did not publicly share. These findings indicate that students who opted to publicly share felt more connected to their peers and more skilled at creating the renewable assignments than did their peers who opted not to publicly share.

What were the differences in representational and recognitive justice between students who publicly shared and students who did not publicly share their renewable assignments?

To answer the fourth research question, independent-sample t-tests were conducted with publicly sharing as the independent variable and representational justice as well as recognitive justice as dependent variables. As can be seen in Table 2, students who publicly shared reported higher levels of representational justice than students who did not publicly share. Recognitive justice levels were lower for students who chose to publicly share compared to their peers who did not publicly share. These findings indicate students who publicly shared felt they had more opportunity to express their identities and voice than students who did not publicly share. However, students who chose to publicly share perceived the existing course materials as less inclusive and diverse than did students who chose not to publicly share.

What reasons did students state for opting to publicly share or not share?

Students were asked to share their reasons to publicly share or not publicly share their renewable assignments. Their responses were coded for themes and

Table 3. Reasons students publicly shared their renewable assignments.

Theme	Examples	Frequency
Valuable knowledge	"It is valuable information that others should be able to use when needed!"	15
Desire to share with or help others	"I decided to publicly share my assignment because I wanted people to see my work. I did not want to do work for an assignment just for it to virtually disappear."	13
Proud of my good work	"I chose to publicly share my assignment because it is informative and I am proud of my work."	9
To help future students	"It gives other students the ability to gain knowledge from my assignment."	7
Allow work to be improved upon by others	"I hope it can be better refined as time goes on."	5
Course expectation	"The entire goal of the assignment was to create a platform that was meant to be shared."	4
Provide professors with examples	"I wanted the assignment to help professors in the future."	3
My choice	"I chose to share my work."	1
Interesting project	"I chose to publicly share it because it was an interesting project to work on."	1

the findings are presented in Tables 3 and 4. Perceived value of their assignments, wishing to help others, and pride were common reasons for sharing. Anxiety over public sharing, shyness, and disagreements with group members were common reasons for not sharing.

Discussion

In this study, student perceptions of renewable assignments in terms of autonomy, relatedness, competence, inherent interest and enjoyment, and representational justice were compared to traditional assignments. Students reported higher levels of choice and lower levels of pressure with renewable assignments than traditional assignments, indicating higher levels of autonomy with renewable assignments. Relatedness and competence, including perceptions of pride, were both rated higher with renewable assignments than traditional assignments. Inherent interest and enjoyment were also rated higher with renewable assignments than traditional assignments. Representational justice, referring to students' perception of being able to share their experiences and unique identities (Lambert 2018), was also rated higher with renewable assignments compared to traditional assignments.

Based on self-determination theory (Ryan and Deci 2020), students appeared to have higher levels of

Table 4. Reasons students did not publicly share their renewable assignments.

Theme	Examples	Frequency
Public sharing is anxiety provoking	"I don't want other people to look at my assignments because I'm always worried what people think about my thoughts through the assignments."	4
Too shy for public sharing	"I am just too shy to share things publicly."	4
Unaware public sharing was an option	"I'm not sure if I had that option."	3
Group members did not agree to publicly share	"I worked on my assignment with multiple other peers and did not get their consent to share it."	2
My choice	"I didn't want to."	1
No answer	"NA"	1

motivation for renewable assignments compared to the traditional assignments. This is because the students' psychological needs of autonomy, competence, and relatedness appeared to be better met through renewable assignments than traditional assignments, and having these needs met fosters motivation. Moreover, students reported higher levels of intrinsic motivation (inherent interest and enjoyment) with renewable assignments than traditional assignments. Instructors may find these results helpful for informing their choice of using renewable assignments in the classroom. Intrinsic motivation is well known to bolster student achievement (Howard, Chong, and Bureau 2020; Taylor et al. 2014; Wu 2019); however, enhancing students' intrinsic motivation is generally considered more challenging than extrinsic motivation, which is driven by rewards and relevance to goals (Harackiewicz et al. 2014; Shin et al. 2019).

With renewable assignments, students have the option of publicly sharing and licensing their intellectual property for others to appreciate and use (Seraphin et al. 2019). We also examined student decisions for public sharing of renewable assignments through the frameworks of self-determination theory and social justice principles (Ryan and Deci 2020; Lambert 2018). Students who publicly shared reported higher levels of competence, relatedness, and representational justice than students who did not publicly share their work. In contrast, students who publicly shared perceived the existing course materials as less diverse and inclusive than did students who did not publicly share.

Based on the current study's findings, students who publicly shared had higher levels of perceived competence than those who did not. This aligns with open-ended responses in which some students who

publicly shared stated they shared because it was quality work or that they knew they did well which would logically relate to competence. Also relevant to self-determination theory, students who publicly shared reported higher levels of relatedness than did students who did not publicly share. This can be explained by some of the comments by students who did not publicly share in which group members did not agree to share, which could indicate difficulties in relating to their peers. Moreover, students reported a reason they publicly shared was to help other students and professors, which could indicate that they related well to the students and professor in their course (Ryan and Deci 2020).

Based on the findings of this study, renewable assignments aligned with social justice principles, which is critical as the field of open education grows (Croft and Brown 2020). Namely, students reported higher levels of representational justice for renewable assignments, indicating that they noted more opportunities to share their stories and speak from their experiences in these projects than with traditional assignments (Lambert 2018). This is likely because the renewable assignments were designed to afford self-expression and sharing experiences from the vantage points of their identities. Moreover, students who publicly shared reported higher levels of representational justice for the renewable assignment than did students who did not publicly share. This could be interpreted that students who felt they could express their identities well in the renewable assignment wanted to take advantage of an opportunity to share their experiences with others by publicly sharing their work. In reviewing the reasons why students publicly shared their renewable assignments, the value of the knowledge in them and wanting to help others were commonly noted. These findings indicate that instructors who wish to promote representational justice in their courses may use renewable assignments as a means for this purpose.

Students who publicly shared perceived the existing course materials as lower in recognitive justice (perceived diversity and inclusion shown in materials; Lambert 2018) than did students who publicly shared. This is contrary to what was expected. We were concerned that students who experienced low levels of recognitive justice did not have their backgrounds respected and subsequently these students would not wish to share their materials. However, it is possible that students who experienced low levels of recognitive justice may have felt more compelled to share their materials to improve the diversity and inclusion of available materials to the public. This possibility is

supported by the student response to an open-ended item that their work was publicly shared because there was a lack of diverse racial representation in existing resources.

Pedagogical implications for instructors considering encouraging students to publicly share their assignments may be inferred from this study. In this study, faculty were trained on these concepts and explained them to students. Instructors who wish to incorporate renewable assignments should seek out similar training and education so that students are fully informed before they publicly share their work. It should also be noted that competence and relatedness were lower for students who did not publicly share their work. Instructors could be mindful of these issues when planning their renewable assignments by ensuring there is scaffolding and constructive feedback to build competence (Orsini et al. 2016; Ryan and Deci 2020) and foster communication and a class environment that support relatedness (Escandell & Chu, 2021; Santana-Monagas et al. 2022).

There were limitations in this study that should be considered when considering future studies on renewable assignments. Namely, there was a lack of demographic information reported. One potential reason could be that the instructions stated that reporting demographics was optional; and students may have opted to exit the survey when seeing these instructions. Therefore, it is unclear how these findings may vary across student identities and backgrounds, which is important for understanding equity and inclusion in open education (Croft and Brown 2020). Moreover, the renewable assignments themselves varied and it is possible that student perceptions differed based on the specifics of the assignments. Furthermore, the study was primarily quantitative which allowed for an investigation based on predetermined constructs. This allowed for broad participation in the study and grounded the measures in previously-developed theories. However, future studies using a qualitative approach would provide more information on students' lived experiences with renewable assignments and allow for grounded theories to be developed.

Conclusion

Renewable assignments provide a promising opportunity for students to create valuable work that can be freely shared, used, and adapted by others. Based on the findings of this study, students overwhelmingly reported higher levels of motivation with renewable assignments compared to traditional assignments. Importantly, students perceived more opportunities to share their stories and experiences based on their identities and background with renewable assignments. Future research may elucidate whether renewable assignments are particularly valuable for empowering students historically underserved in higher education.

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