Perceptions vs. Reality of Digital Learning in Undergraduate Bioscience Students

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The COVID-19 pandemic saw digital learning methods become the backbone of teaching and learning throughout the 2020/21 academic year. The rapidly changing context necessitated fresh research on student perceptions and experiences.

**Methods**

- Semi-structured interviews were carried out with 13 Level 3 UG students across our bioscience degree pathways. These students had experienced full academic years of both face-to-face delivery and the Connected Learning model.
- Probes were centred around the students’ experiences and perspectives of digital learning and whether their perceptions going in had differed from their final experiences.
- Data was transcribed, coded and thematically analysed (Braun & Clarke, 2006).

**Results**

- **Going in was scary...**
  - Students were uncertain and unprepared. It was seen to require more independence, discipline, and motivation than they had previously come to expect.
  - There was considerable anxiety over the learning curve for online technologies (Abdous, 2019). Some thought that it would be detrimental to their learning, unable to see how the same amount of content could be covered in the same depth.
  - Other students were optimistic but this was due to having past experience of blended learning or remote work. Trust in the institution and/or the lecturers made students less anxious.

- **The social part is very important...**
  - Peer-to-peer learning was considered at risk, and non-educational social interaction was considered as important as educational. The physical presence of the lecturer and other students in the room was deemed to be highly important for maintaining engagement and motivation.
  - Live sessions were preferred to pre-recorded material, and were considered more engaging. This engagement increased if tools and practices were used to make the session interactive.
  - Students wanted to feel part of a community, and most did, but it was inferior to a face-to-face one (Alenezi, 2022).

- **And the challenges are evident...**
  - Engagement was not seen as the student’s responsibility, and was determined by the staff member’s ability to make online sessions interactive and to organise learning materials (Zhang et al., 2022).
  - There was a perceived loss of knowledge and employability due to the lack of lab and field skills taught.
  - The flexibility of digital learning eventually made education take a back seat to other commitments.

- **But there were some benefits...**
  - Recorded lectures were key tools for flexibility and revision.
  - Combining synchronous and asynchronous discussion was considered highly beneficial.
  - The ethos of digital learning made staff seem more approachable and supportive.

**Recommendations**

- As an institution, we need to clearly define our responsibilities around providing social experiences to students.
- At local levels, expectations of student behaviour and commitment need to be made more explicit, particularly at key transition points.
- For individual lecturers, knowledge and skills sets around facilitating interactive, peer-to-peer learning is a key development priority.

**References**