An Evaluation Of The Use Of OpenStudio Adapted For A First Level Foundation Module To Encourage Multi-Modal Learning And Peer Interaction

Lucy Rai (Lucy.Rai @open.ac.uk), Nashwa Ismail (Nashwa.ismail@open.ac.uk), Sally Ogut (Sally.Ogut @open.ac.uk), Tajinder Gill (Tajinder Gill @open.ac.uk), Eveyn Mooney (evelyn.mooney@open.ac.uk), Kerry Jones (Kerry Jones @open.ac.uk)
Ceinwen Gwilym (Ceinwen Gwilym @open.ac.uk), Michelle Carrington (Michelle Carrington @open.ac.uk), Joanna Rawles (Joanna Rawles @open.ac.uk)

Abstract

OpenStudio is a tool developed by the Open University which provides a collaborative online learning space. It was originally created as a design studio, similar to the social media tool Pinterest, and has only been used to date in STEM subjects. OpenStudio was piloted in the Faculty of Wellbeing, Education and Languages on K102, Introducing Health and Social Care, a new foundation level module. This pedagogic tool was included in the new module to explore its value at this level for students in health and social care. The aim of this project is to evaluate student engagement with multi-modal activities and peer-to-peer interaction and learning. Also, to explore how effective is the use of OpenStudio as a tool to support peer interaction on K102. Moreover, the research explores the impact of the use of Open Studio as a multi-modal pedagogic tool to develop participation and conceptual thinking on K102.

Literature review

Collaborative learning or peer to peer communication within modules has been shown to have a positive impact on student retention (Rienties and Toetenel, 2016). However, the extent of participation with collaborative learning varies as does the level of student satisfaction with its use (Cross et al 2015). Open Studio created, developed and used by The Open University in the context of design and STEM modules. These modules have primarily used the tool to provide a method for students to collaborate and prepare assessments based on visual artefacts such as diagrams (Creswell et al. 2017). Open University evidence has shown that while student performance improves when modules include collaborative activities, satisfaction rates generally fall (Open University 2016). This finding is consistent with the piloting of collaborative assessment was piloted on K101 and withdrawn in part due to problems with student satisfaction and complaints about equity arising from unequal levels of participation. Despite the challenges of encouraging peer learning, communication is an important employability skill (for example; NMC 2019). This has been the driver for the current research which aims to evaluate the use of OpenStudio as a tool to motivate and support students to develop foundation steps into peer learning through multi-modal using a low-risk tool which draws on interactions familiar in social media, such as Pinterest.

Peer learning

OpenStudio on K102 module offers a way for students to develop collaboration skills, which are one of the twelve elements of the Open University Employability Framework (Open University 2018). Collaboration is an important skill and is identified in The Open University Levels Framework which requires students to connect and work with others' which at level 1 involves working with others, recognising and following accepted conventions of learning interaction (Open University 2015).

Nelwati et al (2018) suggest that 'In addition, cognitive skills such as deep learning, critical thinking, problem solving, and reflective thinking skills are essential to be acquired by students in order to provide professional, effective, therapeutic, and safe nursing care to their patients by making clinical decisions and judgement. However, there is less published research on online peer learning in social work or social care education, and where addressed this has primarily been in the context of virtual placements (Taylor and Salmon 2020) or peer mentoring (Crooper 2000).

Multi-modal learning

Literacy researchers have recognized the significance of visual modes of literacy and how they can expand options for writing and reading in the classroom (Siegel, 2006). Specifically, photographs have been used to support reflection and critical thinking as well as connect to the multiple contexts of children's lives.' (p. 537). Photographs have been used to support reflection and critical thinking as well as connect to the multiple contexts of children's lives.' (p. 537). Taking a critical pedagogy approach, his study found that the use of images helped students to reflect and share on complex everyday experiences in order to make connections with theory. The study found that 'students made connections between everyday life and abstract concepts and enhanced 'depth' in their learning where we understand depth to be a sense of connectedness' (Sakr, 2020 p. 868).
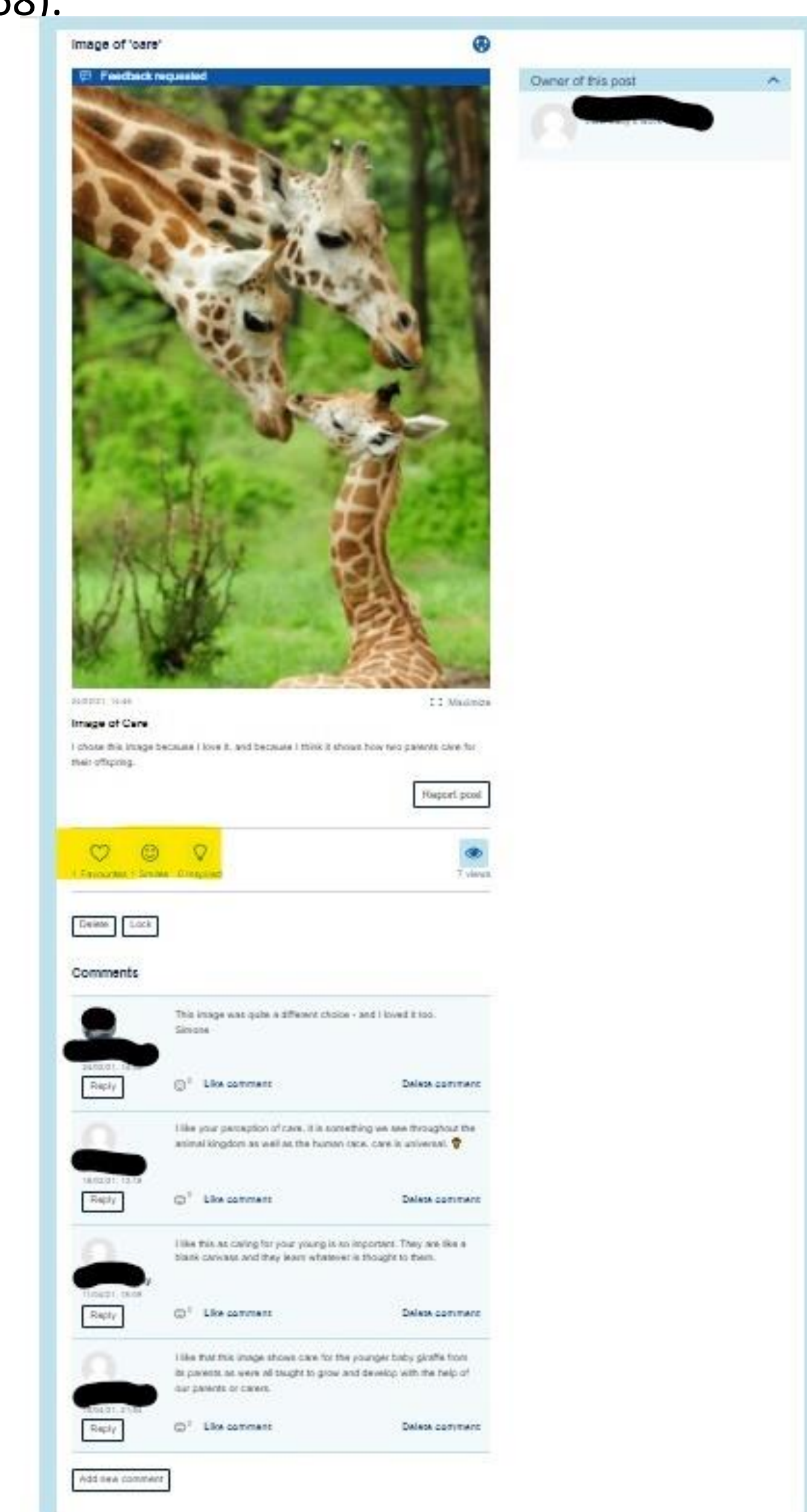

Figure 1: OpenStudio feedback

Methodology

The study employs a mixed methods approach between the quantitative and qualitative is explanatory-sequential approach (Creswell et al, 2017).

Survey

The study starts with the collection of quantitative data, through online survey, in order to measure and analyse students' engagement and use of the tool to measure the level of participation on Open Studio and correlate this with retention, performance and engagement with tuition. The survey has been sent to 167 students and 144 out of this number has responded.

Figure 1 below shows the percentage of students' engagement with the OpenStudio tool over the module for K102, KXY102 and KYN102. The overall attendance on K102 in 20J was 53%, a rise from 18% on K101 in 19J. There is only a correlation between the introduction of OpenStudio and this increase in tutorial participation, and other factors such as the pandemic, may in part explain this change in behavior. However, this increase is significant and very positive as an indicator that the tool may be supporting greater peer learning.
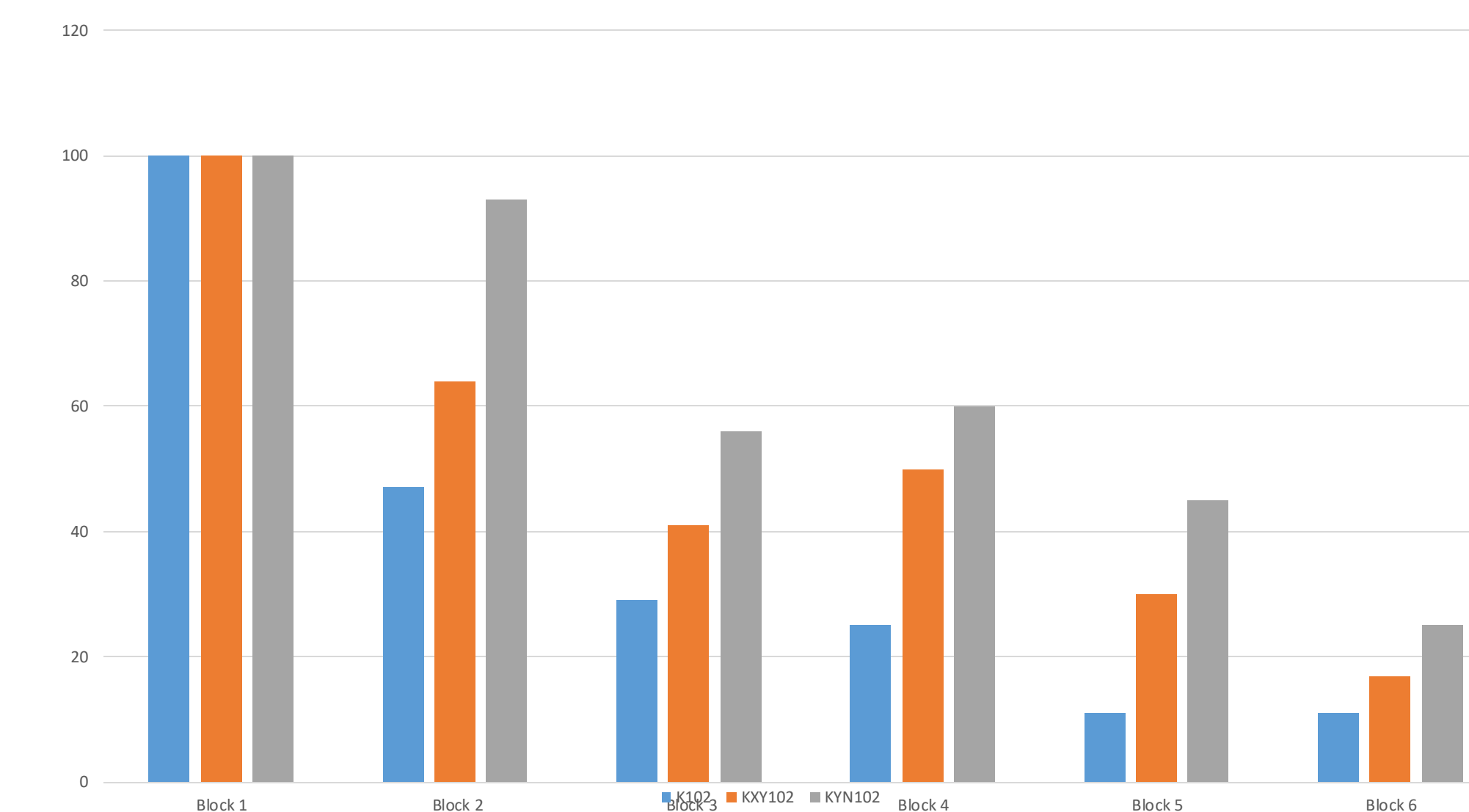

Figure 2: Findings from percentage of students' engagement with the OpenStudio tool

The quantitative cycle is followed by qualitative deep dive to learn more about the context behind the figures through online focus group with 6 associate lecturers and in-depth one-to-one online interviews with 14 students.

Focus group with associate lecturers

Tutors reflected on students' experience in using OS differently; some were with this experience referring to students' positive experience in promoting their self-confidence, self-reflection and developing work-based skills. On the other hand, other tutors narrated their negative views about OS referring to students' limited time to do the activities using OS and their lack of engagement with each other.

One-to-one students' interviews

Peer-to-peer interaction, collaborative learning and their impact on students' learning and their skills, have been addressed as emerging themes.

Students narrated this impact from two different perspectives: firstly; socially such as, feeling connected with others. Secondly, personally such as self-confidence and creativity. Students related these two perspectives with the academic perspectives and hig hlighted how peer-to-peer interaction influences their learning. Finally, some students addressed some challenges they have confronted when using OS. These challenges are related to different variances such as limited time and limited technological knowledge. Summary about students' findings is illustrated below, see- figure 3.
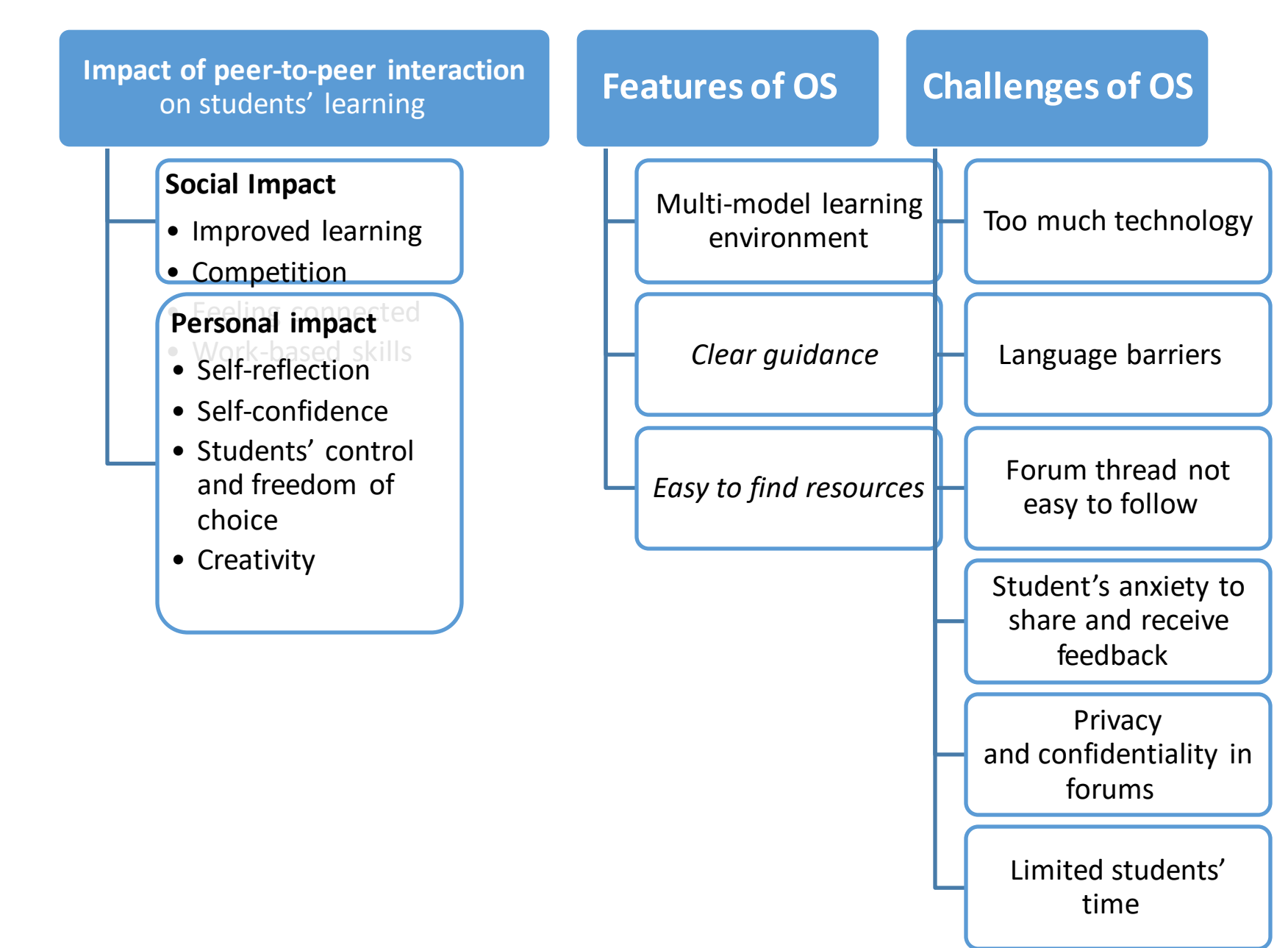

Figure 3: Findings from students' interviews

Conclusion & Recommendations

OpenStudio has benefits to support students in developing skills in collaboration, reflection and critical thinking skills and also has the potential to encourage greater participation in tuition generally. OpenStudio has the potential to support the development of core graduate skills, particularly in practice-based learning. To maximise its effectiveness the tool needs to be set up with appropriate sizes of groups to allow effective moderation whilst also giving students access to a sufficiently large population of contributors. Tutors also need to be sufficiently prepared to ensure that they can provide effective support to students to facilitate them in using the tool. Further research is needed to test out the impact of the tool on participation in tuition longer term.

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