Future hybrid education and planning professional development

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Why should we be concerned with this topic?

• Managing educational futures continues to be uncertain
• The current Covid-19 pandemic has created different challenges and some opportunities
• There is a need for education to align with ongoing, continuous and contemporary change, whether social or dramatic
• It is clear that there has been and will continue to be a need to integrate uses of technology to support education
• This will not just be to address crises, but also to support wider student involvement and participation in the future
• There is a contemporary challenge for education - to develop sustained, long-term, effective teacher practices with current and future digital technologies
A background to the current situation

- Some people, throughout their lives, adapt to technological change (Passey & Lee, 2020)
- They apply technologies not just for social or leisure purposes, but also to their learning, teaching, or employment needs (Lee & Passey, 2019)
- Some research indicates that the overall evidence base identifying positive impacts on teaching and learning from uses of digital technologies is not always clear (Lim, Zhao, Tondeur, Chai, & Tsai, 2013)
- Ways that teachers use the digital technology can have a major effect on outcomes for all concerned (Passey, 2013)

Has the pandemic affected this concern or its focus?

- The Covid-19 pandemic has provided an imperative to adapt, yet to continue to maintain, but, which exactly should be adapted and what should be maintained? (Passey, 2021)
- UNESCO (2021) reported in early April 2020 about 150 countries fully closed educational institutions, about 10 countries had partially closed them, and in another 10 they were fully open
- Published literature and related experiences showed that the teaching medium changed in many localities, largely from a face-to-face medium to an online medium
- Sometimes this change was from a synchronous, face-to-face medium to an asynchronous medium, or to a mixed synchronous and asynchronous medium
The study exploring teacher adaptation with technologies

- The study involved researchers from Sunway University and Lancaster University (Passey & Lee, 2020; Lee & Passey, 2019)
- It gathered qualitative in-depth evidence from a selected sample of long-term users in different occupations: students; parents; teachers; employers; policy makers; and managers
- Structured interviews were used to identify key factors or reasons for how these individuals established and maintained their long-term uses
- Individuals selected had been using technologies for learning, teaching, training, or employment purposes for at least 5 years, in many cases up to 20 or 30 years, and in some even more

The methodological approach and methods

- The analysis of individual questions from the interviews adopted a grounded approach (Charmaz; Bryant & Charmaz)
- The grounded theory approach used different subsequent coding methods:
  - open coding, to identify specific elements of the interview texts that offered insights or details
  - axial coding, to explore relationships between the open coding elements
  - selective coding, where core categories were identified
Findings 1

- Hardware changes can affect sustained use in quite profound ways, but respondents tended to recall only one or two specific forms of past hardware change, although they had clearly experienced more than that number across their periods of use, related to periods of their life (childhood, first job, etc.).
- When asked about software changes and when these were first used, some respondents indicated general software changes or features, while others identified specific software changes, but respondents did not relate these changes to specific years or time periods or times when they were used (Passey & Lee, 2020).

Findings 2

- Performance with new hardware or software can be affected when change occurs, but participant responses reported within four main categories (Passey & Lee, 2020):
  - increased efficiency
  - enhanced access
  - improved performance
  - enhanced ease of use
Findings 3

• In terms of benefits experienced, responses fell into six main categories (Passey & Lee, 2020):
  – information access
  – access at a more general level
  – collaboration
  – self-empowerment
  – greater levels of understanding
  – communication

Findings 4

• Interviewees were asked how they had managed to maintain uses and address challenges of technologies when software or hardware changed, and what they did so that they could use the new or updated software or hardware. Responses were (Passey & Lee, 2020):
  – exploring uses themselves and practicing as needed
  – using advice and guidance provided with the updates
  – going on training courses
  – using help from those around them
Findings 5

• When asked about the people consulted who made a difference to their abilities to accommodate these changes, responses fell within four main categories (Passey & Lee, 2020):
  – individuals within their area of employment
  – family members or friends
  – units supporting employment areas
  – the more general work environment

Findings 6

• Crucially, when asked about the main personal factors or characteristics that they felt enabled them to adapt to technology changes over time, the most commonly arising factors stated by respondents were (Passey & Lee, 2020):
  – seeing its value, its use, or having a positive attitude to technology
  – being very inquisitive
  – liking to learn new things
  – being very adaptable
  – always looking for short cuts, for easier ways to do things
  – being humble and having a willingness to learn things
  – being open-minded
Findings 7

- Respondents’ focus on technologies overall was largely on impact, outcomes, and uses, not on affordances.
- Statements such as it makes life easier (which was stated as being ‘easy to say after spending four days without it’), and necessary to work highlighted the point.
- However, some respondents were clear that there was an important need to consider the negative potential those technologies could bring, and that it was necessary to accommodate use (Passey & Lee, 2020).

A new model

Provide a positive work environment – encompassing both inside and outside the organization.

Focus on developing general characteristics - bring people about learning new things, be people, and look at doing it and easier.

Maintain contact with technologies.

Highlight the need to support software and hardware, and the perspective of impacts both on the rather overwhelming complexity.

Focus on outcomes: impacts – evaluate efficiency and productivity.

Support a balanced view of applications of technologies – offer feedback and work with decisions to address concerns and issues.

Source: Passey & Lee, 2020
General recommendations

- Develop positive personal characteristics to drive sustained use
- Enable maintaining of contact with developing technologies – and increasingly online
- Support a balanced view of technologies
- Manage and budget for time to learn and adapt
- Encourage others around to offer support
- Focus on enhanced communication and cloud access, enhanced efficiency and productivity
- Use technologies to enable a position of advantage
- Consider software and hardware changes as offering increased ease of use rather than creating increased complexity, or obstacles (Passey & Lee, 2020)

What next?

- Institutions that have focused solely on providing technical support alone should rethink their positions
- Rather than a single focus on technical support and affordances, the evidence indicates that institutions should focus on developing personal characteristics concerned with enquiry and inquisitiveness, highlighting outcome and impact support
- Fundamentally, this suggests moving away from technical support that focuses on affordances to a focus on outcome and impact support, developing units or individuals that have a different and complementary focus (Passey & Lee, 2020)
Conclusions

• Covid-19 has shown that we are not prepared for crisis, even when technology can support and sustain education (Passey, 2021)
• Past practice frames conceptions of technology and uses:
  – Teaching medium and mode
  – Learning medium, mode and environment
  – ‘Home’ technology access and support
  – Teacher technology access and support
  – Roles of those involved
  – Digital skills and techniques
• How do we reframe these conceptions to support a future that can address crisis?

References

Thank you for listening!

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