

# ICED 2020 proceedings:

## Developing digital capabilities of future students through consensus curriculum development

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### **Abstract**

This paper details a workshop structure designed to stimulate discussion and debate with educational developers. We define and discuss how consensus can be used in the curriculum development process to develop future-ready graduates with enhanced digital capabilities. The workshop design uses a co-design structure, providing opportunity for social learning through sharing challenges and inhibitors while receiving constructive feedback from other educators concerned about the same topic. The workshop provides an opportunity to work immediately on ways forward with the potential to forge interprofessional digital capability strategies that will improve the holistic student experience and help prepare future-ready graduates.

### **1 Introduction**

The unprecedented pace and scale of growth in the role of digital technology in the workplace is now a key driver of educational change in higher education. Not only do employers require graduates to be prepared to work in a digital environment; universities require students to have digital capabilities to be successful in their academic study. Although technology is now ubiquitous in everyday life, it cannot be assumed that students will automatically be able to use technology for learning or in future employment (Slade, 2015). Subsequently, educational developers who support academics in curriculum development face ongoing challenges in integrating the digital skills needed by students (Brown Wilson and Slade, 2019).

The key question posed in this paper is how to embed digital skills within a content-heavy programme. Using the professional degree of nursing as a case study, this paper presents a curriculum development process that embeds opportunities for students to develop digital capabilities across the programme. This was used across international contexts. This paper considers how digital capability is defined and then presents an example of a consensus curriculum development process that enables digital capabilities to be embedded across a programme to equip students for study and future work.

### **2 Defining digital capability**

In the UK, the Joint Information Systems Committee (Jisc) (2017) developed six elements of digital capability for use in higher education to prepare individuals to learn, live and work within the ever dynamic digitalising world (Figure 1). This figure is useful because it visually explains the complexity of digital capabilities, with ICT proficiency as the central basic skills, and the digital identity and wellbeing of the user surrounding all the capabilities.

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**Digital capabilities:  
the six elements**

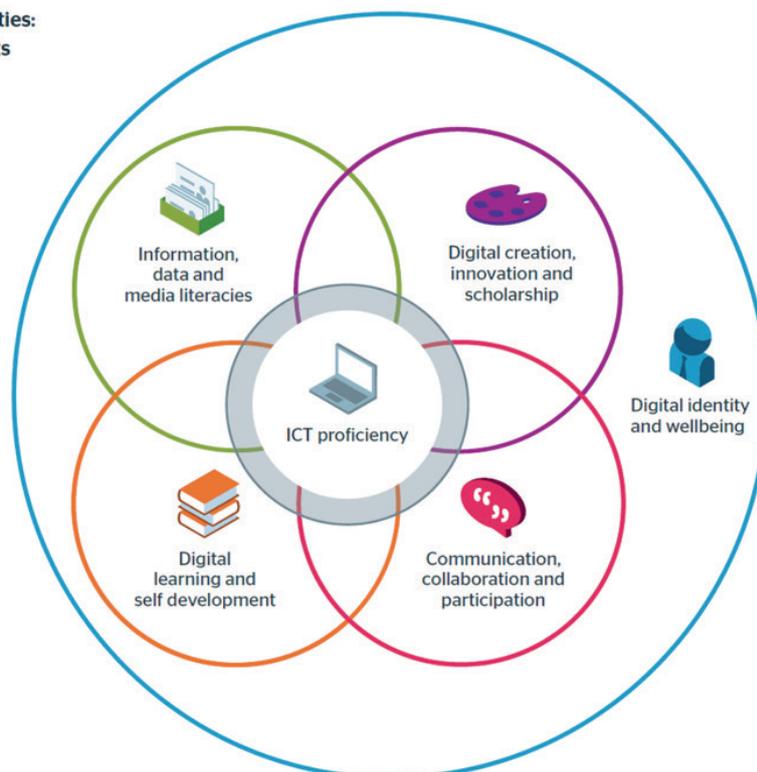


Figure 1: Digital capabilities: the six elements (Jisc, 2017)

Digital capability moves beyond digital literacies to include digital creation, problem solving, innovation and managing digital identity. Within these broad areas, the requirements for digital capability may differ according to the discipline, the area of expertise of faculty and the individual nature of the students entering the programme. Obtaining a proficient level of all these capabilities, whilst maintaining their own digital identities and wellbeing, requires a spine of scaffolded activities and experiences across a curriculum as a foundation for professionals across their careers. This raises key challenges for educational developers when working with faculty as they develop curricula which is already content-heavy. One solution developed by the presenters was the development of a consensus model of curriculum development (Brown Wilson and Slade, 2019), which brings multiple stakeholders to the decision making process, enabling academics to consider the digital skills graduates might need from different perspectives.

### **3 Using consensus to embed digital capability in the curriculum**

Consensus decision-making is not new, but when group members engage in it they view the decision as representative of their own and other's views, perceiving the process to be fair (Sager and Gastil, 2006). According to Hartnett (2019), four key processes are involved in reaching a consensus: inclusivity, participation, collaboration, cooperation and agreement seeking.

The consensus model of curriculum development brings key stakeholders to the curriculum development process as equal partners, creating inclusivity (Brown Wilson and Slade, 2019). Stakeholders may include future employers, partners for work integrated learning, consumers, students, and academics. Facilitating conversations around shared topics enables participation of all stakeholders where everyone is able to offer a viewpoint, all views are accepted, and cooperation is established (Table 1, Activity 1). Identification of themes from initial exercises continues the conversation, enabling a process of collaboration to be

established (Table 1, Activity 2). Developing specific activities such as ranking exercises enables a synthesis of ideas (Table 1, Activity 3), with consensus being reached through the development of practical next steps by the end of the workshop (Table 1, Activity 4). This process is not without its challenges: it requires high levels of organisation, keeping people to deadlines and time for multiple meetings. Where differing perspectives exist, consensus workshops offer a key way for educational developers to support academics in bringing multiple stakeholders to the table, thus preparing future-ready graduates.

Activity	Facilitation prompts	Steps towards consensus
<b>1: Each table of participants to identify the digital capabilities required by students, rank in order of importance and map to the Jisc framework.</b>	Ask each table to write an idea individually and then group all ideas into themes per table. Use Jisc framework as prompt for themes.	Participation involving everyone on the table Co-operation – reaching agreement on themes
<b>2: Participants use information from Activity 1 to identify examples of how these digital capabilities may be embedded into a programme</b>	Ask individuals to identify which themes/activities are relevant for Years 1, 2 & 3.	Collaboration to develop a scaffolding process
<b>3: Each table group develops a plan for embedding digital capabilities into a programme.</b>	Using grouping from Activity 2, each table to rank which are the key skills for Years 1, 2 & 3.	Synthesis of activities and identification of key areas that can be scaffolded across the programme
<b>4: Group agrees on practical steps to effectively embed digital capability in curriculum – for example using assessment to demonstrate digital capability.</b>	Final decision on what skills sit in each module for Years 1, 2 & 3. Action plan for supporting staff Development	Consensus-action planning

*Table 1: An example of a facilitation plan for a consensus workshop*

#### **4 Conclusions**

Developing digital capability is becoming increasingly important as digital technologies evolve rapidly within the workplace. Therefore, future graduates need to be flexible, adaptable and confident in preparation for work in a dynamic technological environment. Considering digital capability as a scaffolding process that enables students to build their skills incrementally through learning activities and assessments across a programme integrates digital capability without additional content required. Using a consensus approach to curriculum development enables multiple perspectives to be included, with the potential for developing novel and innovative curricula.

#### **Acknowledgements**

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## References

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