QAA

Digital capability and teaching excellence: an integrative review exploring what infrastructure and strategies are necessary to support effective use of technology enabled learning (TEL)

Summary Report

Subscriber Research Series 2016-17

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In 2015-16, following a call for expressions of interest open to its subscribers, QAA commissioned two small-scale primary research projects intended to encourage collaboration between providers and promote the formation of communities of practice.

This summary report is on the topic of digital capability, teaching excellence and the effective use of technology enabled learning (TEL). It was submitted to QAA by Dr Liz Austen, Helen J Parkin, Stella Jones-Devitt, Kieran McDonald and Brian Irwin of Sheffield Hallam University.

The reports in the Subscriber Research Series are not QAA documents, so we have respected the authors' approach in terms of style and presentation. We hope that you will read them with interest.

The other report in this series explores the extent and nature of sub-degree education in UK higher education.

For more information, and to read other reports in the series, please visit: www.qaa.ac.uk/research/projects/published-research.

Executive Summary

Context

This report is set within the evolving landscape of UK Higher Education (HE) in which an increasingly marketised HE economy has led to a changing relationship with students and wider stakeholders. The proposed introduction of the Teaching Excellence Framework (TEF) (Department for Business, Innovation and Skills, 2016) aims to recognise and reward excellent learning and teaching. This integrative review provides timely evidence concerning the relationship of digital capability and teaching excellence.

Digital capability, as defined by Jisc,[1] can be described as six overlapping elements:

- ICT proficiency
- information, data and media literacies
- digital creation innovation and scholarship
- digital learning and self-development
- communication, collaboration and participation
- digital identity and wellbeing.

Key findings

Which digital capability strategies have the most evidence of enhancing and transforming the student learning experience?

- Teaching with technology does not always transform learning.
- A broader conceptualisation of digital capability is needed to promote teaching excellence in higher education.
- Digital capability can promote teaching excellence by avoiding technological determinism while putting pedagogy first.
- Measurements of student satisfaction - and poorly constructed proxy measures - can (and will) be used to assess the digital capability of teachers.
- Teaching excellence requires all teachers to engage with digital capability, rather than silos of digital specialists.

Which features of institutional infrastructure maximise and ensure the effective use of technology enabled learning (TEL) to enhance and transform the student learning experience?

- The promotion of digital capability for teaching excellence requires strategic ownership.
- Digital capability strategies used to promote teaching excellence must address resistance to change.
- Digital capability needs to be valued if it is to promote teaching excellence.
- The pivotal nature of professional development and pedagogy should be acknowledged.

[1] Building digital capability (Jisc), available at: www.jisc.ac.uk/rd/projects/building-digital-capability.

Guidelines for Developing Digitally-Capable Teaching Excellence

The good practice guidelines are intended to provide discursive starting points for developing ideas concerning the effective integration of digital capability and teaching excellence into a unitary construct for the UK HE sector.

These ideas form a set of overarching principles - presented here as a set of statements - to shape relevant approaches between institutions, staff, students and wider stakeholders.

1 Start with pedagogy every time

- Do the proposed approaches align with strategic values and add value?
- Have the appropriate pedagogies been applied across all subject areas and disciplines while retaining contextual distinctiveness?
- Do the pedagogical underpinnings work for all stakeholders?

2 Recognise that context is key

- What infrastructure needs to be in place at the outset and will it support the situated nature of current practices?
- Is the process inclusive across the institution?
- Is the approach complementary to the disciplinary modes and associated learning?

3 Create a digital capability threshold for institutions

- What does a basic capability threshold look like at all institutional levels?
- How does effective engagement occur to gain stakeholder buy-in and wider agency?
- Are incentives and reward-schemes, performance indicators and appropriate development opportunities agreed and in place for all, prior to inception?

4 Use communities of practice and peer support to share good practice

- How can existing governance structures be used to develop relevant communities of practice and support a culture of teaching excellence underpinned by digital-capability?
- Who leads the communities of practice and how will responsibility be devolved and sustained?
- Will there be protected time for development and enhancement activities?

5 Introduce a robust and owned change management strategy

- How will the concept of optimum disruption be introduced in order to avoid resistance?
- How will buy-in be maximised to avoid commonplace notions that adoption will only stem from technologically adept practitioners?
- How will success be determined, led and evaluated at all levels?

6 Develop a compelling evidence-informed rationale

- Who is responsible for collecting evidence, interpreting research and evaluating impact in this domain at institutional level?
- How accessible are good practice case studies and guidance and which forums are available for sharing and spread of adoption?
- Can all stakeholders engage in opportunities to create compelling evidence in the domain?

7 Ensure encouragement for innovation and managed risk-taking

- How does the envisaged infrastructure support and manage staff and students to experiment, and is 'play' encouraged across all areas of the institution?
- How will innovations be shared, monitored and escalated?
- Is there an equitable system for assessing and rewarding impact on practice at all levels?

Recommendations

- Institutions could look to replicate the studies of Owens (2012 and 2015) as this body of work provides a link back to the highest quality of evidence deemed useful within this review, for the purposes of examining digital capability and teaching excellence as an integrated concept.
- There is a need to evaluate teaching practice and to recognise complexities of practice and attendant terminology such as transformation, enhancement of learning, etc. as this review found many unresolved aspects within the nomenclature used to describe teaching excellence.
- All stakeholders should consider assumptions concerning pedagogies, including an examination of new theories of how people learn and the potential influence of disruptive pedagogies.
- Institutions should horizon-scan emerging technologies and new pedagogical ideas and consider their integrated application for developing teaching excellence; this might include proof of concept testing before mass implementation as this was deemed lacking within the found artefacts.
- Other researchers should consider the utility of the integrative review methodology as a very useful, iterative approach when needing to build theory from emergent and/or contested areas.
- To maximise impact, the *Guidelines for Developing Digitally-Capable Teaching Excellence* should be enhanced by building-in further workshop elements - such as scenario-modelling - in order to contextualise meaningful implementation of the overarching principles.
- Next steps for escalating further work in this area concerns linking the *Guidelines for Developing Digitally-Capable Teaching Excellence* and findings to examples of existing good practice and in pursuing more resource-development and sector-wide partnership working.

Conclusions

- There is an inherent difficulty when trying to use the words *digital capability* and *teaching excellence* as they are contested terms singularly and then in combination, especially when there is minimal consensus within the sector.
- This is an evolving area of research - as found in this review - and the areas of teaching excellence and digital capability are emerging concepts which are not yet unified, so their development as an integrated construct is worthy of further analysis.
- Given the dearth of information when strict parameters were applied - and the highly contested nature of the concepts under scrutiny - the integrative review process was a timely methodology as it afforded robust critique of grey literature, artefacts and conceptual pieces, in addition to finding more traditionally-academic publications. As an iterative process, integrative review is ideal if considering dynamic critiquing mechanisms for emerging concepts.
- The aim *To identify which strategies have the most impact for teaching excellence* has been met partly - given the notion that much of the reasoning is inferred - due to the considerable contestation of the areas under scrutiny.

- Evidence found in assessing the aim *To identify which features of institutional infrastructure maximise and ensure the effective use of Technology Enabled Learning* confirmed that priority was still given to developing digitally-capable individual practitioners above everything else. Principally, there was a focus on hygiene factors and IT accessibility rather than change-management.
- More nuanced conclusions can be found within the body of this work and researchers interested in deeper analysis of the review findings should access the full database of sources (see Appendix G for further information).
- This review and the development of embryonic *Guidelines for Developing Digitally-Capable Teaching Excellence* are proportionate to the timescale for completion of this commissioned research and should be considered within such context.

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