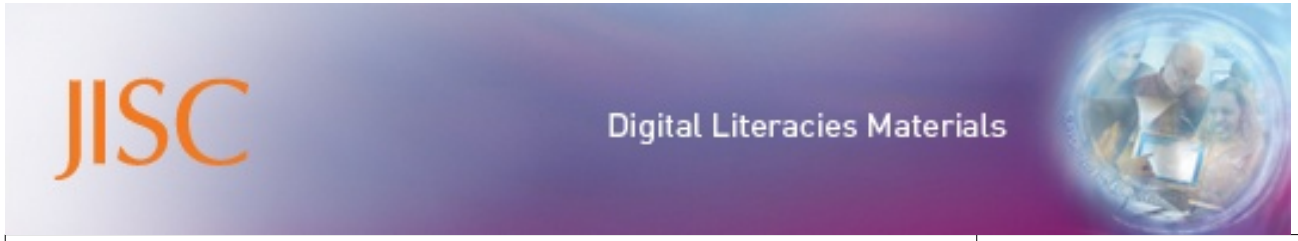

Research into practice

Research finding/theoretical stance	Implications for learning and teaching practice
Literacy is best understood as a set of knowledge practices, embedded in different situations (including digital environments) and cultures (e.g. disciplinary, peer and family cultures) (Street; Brown, Collins & Duguid)	Learners need many opportunities to practice and develop their uses of technology, in different contexts: e.g. self-directed exploration, in peer contexts, in low- and high-stakes assessment tasks, on work placements, in project teams...
Literacies are '*social practices of using codes for making and exchanging meanings*': new literacies come about in response to changes in the technical, epistemological and cultural order (Lankshear & Nobel; Goodfellow & Lea)	Learners should be exposed to authentic communications of the relevant research or professional community, including digital communications. Teachers need opportunities to understand and reflect on how meaning making is changing in their research area/profession as a result of new digital technologies.
Literacies for the 21st century are constitutively multimedia and multi-modal; the screen increasingly dominates over the page (Kress)	Learners need to encounter academic content and argument in non-textual forms where appropriate. Learners need to experience how meaning is made in their chosen subject area, and how these modes are changing, e.g. through novel uses of images, moving images, data forms.
Digital literacy entails both critical reading and creative production (Buckingham)	Learners need explicit introduction to the different media used for academic and professional communication, and opportunities to explore different genres, audiences, and means of production. Learners need opportunities to express their understanding in non-textual forms and to develop their own practices of expression In addition to basic information literacy, learners need to practice sharing, re-using, critiquing, enriching and communicating information in digital networks.
Conceptions of 'graduate attributes' include both high-level 'stances' (scholarship, citizenship and lifelong learning) and 'personal skills and aptitudes': they are realised differently in different subject areas (Barrie)	See literacy development framework Learners need to practice ICT and information skills in authentic tasks, relevant to their subject area. Learners need to explore the ethical dimension of participating and practising in virtual communities.

Research into practice

Research finding/theoretical stance	Implications for learning and teaching practice
Capacities acquired iteratively, progressively, through practice of authentic tasks, are better retained than those gained one-off, in isolation, and through instruction.	Digital literacies need to be continuously assessed, progressed, and supported, across the learning experience. Addressing digital literacy requires involvement of staff in multiple roles, but learners require an integrated experience and clear access to help when they need it.
Learners' choices about technology to support their study are an aspect of personal identity.	Personal preferences in technology use should be supported as far as possible, e.g. thru ICT support, learning resources, modes of access. Learners should be able to map their own learning pathways, to reflect on the learning experience, and to showcase their achievements. E-portfolios and personal blogs can beused to support these activities.
Learners' personal and social digital skills may be extensive (Jones & Lea) but transferring them to the domain of learning may still be problematic (Eraut; Bennet et al)	Learners' existing technical know-how can be recognised and rewarded by e.g. internships, peer mentoring schemes, student helpdesks. Well-designed learning tasks can help learners to use their 'participative' learning skills (Jenkins) as resources for academic study No assumptions should be made about learners' existing skills or their capacity to apply familiar technologies to learning ends.
Learners' digital skills are strongly influenced by tutor skills and attitudes towards the digital in their scholarship and teaching (Sharpe & Beetham)	Digital literacy of staff and time for updating/reflection are critical Learning and teaching innovation should be actively rewarded
There is a tension between recognising an 'entitlement' to digital literacy as an aspect of inclusion, and recognising technology practice as diverse and constitutive of personal identity (Beetham, Littlejohn & McGill)	Institutions and departments may consider how they are fulfilling their responsibility to ensure graduates have basic digital capabilities Departments and programmes of study may consider how they are preparing graduates to be leaders and innovators in specific communities of digital practice e.g. professional, disciplinary, creative, local/regional. Where appropriate, assessment tasks should allow learners to choose technologies, media, and modes of expression.

Research into practice