CASE STUDY

# Students as Partners in E-Content Creation: A Case Study Exploring Student-Staff Partnership for Learning and Student Engagement Using Digital Applications for Co-Creation of E-Learning Materials

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ABSTRACT

In order to enable learners to take control of their learning needs and actively contribute in their learning processes, educators can partner with students in various reciprocal student-staff partnership (SSP) settings where students can be co-creators, co-producers, curators, or co-deliverers of the curriculum. Our project, undertaken to enhance the curriculum as part of a teaching qualification, places emphasis on educators partnering with first-year undergraduate students over e-content creation within an existing module, using readily accessible digital applications in order to promote active learning in students and improve student engagement. In this case study, we evaluate the extent to which SSP, as an approach to the creation of e-learning materials using digital applications, enhanced learning and student engagement in an existing module. Our student partners perceived SSP to be an excellent platform for learning, actively engaging in the classroom, and developing skills such as communication and digital literacy. However, they expressed some concerns about overcoming the traditional hierarchies within our SSP initiative.

KEYWORDS

co-creation, active learning, student engagement, partnership

Reimagining the application of digital technology for classroom learning and making it accessible to students, staff, and other stakeholders is an ongoing challenge facing institutions of higher education (Britland, 2013; King, 2018). Some argue that using digital applications in the classroom for creating e-learning materials may benefit students, as it enables learners to use their devices to enhance their learning and hone their digital literacy skills whilst allowing educators to personalise lessons and find innovative ways to track individual student achievements (Curtis, 2014). Bovill, Cook-Sather, and Felten (2011) suggest students can be involved in the learning process by engaging in co-creation, curation, course design, or to co-deliver curriculum through staff-student partnerships.

Partnerships are collaborative, reciprocal processes between academic staff and students in teaching and learning, where all participants can contribute equally, although not necessarily in the same ways (Bovill, Cook-Sather, & Felten, 2014). This project, undertaken as part of a postgraduate certificate in teaching and learning in higher and professional education, sought to enhance the curriculum of a taught module using technology to promote digital literacy through co-creation of e-learning materials. In this article, we explore how educators partnered with first-year undergraduate students to co-create and deliver e-learning materials using mobile digital applications. The aim of our case study was to evaluate the extent to which a student-staff partnership (SSP) approach to the creation of e-learning materials using digital applications enhanced learning and student engagement in an existing module.

OUR CONTEXT

E-learning is gaining widespread acceptance in many higher education curricula, but students have typically been consumers or recipients of e-learning materials produced by their tutors without students' active engagement (McKerlie et al., 2018). Neary, Saunders, Hagyard, and Derricott (2013) argue that including students in the production of digital materials to support curriculum delivery and personalized learning for themselves and others enhances learners' creativity and turns students and teachers into collaborative explorers in uncharted territories.

In order to enable students to take control of their learning needs, educators can nurture a power-sharing relationship with students over digital content creation. This can be achieved by treating students as co-producers, curators, and co-creators of e-learning materials using various mobile digital educational applications (McPherson & Heggie, 2015; Mercer-Mapstone et al., 2017; Terrel, 2018).
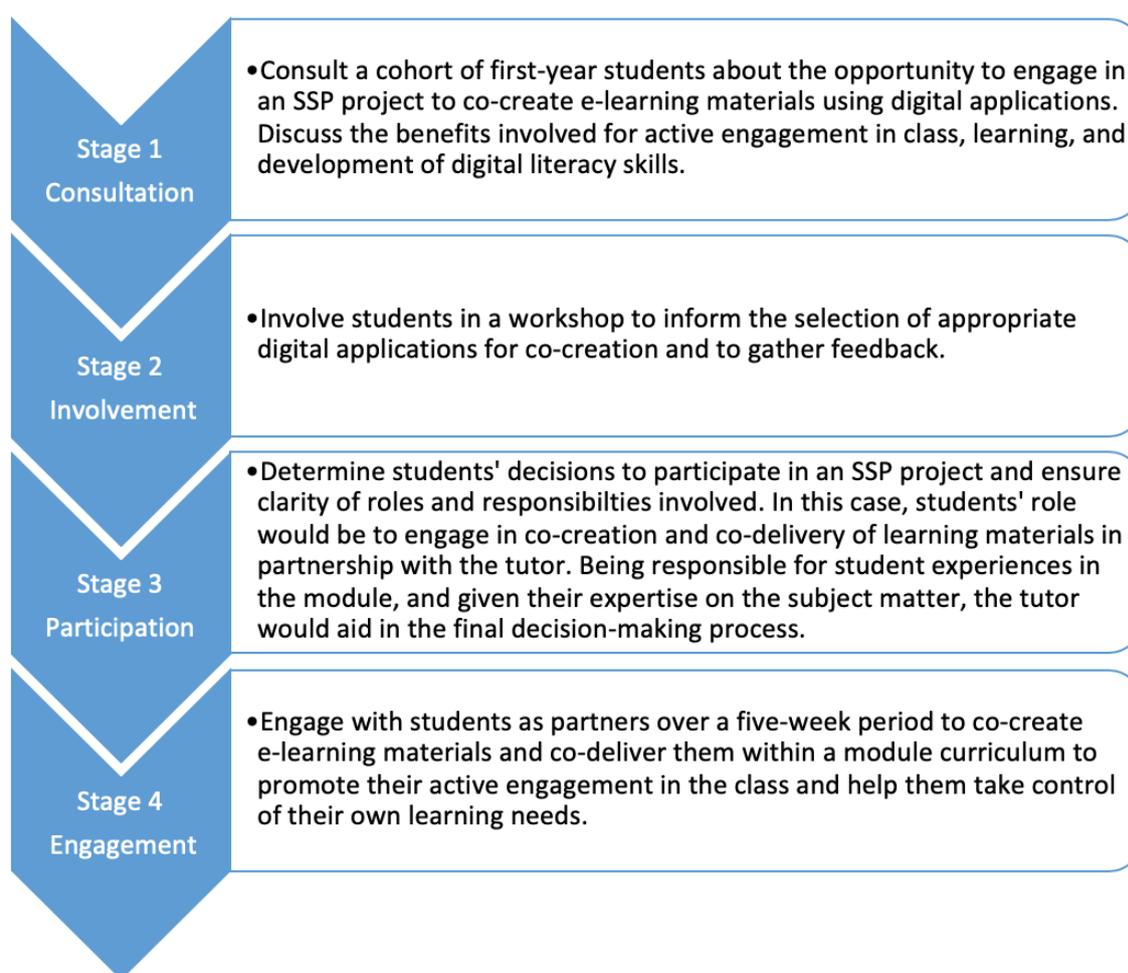
Student-staff partnership (SSP) is gaining momentum in teaching and learning in higher education as an enabler of student engagement (Bryson, 2016; Curran, 2017; Mercer-Mapstone et al., 2017). Engaging students in partnership to co-design e-learning materials can support learner engagement. Through SSP, tutors can inform students about using various digital applications to help with their learning practices, alongside engaging students in setting their own learning goals and managing their own learning needs. It provides students with the opportunity to embark on an interactive journey that enables them to develop and acquire learning and digital literacy skills (Greaves, 2012). According to Oddone (2016), the role of technology in education can be reimagined by allowing students to use it for coding, media production, design, and collaboration, transforming learners from passive consumers to active creators of digitized learning materials.

The benefits of engaging students in producing and co-creating e-learning materials are many. This type of engagement through co-creation is  linked to institutional virtual learning environments (VLEs) for scaffolded learning, promotes peer learning through sharing (Van Dijk & Lazonder, 2016), and generates e-learning materials designed to support learners. Thus, SSP initiatives enable educators to deliver curricula that promote a digitally enriched learning environment, promote active student engagement, and provide learners and educators opportunities to co-develop their digital literacy skills for a digitally connected world (Terrel, 2018).

SSP has been described as a process rather than a measure for the achievement of predetermined outcomes (Healey, Flint & Harrington, 2014; Matthews, Groenendijk, &

Chunduri, 2017). Seventy-four percent of the literature on SSP highlighted personal development of both staff and students, with the potential to enhance skills, motivation, creativity, staff-student communications, and self-efficacy as some of the key positive outcomes of the partnership process (Matthews, Groenendijk, & Chunduri, 2017). However, SSP initiatives can also give rise to challenges. They can be time- and resource-intensive for both staff and students (Bell et al., 2019). They may also reinforce pre-existing power differentials between students and staff (Mercer-Mapstone et al., 2017).  Students' expectations about the roles they will enact in university may make it difficult for them to comprehend or appreciate working in partnerships with tutors, and this may prevent them from engaging in SSP work and exploring their potential for teaching and learning (Rakrouki, Gatenby, Cantore, Davidson & Rowledge, 2017). According to Bovill, Cook-Sather, Felten, Millard and Moore-Cherry (2016) and McKerlie et al. (2018), some of these issues may be overcome by ensuring transparency and trust during the process. To address this concern in our project, we applied Healey et al.'s (2014) four-stage holistic approach to engage students in partnership for co-creation of e-learning materials, as shown in Figure 1.

**Figure 1: Four stages of engaging students in partnership (adapted from Healey et al., 2014)**



**Stage 1 Consultation**
- Consult a cohort of first-year students about the opportunity to engage in an SSP project to co-create e-learning materials using digital applications. Discuss the benefits involved for active engagement in class, learning, and development of digital literacy skills.

**Stage 2 Involvement**
- Involve students in a workshop to inform the selection of appropriate digital applications for co-creation and to gather feedback.

**Stage 3 Participation**
- Determine students' decisions to participate in an SSP project and ensure clarity of roles and responsibilties involved. In this case, students' role would be to engage in co-creation and co-delivery of learning materials in partnership with the tutor. Being responsible for student experiences in the module, and given their expertise on the subject matter, the tutor would aid in the final decision-making process.

**Stage 4 Engagement**
- Engage with students as partners over a five-week period to co-create e-learning materials and co-deliver them within a module curriculum to promote their active engagement in the class and help them take control of their own learning needs.

STUDY DESIGN

This project involved collaborating with 35 first-year undergraduate students studying an accountancy module in the second semester of the 2017/18 academic year. The project spanned five weeks. Each week during the first four weeks, one app was explored and used for co-ceation. Table 1 provides a summary of the digital applications used for co-creation. In the final week, we sent all 35 students enrolled in the module an e-mail inviting them to participate in a focus group.

A total of six students agreed to participate. The focus group was guided by eight questions, which we adapted from Curran (2017) and Matthews et al. (2017), and which captured students' perspectives on student-staff partnership for learning; the impact of its use as an approach in co-creation of e-learning materials using digital applications, the challenges and opportunities posed by partnership, any changes observed in their engagement levels in class and in their approach to learning as a result of engaging in partnership, and the need for undergraduate students to engage in SSP practices for digital skills development.

My co-author and I used thematic content analysis (Braun & Clarke, 2006) to analyse the focus group responses and name key themes.

**Table 1. Digital application for co-creation**

| Week | Digital application | Function | Engagement process |
|---|---|---|---|
| 1 | Sutori | A student-centred approach for collaborative learning for the flipped classroom using timeline presentations for storytelling (Sutori, 2019). | Using Sutori, students worked independently in the classroom to curate and organise various online resources relevant to a module topic in the form of a personalised storyline and present these in the classroom for collaborative learning. |
| 2 | Canva | A graphic design tool used for both web and print media design and graphics. It enables users to access over a million photographs, graphics, and fonts and use them by dragging-and-dropping (Canva, 2019). | Students opted to work in pairs to create an infographic using Canva on a module topic and present it to fellow students and the tutor to generate group discussion. |
| 3 | PowToon | A readily available application that enables users to create videos individually or in collaboration in order to captivate, engage, and explain (PowToon, 2019). | In collaboration with the tutor, students worked in small groups to create short interactive educational videos on PowToon to explain a number of module topics in the class. |

| 4 | **Prezi** | A presentation application that allows users to create and publish interactive presentations online (Prezi, 2019). | Students chose to co-deliver a lecture session with the tutor using these applications and actively engaged in designing a lesson plan for the topic selected. Students set learning objectives for the selected topic and selected formative assessment activities to assess learners. This enabled students to extend their skills and awareness of behind-the-scenes curriculum development processes at the university (Bell et al., 2019). |
|   | **Kahoot** | An application that provides a platform for game-based learning that is particularly suitable for designing formative assessment activities (Kahoot, 2019). | |
| 5 | **Loop** | A digital feedback application that enables tutors to capture student voices in real time in order to adapt classrooms to maximize learning outcomes and gather evidence to support impact (Loop, 2018). | Focus group participants were asked to download and install the application on their smartphones prior to the focus group session so that they could access the questions during the session. Using Loop, participants were able to record their responses quickly and easily on their smartphones. It also saved time with data transcription by enabling the quick export of data to a spreadsheet for analysis. |

RESULTS AND DISCUSSION

Four key themes emerged from our content analysis of focus group participants' responses: SSP as an approach to learning, SSP for co-creation of e-learning materials using digital applications, SSP for enhancing student engagement, SSP for enhancing student engagement.  To protect their anonymity, we refer to participants by the initial letter of their first names.

**SSP as an approach to learning**
*''with SSP, the lecture is more interactive between tutors and students''- L*

Our SSP project provided participants with an opportunity to learn from each other through effective communication. Students felt that SSP was good practice to use in lectures for collaborative learning. They thought SSP settings could be a good addition to other courses as it acts as a catalyst for developing helpful relationship between staff and students for a better educational experience.

*'It creates a good relationship between staff and students due to effective communication regarding the course and other opportunities available''- N*

*''I feel student-staff partnership is beneficial to use in a lecture. It's good to be part of a project and collaborate''- M*

*''It is a good method to learn from each other''- L*

Our findings support those in previous literature that SSP provides opportunities for students to make active contributions to their learning (Bovill, Cook-Sather & Felten, 2014; Bovill & Felten, 2016) and promotes peer learning through sharing (Van Dijk & Lazonder, 2016).

**SSP for co-creation of e-learning materials using digital applications**
*''I found it inspirational to be able to co-explore digital applications in the class with staff and other students in order to produce e-learning materials. It supported me in thinking creatively''- J*

*''Using digital applications for co-creation helped me to achieve a different approach to learning''- A*

All of the participants in the focus group thought that using various digital applications for learning was important (Curtis, 2014). However, what participants found inspirational was the opportunity to explore digital applications in class with staff and other students for co-creation of e-content. As in Neary et al.'s (2013) research, engaging actively in the production of digital materials to personalise learning for themselves and others made them feel more creative. They found our partnership project to be an excellent way to use digital applications for teaching and learning. Partnership provided them with the opportunity to increase their confidence in using digital technology creatively for learning by engaging in a collaborative scholarship process as co-creators, curators and co-deliverers of teaching and learning materials (McPherson & Heggie, 2015; Mercer-Mapstone et al., 2017; Terrel, 2018). This suggests that, if given an opportunity to explore the co-creation of digital applications in partnership with staff, some students are likely to experience a transformation from passive consumers of digitized learning materials to active consumers, as discussed by McKerlie et al. (2018) and Oddone (2016).

*''SSP is a great experience to develop our skills through co-creation using digital applications"* (sic) - A

All six participants agreed that the opportunity to collaboratively co-create e-content with the tutor and their peers and using various digital applications contributed to the development of their digital skills (Curtis, 2014; Greaves, 2012; Terrel, 2018).

*''It is a great opportunity for students to gain knowledge, develop their confidence and digital skills''- K*

*''The tutor-student partnership is an excellent way to practice how to manage work projects through teamwork which can be a transferable skill to the work environment''- M*

*''I believe it changes the sense of university experience the more I am involved''- J*

For these students, partnership was an excellent way to practice teamwork skills. It also changed the sense of university experiences for them by allowing them to become more involved in their learning and skills development (Matthews et al., 2017).

### SSP for enhancing student engagement
*''The lecture is imparted in a rather collaborative environment, providing more participation in class from the student side''- M*

Four of the six focus group participants commented that partnerships such as ours provided a more "relaxed" and "supportive environment" for learning in the classroom, as it improved active student participation in the class.

*''Student-staff partnership makes the class academically engaging with neither the staff nor the students left behind in achieving their targets''- N*

Five of the six focus group participants thought that the partnership project gave them an opportunity to actively contribute to the development of others in the class, and they found this aspect motivational. Increased motivation has been found to be one of the key outcomes of staff-student partnerships (Matthews et al., 2017). In our case, perhaps this was because they felt actively engaged in their learning processes and appreciated the opportunity to contribute in the decision-making process as a result of engaging in partnership (Bovill et al., 2011; Bovill & Felten 2016; Cook-Sather et al., 2014; McCulloch, 2009).

One participant noted that working in partnership had a "huge influence" on their engagement in the class, since it provided the opportunity to learn from others in the process of the partnership. Another found it beneficial and inspiring, helping to improve their "punctuality and attendance in the class."

All of the focus group participants noticed some positive changes in how they approached their academic studies. Working in partnership with staff made them feel more motivated and creative in their academic studies, increased their ability to multitask in the class and gave them more confidence in their research and communication skills.

*''By co-creating e-learning materials through SSP, I found an alternative method for learning and participating in the class''- L*

*''SSP motivated me to do multiple tasks in the class within a limited time''- N*

*''Staff-student partnership has motivated me more towards my academic work. I have gained research and communication skills that will help me through my studies''- K*

These statements support previous findings on the benefits of student-staff partnerships as a process (Healey et al., 2014; Matthews, Groenendijk & Chunduri, 2017) and also for enhancing student engagement in the class (Bryson, 2016; Curran, 2017; Mercer-Mapstone et al., 2017).

### Challenges and opportunities faced by engaging in this SSP initiative

*''I think the success of a staff-student partnership project needs to be based on an excellent and solid communication between both parties''- M*

One of the key challenges student partners mentioned facing was overcoming the traditional power relations  during the partnership process. Three out of six focus group participants indicated that they did not notice any difference in their interactions with the staff due to the maintenance of the pre-existing hierarchy between staff and students.

*''The tutor is a staff member and must still be treated with utmost respect''- J*

These participants felt that students' fixed assumptions of the difference between staff and student roles would be a difficult barrier to overcome (Rakrouki et al., 2017). Some students struggled to revise their relationships with staff, continuing to place tutors on a pedestal rather than coming to see them as equals. This supports the assertion that staff-student partnerships may reinforce inequality between staff and students (Mercer-Mapstone et al., 2017).

In contrast, three of the participants seemed to agree that, by engaging with staff as partners, they felt a positive difference in their interactions with staff and fellow students in the module and were keen to engage in more partnership practices.

*''SSP presents a lot of opportunities because one develops a better relationship with the partners involved. It gives them the confidence to ask questions to the tutors without hesitation'' – K*

*''It provides better opportunity to learn from the tutors by overcoming any barriers to express concerns and asking questions more confidently''- L*

It is crucial to develop trust and build transparency during the engagement stage of staff-student partnerships (Bovill et al., 2016; McKerlie et al., 2018). Applying Healey et al.'s (2014) four-step holistic approach to our project may have helped to ensure transparency in the engagement process, which in turn helped to build trust in order to overcome the traditional power relations. This may have enabled students to build better communication and working relationships with staff and peers. As Matthews et al. (2017) described, the SSP engagement process improved staff-student communication for these students.

Another challenge reported by a minority of the participants in the focus group was not being able to explore the possibilities offered by partnership to its full potential due to the limited availability of time in scheduled classes. Two participants found the process to be time intensive (Bell et al., 2019).

*"It is important to take into account the availability of time in a class to collaborate and prepare extra material when the student needs to comply with assignments and other obligations''- M*

*''Challenges were to manage time and communicate effectively in a new platform such as SSP''- J*

Despite the challenges they faced, all the participants appeared to agree that staff-student partnership provided the "best platform for sharing knowledge" between staff and students and is a key opportunity to enhance academic progression.

*"I have experienced it to be the best method for learning"- A*
All six participants felt that institutions of higher education need to consider including SSP practices in their curricula, since it will be of "major benefit to students" in many ways.

CONCLUSION

Overall, students found co-creation of e-learning materials using digital applications and in partnership with staff beneficial for their learning, engagement, and skills development. However, because only six students were involved in the evaluation process, it is not possible to generalize the outcomes.

The existing power relations mentioned by the students were noticeable during the engagement process, as some of the students were quite hesitant to ask questions or challenge the opinions of the tutor. This may have prevented both staff and students from exploring the full benefits of engaging in partnership. To overcome this barrier in future partnership projects, it would be useful to explore ways of navigating pre-existing inequalities between staff and students in order to enhance the engagement process for both parties.

Nevertheless, for this cohort of students, all of whom were participating in their first collaborative process for teaching and learning, this project prompted them to consider partnership's potential for making active contributions to their learning needs in the future.

For educators wishing to co-create or design e-learning materials with students, our case study may suggest digital applications that would be valuable tools for their own digital co-creation projects. Teaching practitioners interested in ways to improve student digital literacy skills in the classroom may use the co-creation process we outlined in this case study as guidance for using readily accessible digital applications. The outcomes we present here indicate that the application of an SSP approach is recommended to ensure the experience of engagement is meaningful for both students and staff.

*This project was reviewed and approved by the University of Bolton, Faculty of Professional Studies Research Ethics Committee (March 2018).*

NOTES ON CONTRIBUTORS

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