Co-creating a toolkit of resources and building knowledge share between students on how to communicate their own research to wider audiences

Sem Lee and Dr Gemma Moore (University College London)

Introduction

This project was delivered for the 2022/2023 cohort of students on the MSc Health, Wellbeing and Sustainable Buildings MSc. However, it is worth noting that in the years before conducting this project, students had adopted asynchronous/online learning approaches due to the COVID-19 pandemic. This was to ensure uninterrupted education off-campus whilst adhering to COVID-19 national rules.

The Changemakers Project

UCL ChangeMakers is a collaborative student-staff partnership to support students' ideas to enhance education at the university. The programme offers funding for those wanting to develop partnerships to improve student experience. We used the funding provided from this programme to deliver a project in the category of 'Supporting student success: Co-creating inclusive curriculums'.

Aims and hypothesis

The aim of this project was to co-produce and co-create, with students and tutors, a toolkit of resources that would support students' dissertation research journeys and help them to understand how they can communicate to wider audiences for impact. In previous years, students had reported the need for more support with how to communicate their research to wider communities. A co-production workshop held with current students and graduates highlighted the importance of needing a place that held information from the course, external resources including links to pastoral/ health and wellbeing support, and further information on how to engage with stakeholders throughout their dissertation research projects.

The experiences and learning needs of students in previous years was likely to be different to those of the current cohort due to the impacts of the COVID-19 pandemic on teaching modes and research support. For this reason, it was important to capture feedback from both previous and current students to understand their combined experiences. Both student groups were involved in the scoping and delivery of the project to ensure that the final deliverable was relevant and rooted in lived experience.

It was hypothesised that a toolkit of resources co-created by the students would help them to feel empowered by: 1) being part of the process and 2) helping to deliver something that could be used going forward to help future students. We also identified that there was a need for students to understand the full research cycle including how to disseminate and communicate their research. For this project, we involved course directors and programme tutors of the MSc programme to help us identify existing resources that the students highlighted as useful. This was a key stage in ensuring that the content was validated and aligned with the MSc course.

Pedagogy/ Practice

The rapid transformation in learning styles and the global landscape (COVID-19) is likely to have had an impact on learning for students. Recent literature identifies that

collaborative cultures in learning environments during this transformative period are likely to have a positive effect due to their ability to facilitate peer-to-peer learning and encourage group working (Khan, 2021). There is also recognition in higher education environments of the need to integrate Students as partners (SaP) models in shaping modules for their ability to add transformative value to the design and development of curriculums and improve student experience (Chadha et al, 2023).

The method of co-created learning and teaching to develop new solutions with students, and for students, was key to this project. This approach has benefits of relational pedagogy which can help towards increasing engagement and improving empowerment amongst those involved (Bovill, 2020; Chadha et al, 2023; Higgins et al, 2019). Co-creation in learning can also challenge existing hierarchies between student and teacher and help to deliver meaningful learning experiences by constructing knowledge from their lived experience rather than through passive intake of information (Katz, 2021).

Method

Methodology

This project took a participatory action research approach (Kemmis and McTaggart, 2020) whereby stakeholders, students and staff took an active role in shaping and informing the final deliverable. For this project, the staff partner was Dr Gemma Moore and the lead student researcher was Sem Lee who had previously studied part-time on the Health, Wellbeing and Sustainable Buildings MSc during the pandemic years (2020-2022). Eight current and past students were self-selected for the co-production workshop and two additional student researchers from the current cohort were recruited to help the lead researcher deliver the project. This governance structure was set up to encourage students to take ownership of the process of enquiry (Passon et al, 2019).

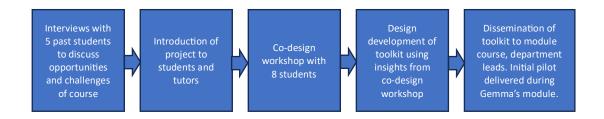
Five students from the 2021/2022 cohort were asked questions on their learning experience and what opportunities there were for improving learning and

developing their dissertation research project. The insights gathered from these interviews were shaped into the agenda for the co-production workshop. The workshop agenda can be found in Appendix 1. It was important that the co-production workshop enabled the students to feel informed and able to contribute. The workshop focused on outlining the purpose for this project, sharing the insights gathered from the previous students and working together to produce the 'user journey' that a student might go through when developing their dissertation research.

After the co-production workshop, a meeting with the lead researcher and two student researchers was held to discuss the findings and synthesise insights into designs. The findings were mapped out onto a Miro Board (see Appendix 2). The student researchers then decided how best to present the information and what information could be used in each scenario as well as discussing how we might structure the group information. The lead researcher took on the role of facilitator for this session, asking open-ended questions to prompt enquiry amongst the student researchers.

The lead researcher took the feedback from this session to develop into a design deliverable (see Appendix 3) which could be tested with current students and tutors to validate its use.

The methodology of the project is as follows:



The timeline of activities is outlined as below:

Intro to Changemaker project and beginning of recruitment for workshop (ensure we have a diverse mix of participants).

Open workshop with students to develop toolkit.

Development of toolkit and resources (including video content for using toolkit). Dissemination to module, course, department leads.
Initial pilot with
Gemma's module.

January- March 2023

April- May 2023

Data Collection

Primary data was collected in the initial interviews with students to understand the need from previous students. During the co-production workshops with current and past students, the lead researcher and two student researchers took notes. Notes that were collectively brainstormed amongst students were recorded on Post-it notes with photos taken to ensure that feedback had been collected accurately.

Key findings

The importance of structure and key roles within the project

Throughout the project, the staff partner and lead researcher played a vital role in its management. The staff partner was responsible for connecting the lead researcher with the wider academic staff when presenting the final deliverable and unlocking opportunities to present at other events in the UCL calendar year. The lead researcher was responsible for the overall project management, acting as the intermediary between the research, students and tutors. They facilitated any meetings with the student researchers and wider student cohort, taking a relational approach to support the creativity of the students. They were also responsible for turning insights into a design deliverable.

At the start of the project, the lead researcher and staff partner communicated to the

departmental staff and students the aims of the project, the planned schedule for the work, its benefits and intended outcomes. This helped to ensure that those that wanted to be involved had a clear idea of what to expect from the project. Throughout the project, the lead researcher provided updates to the staff on the progress of the project.

Empowering students to provide authentic feedback

With this project, it was important to ensure that students felt a sense of ownership over their learning environment and to use this project to design a new environment based on existing experience. The lead researcher used the insights from the initial scoping sessions with past students in the co-production workshop to help set the scene of the challenge areas experienced when they were developing their dissertation research. This helped the current students to feel informed and align on some of the challenges. Students reported that this helped them to feel comforted in knowing that others had experienced similar challenges, despite the current students being in the early stages of scoping their dissertation research. The scene-setting also helped the students to begin feeding their thoughts on early prompts that helped to map out their own experience.

The first exercise focused on 'experience mapping' to understand what excited students most about the dissertation process and what they valued from research practices. The next exercise focused on producing the research journey and mapping out where students felt they may need most support and resources. The final exercise looked at the students' ideal outcomes, which many identified as 'real world action' or 'political change'. The feedback from this workshop was that the students felt safe to express their opinions openly and felt that they benefitted from being part of the process.

Change in deliverable after co-production workshop

The original aim of the project was to develop a toolkit that helped students to communicate their research to wider communities for impact. However, co-producing with students opens the possibility that the aims and objectives originally set out may be slightly different to the result, depending on the need. During the co-production workshop, students highlighted the need for more face-to-face support with each other and other mentors. A suggestion was made collectively that speaking with students from previous years would help with the support they were looking for. An additional deliverable of setting up a mentoring scheme between past and current students, was agreed at the co-production workshop.

After discussions with the Deputy Course Director (who also is also Dissertation Lead) the mentoring scheme was set up and managed by the lead researcher. The mentors and mentees were recruited through self-selection. All participants were given a form to fill in regarding their expertise and dissertation topic. Mentors and mentees were matched according to similar topics or appropriate support that they could provide. Participants were given instructions on how to manage the meetings and they were given the option to schedule up to two meetings to check in and sense check topics related to the current students' dissertation projects.

Evaluation

Benefits of being part of the project

We received feedback from six students and one of the student researchers that participated in the process (7/8 response rate). Students reported that being able to be part of a participatory project that used a variety of social methods (e.g., focus groups, workshops) was a great way to experience and understand how other creative ways of data collection can be used for research. Others reported that it allowed them to freely discuss concerns as they enjoyed discussing and communicating these points with others:

'The way to discuss and it's like a new thing for me to be a researcher. I really enjoyed communicating with others even though I am a shy person.'

'I enjoyed seeing how focus groups can be used in research. I found it interesting how a more creative task could be used to gather information about student experiences instead of using a survey/questionnaire.'

All students reported that they would like to take part in a project like this again as they felt good knowing that they were improving the student experience outside of answering the annual or course evaluation student surveys. The workshops helped to open a safe space to voice any personal concerns and the discussion with peers helped to work through problems together. Some reported on the skills that they gained from being part of the process – such as communication skills and understanding different types of research methodologies. Students that took part in the co-production workshops reported that they would like to be involved in a project like this again for the following reasons: 1) that it was a great initiative to improve student experience outside of answering surveys; 2) it helped to open up a safe space to voice personal concerns and reassured them about their upcoming research process; 3) it had help improve their academic skills by understanding the different ways of gathering data and how this could help form insights.

What emerged from the evaluation is that the students reported that the process of developing the toolkit has enabled them to use, apply and develop their skills in practice, and this itself has been a valuable, worthwhile experience. They have learnt different methods and skills, but also learnt how to apply this knowledge:

'Of course yes. To conduct and participate in this workshop is very useful for me [when I] write the dissertation. Taking part in a project to get a preliminary study of some topics is also a way to train my academic skills. Some training in thinking and communication skills is essential.'

Points for improvement

All students reported that they would have liked this project to be spoken about more and marketed. Many respondents reported that they would have liked more workshops to be held to capture different ideas from other perspectives. A student reported that due to limited resources, there may have been some intricate details of the dissertation process that had been missed when brainstorming in a workshop:

'More workshops can be held to collect more different ideas and maybe more participants can be brought together to participate in the study.'

Lessons Learnt

The introduction that was given to wider staff and students was helpful to give people the opportunity to self-select if they wanted to participate in the project. Although this did mean that there were limitations due to the self-selected nature of the students. It was likely this project attracted students who had not only the interest, but also the capacity to be involved. If we were to select a group of different students for the co-production workshop, the reported outcomes and impacts may have been different to what we had reported.

It was very important to keep up clear communication between the staff partner and lead researcher. This was then extended to wider staff members when giving them monthly updates of the project, and the students were also given the choice to be kept updated with the project. This helped all stakeholders feel involved throughout.

The set-up of the co-production workshops and the design of the sessions were very important in helping the students feel at ease with the value that they were bringing to the workshop. It was important to help students feel comfortable with speaking about the challenges that they may have experienced in their research work, and presenting the challenges faced by previous students helped to alleviate some of the anxiety around expressing thoughts honestly. It also helped that the lead researcher was also an ex-student.

In this context, co-producing with students had more positive effects than we had originally expected. Being included in a live project that used focus groups/co-production as a research methodology helped others to understand how this could be used for their own research. There were also positive effects on individuals who felt more confident to speak honestly and openly which was encouraged by other students. The forum allowed the students to feel at ease with each other and by the end of the workshop, each participant had proactively participated in the workshop by suggesting solutions for each other or towards a brainstorm.

Conclusion

This co-production project was originally scoped to answer a need that was expressed by previous years' students, but by using a participatory action research approach, all stakeholders were able to shape and test the assumptions that we had for the original scope. Although the initial aim of this project was to develop a communications toolkit, the students delivered and developed a larger toolkit of resources that could help current students through their research journey on their dissertations. We also set up and provided external mentorship support with past students to help with pastoral support and support for students with similar experiences and/or topics.

The project itself helped us understand how students could help each other and use collective experience to deliver a solution. Although some of the guidance and facilitation was provided by the staff partner and lead researcher, the content and overall shaping of the final deliverable was led and co-created by students and tutors. The resulting toolkit was then embedded into the wider package of dissertation programme support, e.g., workshops and mentoring.

The planning and transparency throughout the project helped all stakeholders feel that they could actively take part in the shaping of the final deliverable. There were positive learning impacts reported from being part of a co-production project as well as individual wellbeing impacts such as confidence in students being able to speak transparently about

their concerns. The peer-to-peer nature of the workshop also provided a good forum for students to learn from each other and brainstorm ideas. The dissertation mentoring provided support for the current students, and both mentors and mentees reported positive impacts from taking part in the mentorship. From feelings of fulfilment to being able to share experiences, both past and current students benefitted from taking part in this activity. It would be good to see more co-production activities supported in universities as a learning tool and way to encourage creative educational practices.

References

Bovill, C. (2020) 'Co-creation in learning and teaching: the case for a whole-class approach in higher education', *Higher Education*, 79, 1023–1037. DOI: https://doi.org/10.1007/s10734-019-00453-w

Chadha, Inguva, D. P., Le, L. B., Kogelbauer, A. (2023) 'How far do we go? Involving students as partners for redesigning teaching', *Educational Action Research*, 31(4), 620-632. DOI: 10.1080/09650792.2022.2058974

Gaventa, J. (1988) 'Participatory Research in North America', *Convergence*, 21(2/3), 19-27. ERIC: https://eric.ed.gov/?id=EJ390106

Hall, B. L. (1992) 'From Margins to Center? The Development and Purpose of Participatory Research', *The American Sociologist*, 23(4), 15–28. DOI: http://www.jstor.org/stable/27698620

Higgins, D., Dennis, A., Stoddard, A., Maier, A. G. and Howitt, S. (2019) "Power to empower": conceptions of teaching and learning in a pedagogical co-design partnership', *Higher Education Research & Development*, 38(6), 1154-1167. DOI: 10.1080/07294360.2019.1621270

Katz, C. (2021) 'Splanetary urbanization', *International Journal of Urban and Regional Research*, 45(4), 597-611. DOI: https://doi.org/10.1111/1468-2427.13025

Kemmis, S. and McTaggart, R. (2000) 'Participatory Action Research'. In: Denzin, N. K. and Lincoln, Y. S. (Eds.) *Handbook of Qualitative Research*, Thousand Oaks: Sage. ISBN: 9780761915126.

Kemmis, S., McTaggart, R. and Nixon, R. (2014) *The Action Research Planner: Doing Critical Participatory Action Research*, Singapore: Springer Singapore. ISBN: 9789814560672

Khan, N. M., Ashrasf, M. A., Seinen, D., Kahn, K. U. and Laar, R. A. (2021) 'Social Media for Knowledge Acquisition and Dissemination: The Impact of the COVID-19 Pandemic on Collaborative Learning Driven Social Media Adoption', *Frontiers in Psychology*, 12. DOI: 10.3389/fpsyg.2021.648253

Passon, J. and Schlesinger, J. (2019) 'Inquiry-Based Learning in Geography'. In: Mieg, H. A. (Ed.) *Inquiry-Based Learning – Undergraduate Research*, Berlin: Springer, 281-290. DOI: https://doi.org/10.1007/978-3-030-14223-0_26

Ross-Hellauer, T., Tennant, J. P., Banelyte, V., Gorogh, E., Luzi, D., Kraker, P. Pisacane, L., Ruggieri, R., Sifacaki, E. and Vignoli, M. (2020) 'Ten simple rules for innovative dissemination of research', *PLoS Computational Biology*, 16(4). PMID: 32298255

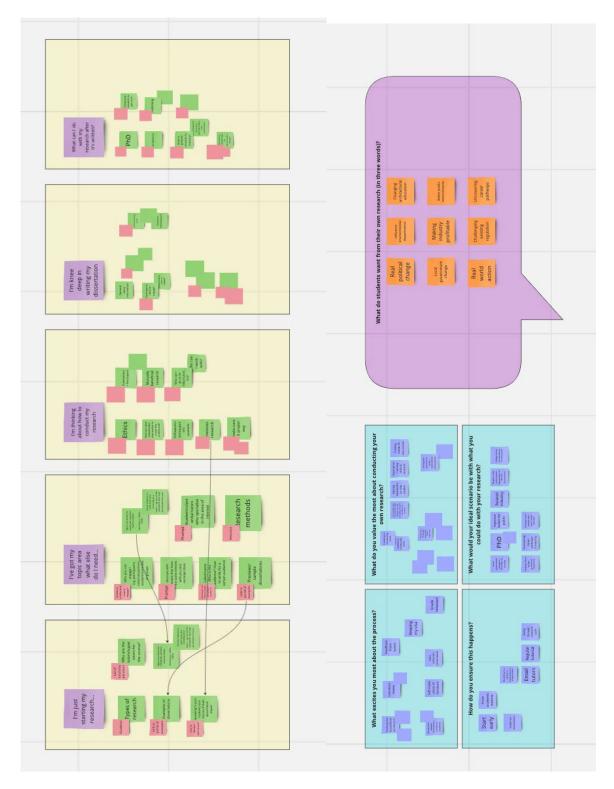
Appendices

Appendix 1: Co-production Workshop Agenda

Changemakers Workshop Plan

	Agenda	Exercise	Time
Introduction	- Introduction to the agenda, aims and objectives of workshop		4.00-4.10
Current experience of the dissertation process.	- What information do you need for the dissertation process? - What format of information works well? - What format of information does not work so well? Eg. thinking about the research process, what your research design might look like, who you need to speak to, who you need to engage etc.	Collaborative experience mapping/ Brainstorming activity	4.10-4.30 - 2 minutes (around 10 mins in total) on each question (everyone to quickly sketch out initial thoughts on each question) - 5 minutes for each group to present back their thoughts
Mapping needs across the research cycle		Mapping out on research cycle the information that is outlined in the previous activity	4.30-4.50 5 minutes for each group to map this out 15 minutes present back and discussion
Your motivations	Break (10 mins) What motivates you to conduct your own research? - What excites you the most about the dissertation process? - What do you need to ensure that this happens?	Collaborative visioning	5.10-5.30 - 10 minutes working in groups to go through each of the questions 5 minutes for each group to present back their thoughts
Your values	What do you value the most about	Creative ideation	5.30-5.50 - 10 minutes working in groups
	conducting your own research? What would be your ideal scenario with what you could do with your research? Reflection & Close (10 n	nins)	to go through each of the questions. - 5 minutes for each group to present back their thoughts





Appendix 3: Co-produced final report

Full report can be viewed here:

https://issuu.com/ouri labs/docs/20230524 changemakers - pdf

Your Dissertation Journey Guide

