



A spotlight on...

Digital fluency

Centre for Innovation in Education

Overview

Digitally fluent graduates think critically and make balanced judgements as they select and use digital platforms to connect, collaborate, and communicate in academic and professional contexts and as citizens. They are open to continuously developing digital practices and artefacts and they manage their digital identity in a professional and responsible manner allowing appropriate opportunities to practice and receive feedback on performance.

Benefits

Developing digital fluency helps students to:

- Thrive in a subject area or profession in our digital society (Beetham, 2017b).
- Reach and express informed views and engage fully in a digital society (CILIP, 2018).
- Become socially and ethically critical of technology (Hudson, 2009).
- Foster an agile mind-set, confidence and self-regulation (Becker et al., 2017).

Students' digital aptitude does not necessarily transfer into subject-specific contexts (Kennedy et al., 2010). They need support in developing digital practices as learners and would-be professionals (Bartlett-Bragg, 2017).



Putting it into practice

To design for digital fluency, ask yourself:

- What does digital fluency mean in my subject area?
- What are the significant digital developments that have transformed or disrupted my discipline? How could we match these with our educational offering in learning outcomes, activities and assessment criteria?
- How will students recognise that they are developing digital capabilities?

Effective ways to develop digital fluency could include:

- Offering authentic learning tasks in digital contexts within a module or programme, rather than separately (Beetham, McGill, & Littlejohn, 2012).
- Setting enquiry-based learning tasks, "sweet-spots" for developing digital fluency and information literacy (Bruce and Casey, 2012).
- Getting students to work together on digital tasks, developing subject-specific knowledge as well as learning how to collaborate and communicate professionally (Sinclair, 2013).
- Utilising students' existing digital skills by enabling them to choose what digital tool to use.

Check [JISC's Digital Bloom's taxonomy](#) for ideas.

Consider setting tasks that require students to:

- Critically evaluate a range of academic, professional and industry information sources, which might be in different media (text, image, video, animation, audio).
- Present their findings in a range of digital formats, appropriate for a defined audience or purpose.
- Use, store and share data/information digitally, applying ethical, legal & security requirements.
- Individually or collaboratively, develop, problem-solve & share ideas & solutions using digital technologies.
- Participate, follow and critique developments in your field in online professional networks and social media.
- Critically reflect on their own digital capabilities and the implications of using/choosing between different technologies and resources.
- Record their learning achievements in e-portfolios and maintain a positive, professional online identity

Course-level progression

Course-level progression might look like:

- Stepped progression: using -> evaluating -> creating digital technologies/resources.
- Moving from private to public: working within the VLE's walled-garden -> showcasing publicly online.
- Gaining independence: working with tools/resources suggested by tutors -> getting students to locate, choose and critically evaluate digital tools/resources.

While some subjects require students to acquire specialised software skills, the focus should be on developing independent learners who are able to work out a new digital tool/resource via self-help tutorials, resources or peer support. This could happen by staff:

- Modelling technology use in relevant, subject-specific contexts: students are influenced by tutors when adopting technology (Margaryan et al., 2011).
- Modelling how you go about learning new digital skills; academics do not have to be a tech-guru in everything.
- Signposting students to self-help tutorials (Lynda.com, YouTube etc.), workshops (e.g. KnowHow) & involving experts in your teaching (e.g. librarians, careers).
- Creating a culture for rewarding students who try new things, learn from their mistakes & seek help.
- Designing tasks which involve students learning multimedia and technical skills from peers.

Challenges

Firstly, staff who might lack digital confidence might take solace in that it is their disciplinary expertise that they need to make the focus of their digital learning task. Secondly, both staff and students can overestimate students' digital fluency (Sharpe, 2010; Coldwell-Neilson, 2017).

Incorporate ways for students to recognise, articulate and record developing digital capabilities:

- Articulate the specific digital capability as a learning outcome/assessment criteria in the session/module.
- Ask students to critically reflect on how they chose which digital technology or platform to use and its advantages/disadvantages; the capabilities they acquired in the process.
- Focus on engagement with subject knowledge (e.g. 'communicate X effectively using multimedia') rather than on technology, and highlight good digital practices (e.g. explaining examples where multimedia is used effectively).

Not all students might have access, skills or confidence to use digital technologies. Find out your students' digital practices and preferences to help ensure an inclusive learning environment. Students, and staff, when choosing a digital platform for group work, need to consider their peers' access to and cultural preferences for certain platforms (e.g. WeChat/WhatsApp).

Additional Resources & References



www.liverpool.ac.uk/centre-for-innovation-in-education/resources/all-resources/digital-fluency.html

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