Jisc

Learning technology mapping

This is a version of the Jisc **'Six elements of digital capabilities'** (http://ji.sc/digicap_ind_frame) model designed for learning technology professionals working in further and higher education. No one individual will have all of the capabilities included in this profile: it is intended to demonstrate how new areas of practice are emerging, and how individuals might use their digital skills in different areas of their designated roles. This profile has been developed in collaboration between Jisc and the Association for Learning Technology (ALT) and is loosely mapped to the Certified Member of ALT (CMALT) framework.

In order to provide a clear context for this mapping and in order to reflect the broad range of professionals with learning technology as part of their role, we note that ALT defines learning technology as the broad range of communication, information and related technologies that can be used to support learning, teaching, and assessment.

Fundamental to professional recognition in learning technology are the key principles as set out in the CMALT scheme, which are:

» A commitment to exploring and understanding the interplay between technology and learning

» A commitment to keep up-to-date with new technologies

» An empathy with and willingness to learn from colleagues from different backgrounds and specialisms

» A commitment to communicate and disseminate effective practice

The framework recognises that critical, reflective practice is a fundamental aspect of professionalisation and this should be considered across all roles, including senior or leadership positions.

Using this mapping

The examples provided below should enable professionals to examine more closely how their practice relates to the 'Six elements of digital capabilities'.

They can also be used to assess how teams share and develop expertise and to identify any priorities for further development.

Through active collaboration and sharing of practice we will seek to continue to build on the mapping between the two frameworks.

This is one of a number of profiles based on the **'Six elements of digital capabilities'** (http://ji.sc/digicap_ind_frame) model, which includes profiles for staff in a range of specialist roles. For more information on all profiles and other related resources please see the **Building digital capability project page** (http://ji.sc/building-digicap).

ICT (digital) proficiency (functional skills)	
ICT proficiency	**Learning technology staff in their own work might:** Use general ICT-based devices, applications, software and services as required; use productivity software, web browsers, and writing/presentation software; use digital capture devices such as a camera, audio recorder. Use institutional systems for administrative and other general tasks such as (but not limited to) communications systems, calendars and timetables, databases and records, content management systems and repositories, institutional mobile apps, catalogues, customer relationship management (CRM) systems. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Support the design or selection, implementation and/or ongoing maintenance of learning technology systems and solutions, such as virtual learning environments/learning management systems, student portals, dashboards, assessment systems, lecture capture, plagiarism detection systems, learning content management and web-conferencing tools. **Maps to:** CMALT Core Area 1
ICT productivity	**Learning technology staff in their own work might:** Use ICT applications to support personal productivity and efficiency eg for time, task and project management, file management, cloud solutions. Work fluently across devices and applications to achieve work-related tasks. Adapt ICT systems, applications, content and interfaces to suit personal needs and working practices; use built-in accessibility features, software and apps. Recover from failures, find work-arounds, fix problems, keep personal ICT up to date as it evolves; evaluate and adopt new systems, applications and approaches into personal practice. Keep up to date with developments in digital technology relevant to their work. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Support other staff and build capacity across the institution to make effective use of learning technology systems and solutions through eg technical advice, guidance and support, trouble shooting. Critically assess the benefits/constraints of learning technology systems and solutions to meet institutional or subject specialist requirements and for issues such as accessibility, inclusivity, usability, interoperability. Keep the organisation informed about developments in digital and learning technologies, and support it to keep systems up to date and fit for purpose as needs evolve. **Maps to:** CMALT Core Area 1

Information, data and media literacies (critical use)	
Information literacy	**Learning technology staff in their own work might:** Find, evaluate, manage, curate, organise and share digital information relating to their responsibilities and role. Choose and use a wide range of resource discovery tools and approaches. Identify and use specialist sources of information eg portals, catalogues, gateways, archives, datasets. Understand issues relating to intellectual property rights, copyright and licensing, including the use and value or open licences such as Creative Commons. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Support information literacy projects and initiatives. Critically assess digital information sources and services for their relevance, accuracy, accessibility and value to the organisation. Support others to understand IPR, copyright and licensing, and to encourage the adoption of open licenses such as Creative Commons where appropriate. **Maps to:** CMALT Core Area 1 and 3
Data literacy	**Learning technology staff in their own work might:** Collate, manage, access and use digital data in spreadsheets, databases, archives, corpora and other formats, including open data as appropriate. Run analyses and reports. Record data and metadata in digital systems. Use dashboards and other interfaces on organisational data. Follow legal, ethical and security guidelines in data collection and use. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Manage data produced in learning technology systems such as virtual learning environments. Understand and support the implementation of learning analytics. Support others to use data from learning systems eg via dashboards and other learning analytics solutions. Develop protocols for the safe, legal and ethical management of data. **Maps to:** CMALT Core Area 1 and 3
Media literacy	**Learning technology staff in their own work might:** Critically read and interpret messages in a range of digital media – text, graphical, video, animation and simulation, audio, data visualisations, presentations, wiki/blog articles. Critically assess, choose and use digital media resources with an awareness of issues such as usability, accessibility, pedagogic values and design. Understand issues relating to intellectual property rights, copyright and licensing, including the use and value or open licences such as Creative Commons. Reference and acknowledge the work of others in whatever medium it is communicated. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Support other staff to develop learning resources in different media, with an understanding of pedagogic values and design. Support other staff to understand issues relating to intellectual property rights, copyright and licensing, including the use and value or open licences such as Creative Commons. Support staff to find and reuse open licensed media resources. Support media literacy projects and initiatives. **Maps to:** CMALT Core Area 1 and 3

Digital creation, problem solving and innovation (creative production)	
Digital creation	**Learning technology staff in their own work might:** Produce a range of digital materials – text, images, video, audio, visualisations, infographics, presentations, podcasts and screencasts, blogs and web posts – to support learning, teaching and assessment, with an awareness of issues such as accessibility, usability, openness, interoperability and pedagogical design. Create other digital artefacts eg apps, interfaces, for use in learning, teaching and assessment. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Support other staff in the creation of digital artefacts relevant to learning, teaching and assessment, including learning materials, quizzes, educational games and simulations, apps and interfaces. Ensure other staff are fully aware of issues such as accessibility, usability, openness, interoperability and pedagogical design. **Maps to:** CMALT Core Areas 1,2,3 or 4, Specialist Area
Digital research and problem solving	**Learning technology staff in their own work might:** Stay up to date with how digital tools are changing learning and teaching practices. Collect data and evidence concerning (the use of) learning technologies, using digital methods where appropriate eg online surveys, data capture and analytics, video and audio recording, social and sharing media. Analyse data using qualitative and quantitative techniques. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Share knowledge and expertise about how digital tools are changing learning and teaching practices. Solve problems and suggest solutions in the area of their responsibilities. Contribute to learning technology evaluation, research and scholarship. **Maps to:** CMALT Core Areas 1,2,3 or 4, Specialist Area
Digital innovation	**Learning technology staff in their own work might:** Develop, try out and adopt new digital tools. Investigate and implement new digital approaches to learning, teaching and assessment. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Develop and contribute to innovation projects in learning, teaching and the use of technology. Support staff and students to develop, try out and adopt new methods with digital tools. Contribute to organisational change projects relevant to their areas of specialism. **Maps to:** CMALT Core Areas 1,2,3 or 4, Specialist Area

Digital communication, collaboration and participation (participating)	
Digital communication	**Learning technology staff in their own work might:** Use a wide range of communication tools for day-to-day working eg email, skype, messaging, chat, social media, photo sharing, video sharing, file sharing services. Communicate in accordance with different cultural, social and communication norms; consider the communication and access needs of different staff and students. Respect others in public communications; maintain privacy in private communications; model respectful communication; be aware of e-safety and safeguarding issues. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Support others to use digital communication tools effectively and well. Communicate about learning technology services and initiatives using eg social media, online platforms, sharing services. **Maps to:** CMALT Core Area 2 and 4
Digital collaboration	**Learning technology staff in their own work might:** Use virtual collaborative environments and tools eg project management tools, shared calendars and task lists, document sharing. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Set up online collaborative spaces for others. Develop collaborative processes and support others to collaborate using digital tools. Contribute to partnerships, internal and external, around learning technology issues. **Maps to:** CMALT Core Area 2 and 4
Digital participation	**Learning technology staff in their own work might:** Participate in, facilitate and build digital networks eg around learning technology research or practice. Share and amplify messages across networks; share links and resources. Behave safely, ethically and with cultural sensitivity in different online networks. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Set up and facilitate networks or participative spaces on behalf of others. Ensure organisational networks are inclusive and supportive, where necessary helping to develop policies and protocols for participation. **Maps to:** CMALT Core Area 2 and 4

Learning and development (development)	
Digital learning and CPD (learning)	**Learning technology staff in their own work might:** Take up online learning, reflection and professional development opportunities to suit their personal and professional needs. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Support others (staff/students) to become more effective digital learners. Enhance the learning experience through provision of a reliable, accessible, responsive digital environment for learning. Extend access and opportunity by supporting the use of digital services and systems to reach learners who would otherwise be excluded. **Maps to:** CMALT Core Areas 1,2,3 or 4, Specialist Area
Digital teaching (teaching)	**Learning technology staff in their own work might:** Teach, coach, mentor or develop others (staff or students) as users of learning technology, and as learners and teachers in technology-rich settings. Develop digital learning, teaching and assessment materials (see under Digital creation). **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Contribute to the development of new learning opportunities, including new modes of participation in learning eg online, blended, open. Contribute to curriculum development and review. Contribute to the development of digital learning environments as spaces of (formal and informal) learning. Contribute to policies and strategies for learning, teaching and assessment. **Maps to:** CMALT Core Areas 1, 2 and 4, Specialist Area
Digital identity and wellbeing (self-actualising)	
Digital identity	**Learning technology staff in their own work might:** Develop and project a positive identity or identities as a digital professional. Maintain a range of digital profiles and other identity assets such as a professional development record. Act safely and respectfully online. Monitor their own digital footprint and impact. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Support others to develop a positive digital identity or identities within and beyond organisational systems. Contritbute to e-safety and digital identity initiatives. Contribute to digital branding and reputation management on behalf of the organisation. **Maps to:** CMALT Core Areas 1,2,3 or 4, Specialist Area
Digital wellbeing	**Learning technology staff in their own work might:** Look after their personal health, safety, relationships and work-life balance in relation to digital technology use; support others to do the same. Act with respect for the health of others and of the natural environment when choosing and using digital technologies. **Learning technology staff might contribute to their university, college or organisation in specialist ways when they:** Contribute to the development of plans and policies in support of digital wellbeing. Contribute to awareness of the personal benefits and risks of digital ways of working. Contribute to digital safety and cyber-bullying initiatives. Support equality of access to digital opportunity; promote the use of digital technologies to support access and inclusion. **Maps to:** CMALT Core Areas 1,2,3 or 4, Specialist Area

**Digital capabilities:
the six elements**

Information,
data and
media literacies

Digital creation,
problem solving
and innovation

Digital identity
and wellbeing

ICT proficiency

Digital
learning and
development

Digital
communication,
collaboration and
participation