## Spaces, Pedagogies and Technologies: Are They Interconnected?

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23 Things International (23T) is a 14-week, online, self-directed course for doctoral researchers, supervisors and early career researchers. It provides the basis of engagement with 23T to promote building academic and research networks, increase familiarity with resources underpinning research, and establish professional profiles. The programme, first launched in 2020 as a collaboration between UK and NZ universities, initially attracted 250 participants. In 2021 the collaboration grew, and it attracted 400. The following years, 2022 and 2023, the number of collaborating institutions grew again, reaching about 550 participants. This year there were more than 1000 participants.

Adopting a socio-technical framework (Bostrom & Heinen, 1977), this paper draws on end-of-programme evaluation data from participants in 23T, delving into perspectives on whether and how they connected with peers during this course. Within a broadly interpretive approach (Erickson, 2012), the analysis involved the refinement of major and common ideas (Mayring, 2000) held by participants.
Two themes emerged from the 2020 to 2023 end-of-programme evaluation:
- opportunities to network with the diversity of peers need to be better engineered in; and
- explicit pedagogical guidance is required to develop deeper partnerships among participants.

Apart from grouping participants into pods based on research interests, the course includes mechanisms of support, including an engagement mentor and live networking events. However, the networking and partnership opportunities were still viewed as insufficient by participants, and the number of participants attending live events was low (average of 5 per session). One of the participants commented, "Given the lack of engagement I found within my pod, I would have preferred a much bigger facilitated session for discussions and sharing of ideas".

While it is argued that intentionally designed spaces, pedagogies and technologies can lead to enhanced learning and teaching experiences (Dron, 2023), many 23T participants did not agree. Not only was engagement in the created spaces lower than hoped, it seemed that the digital learning and teaching pedagogies (e.g., the creation of communities of practice via pods) were not as effective as intended either. The design of the spaces has been revised over the last 4 years, yet outcomes appear to be similar. The adoption of 'proven' pedagogies found in the literature was also in vain. The integration of digital technologies into networking and partnership opportunities seems limited.

Given that the participants of 23T are in their highest qualification status, we face a conundrum about why the spaces, pedagogies and technologies within the programme appear to be not interconnected when it comes to networking and partnership opportunities as we enter the so-called "post digital learning spaces of higher education" (Lamb, et. al., 2022). We now think that building digital literacy prior to the commencement of the programme and providing explicit digital literacy support during the programme might be a key to addressing this conundrum. It is

hoped that this development will increase future participants' understanding of the networking opportunities built into the course and stimulate them to engage actively and with purpose.

*Keywords*: Digital Literacy, Higher Education, Online Course, Pedagogies, Spaces, Technologies

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