

## Competence frameworks

This hand-out briefly summarises the competence frameworks most relevant to digital literacies. Many institutions will already be using specific frameworks, either home-grown or adopted, to support learner development in each of these areas. However, examples are also offered for reference (with thanks to Lou McGill).

High level term, framing idea	Example component capabilities	Comments
<b>Learning to learn, metacognition</b> <i>Attitude: I can manage my learning and personal development</i>	Reflection Strategic planning Self-evaluation, self-analysis Organisation (time etc)	Owned/defined by: the learner; learning development Learners addressed as: self-directed learners, lifelong learners Changing due to: different needs of arriving learners; different expectations; availability of online and open learning opportunities; technology-supported learning styles
	Cartwright, Kelly B. (Ed.) (2008). Literacy Processes: Cognitive Flexibility in Learning and Teaching. NY: The Guilford Press <a href="http://edrev.asu.edu/reviews/rev731.htm">http://edrev.asu.edu/reviews/rev731.htm</a> Quintana, C et al. (2005) A Framework for Supporting Metacognitive Aspects of Online Inquiry Through Software-Based Scaffolding in Educational Psychologist, V4, N4. pp 235-244 <a href="http://www.informaworld.com/smpp/content~content=a784751538~db=all">http://www.informaworld.com/smpp/content~content=a784751538~db=all</a> Spencer, S (200?) A Metacognitive Framework for Learning PhD <a href="http://coe.winthrop.edu/spencers/sue%27s%20office%20web%20page/metacognition/A%20Metacognitive%20Framework%20for%20Learning.htm">http://coe.winthrop.edu/spencers/sue%27s%20office%20web%20page/metacognition/A%20Metacognitive%20Framework%20for%20Learning.htm</a> McGuinness, C (1999) From thinking skills to thinking classrooms, DfeS, 1999 <a href="http://www.dcsf.gov.uk/research/data/uploadfiles/RB115.doc">http://www.dcsf.gov.uk/research/data/uploadfiles/RB115.doc</a> . Hoskins, B and Deakin Crick, R (2008) Learning to Learn and Civic Competences: different currencies or two sides of the same coin? Centre for Research on Lifelong Learning <a href="http://active-citizenship.jrc.it/Documents/learning%20to%20learn/Learning%20to%20Learn%20and%20Civic%20Competences%20FINAL%20final.pdf">http://active-citizenship.jrc.it/Documents/learning%20to%20learn/Learning%20to%20Learn%20and%20Civic%20Competences%20FINAL%20final.pdf</a>	
<b>Academic practice, study skills</b> <i>Attitude: I can make and interpret meanings in this field of knowledge</i>	Comprehension Reading/apprehension Organisation (knowledge) Synthesis Argumentation Problem-solving Research skills Academic writing	Owned/defined by: the academy, especially academic development, learning development, study skills Learners addressed as: students, prospective graduates in specific subjects Slow changing due to cultural values being embedded in institutional, disciplinary/professional/vocational, and wider social practices and expectations. But changing due to: school-based education practices changing; popular practices around knowledge and representation e.g. cut and paste, sharing, informal spelling, essay banks, google answers etc

<b>Academic practice, study skills (cont.)</b>	<p>i-curriculum - a European framework for defining information skills and a curriculum appropriate for living and learning in the digital age (Primary, Secondary and vocational education) <a href="http://promitheas.iacm.forth.gr/i-curriculum/overview.html">http://promitheas.iacm.forth.gr/i-curriculum/overview.html</a></p> <p>The framework for higher education qualifications in England, Wales and Northern Ireland 2007 Quality Assurance Agency for Higher Education <a href="http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp#framework">http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp#framework</a></p> <p>Undergraduate levels framework (OU, UK) 2005 - Centre for Outcomes-Based Education <a href="http://www.open.ac.uk/cobe/docs/KnowAbout/FS4-LevelsFramework.pdf">http://www.open.ac.uk/cobe/docs/KnowAbout/FS4-LevelsFramework.pdf</a></p> <p>OU Open Learn Learning framework <a href="http://openlearn.open.ac.uk/mod/resource/view.php?id=188602">http://openlearn.open.ac.uk/mod/resource/view.php?id=188602</a></p> <p>General Medical Council (2003) Tomorrows Doctors UK policy document to support medical Schools includes curriculum framework <a href="http://www.gmc-uk.org/education/undergraduate/undergraduate_policy/tomorrows_doctors.asp">http://www.gmc-uk.org/education/undergraduate/undergraduate_policy/tomorrows_doctors.asp</a></p>	
<b>Information literacy*</b> <b>Attitude: I can find and use information in a meaningful way</b>	<p>Identification  Accession  Organisation  Evaluation  Interpretation  Analysis  Synthesis  Application</p>	<p>Owned/defined by: the library  Learners addressed as: researchers, information users  Information literacy has evolved rapidly to meet demands of rapidly changing information environment. At the same time, it is a place where lasting values are asserted (evaluation, reflection and judgement, critical awareness, provenance of sources, evidence, method). Established information literacy models are being challenged by widespread sharing of content and blurring of boundaries between information and communication.</p>
	<p>i-curriculum - a European framework for defining information skills and a curriculum appropriate for living and learning in the digital age (Primary, Secondary and vocational education) <a href="http://promitheas.iacm.forth.gr/i-curriculum/overview.html">http://promitheas.iacm.forth.gr/i-curriculum/overview.html</a></p> <p>Seven pillars of information literacy (UK) SCONUL 2003 <a href="http://www.sconul.ac.uk/groups/information_literacy/papers/Seven_pillars.html">http://www.sconul.ac.uk/groups/information_literacy/papers/Seven_pillars.html</a></p> <p>The Big Blue information literacy model (UK) 2006 <a href="http://www.library.mmu.ac.uk/bigblue/ppt/themodel4.ppt">http://www.library.mmu.ac.uk/bigblue/ppt/themodel4.ppt</a>  <a href="http://www.library.mmu.ac.uk/bigblue/index.html">http://www.library.mmu.ac.uk/bigblue/index.html</a></p> <p>Australian and New Zealand Information Literacy Framework: principles, standards and practice 2004 <a href="http://www.anziil.org/resources/Info%20lit%202nd%20edition.pdf">http://www.anziil.org/resources/Info%20lit%202nd%20edition.pdf</a></p> <p>Eisenberg (2001) Big six: Information &amp; Technology Skills for Student Achievement (US) <a href="http://www.big6.com/2001/11/19/a-big6%e2%84%a2-skills-overview/">http://www.big6.com/2001/11/19/a-big6%e2%84%a2-skills-overview/</a></p> <p>Bruce, C. (1997) The Seven Faces of Information Literacy (Australia) Bruce 1997 <a href="http://sky.fit.qut.edu.au/~bruce/inflit/faces/faces1.php">http://sky.fit.qut.edu.au/~bruce/inflit/faces/faces1.php</a></p>	

High level term, framing idea	Example component capabilities	Comments
<p><b>Communication and collaboration skills</b>  <b>Attitude: I can work with others to produce shared meanings</b></p>	<p>Teamwork  Networking  Effective communication in a range of different media  Awareness of audience  Openness/sharing  Repurposing, reaggregation, re-editing</p> <p>Relatively few examples:  i-curriculum - a European framework for defining information skills and a curriculum appropriate for living and learning in the digital age (Primary, Secondary and vocational education) <a href="http://promitheas.iacm.forth.gr/i-curriculum/overview.html">http://promitheas.iacm.forth.gr/i-curriculum/overview.html</a>  The NHS Knowledge and Skills Framework (NHS KSF) (2004) Dept. of Health. Appendix 2 Core Dimension 1 : Communication <a href="http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4090843?IdcService=GET_FILE&amp;dID=5786&amp;Rendition=Web">http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4090843?IdcService=GET_FILE&amp;dID=5786&amp;Rendition=Web</a></p>	<p>Owned/defined by: unclear. Most institutions and programmes claim that this is a key graduate attribute but there are few examples of it being consistently developed or assessed. Some professions require particular forms of communication; in practice there is overlap with use of digital tools (below)  Learners addressed as: communicators, social participants  Fairly rapidly changing to keep pace with emerging new technologies, networks, devices and forms of tele-presence. However, common values are asserted across communicational media, e.g. in acceptable use policies, netiquette etc: listening, turn-taking, facilitation, mediation, respect; also practices of acknowledging particular contributions. Challenged by some features of informal communication including flaming, dissing, etc. Also challenged by proliferation of communication channels - making it difficult for institutions/tutors to control communications around study.</p>
<p><b>Media literacy (also 'visual' and 'audio' and 'video' literacies)</b>  <b>Attitude: I can make and interpret meanings in different media</b></p>	<p>Critical 'reading'  Creative production</p>	<p>Owned/defined by: generally unclear, though some media literacies are well defined in specialist subject areas e.g. film, photography, media studies.  Learners addressed as: consumers and producers of messages in a range of media  Area of focus for European and UK govt, which assert value of some traditional academic practices e.g. critique, review, scepticism, originality and creativity. Moderately fast-changing to keep pace with emergence of new media, e.g. gaming, media sharing sites and some new values - currency, cool, reputation, etc. Changing due to new availability of capture, editing and production technologies; and due to mass practices of rating, reviewing, commenting, redistribution, fandom.</p>

High level term, framing idea	Example component capabilities	Comments
<b>Media literacy (also 'visual' and 'audio' and 'video' literacies) cont.</b>	European Charter for Media Literacy 2006 <a href="http://www.euromedialiteracy.eu/index.php">http://www.euromedialiteracy.eu/index.php</a> UK Charter for Media Literacy (2006) <a href="http://www.medialiteracy.org.uk/">http://www.medialiteracy.org.uk/</a> Media literacy (Ofcom - UK) 2007 - Office of Communications <a href="http://www.ofcom.org.uk/advice/media_literacy/">http://www.ofcom.org.uk/advice/media_literacy/</a>	
<b>ICT/digital/computer literacy</b> <b>Attitude: I can use and explore the affordances of different digital tools</b>	Keyboard skills Use of capture technologies Use of analysis tools Use of presentation tools General navigation/UI skills Adaptivity Agility Confidence/exploration	Owned/defined by: technology developers, designers and support staff Learners addressed as: technology users (and consumers?) Very rapidly changing skill-set, requiring constant updating. Skills often acquired informally e.g. from more competent peers, but very significantly also through direct instruction. Agile adopters will use help menus, online discussion forums and user groups, trial and error etc, but most learners do not fall into this category and need active support. Some capacities remain relevant e.g. risk-taking, innovation, the capacity to evaluate and be an informed consumer, increasingly involvement in development, criticise the ends for which technologies are offered as the means... Changing in response to technical development and consumerism, learner expectations, open source/constant beta, personalisation of ICT services and environments, and rapid obsolescence of existing skills.
<b>Employability</b> <b>Attitude: I contribute to the economic life of my community</b>	Self-management (time, task etc) Teamwork Problem solving Business and customer awareness Innovation/enterprise	Employability encompasses all or many of the other skills but is included here as a distinctive framework for theorising about and organising these skills, i.e. the production of the learner as a competent worker/employee. Component skills are those distinctive to this framework. The UK Govt and bodies such as the CBI and sector skills councils take a close interest in how this area of competence is changing.

High level term, framing idea	Example component capabilities	Comments
<b>Employability cont.</b>		<p>Student Employability Profiles, 2004/5, Higher Education Academy, ESECT and Council for Industry and Higher Education Includes a glossary of competencies <a href="http://www.heacademy.ac.uk/resources/detail/Employability/employability542">http://www.heacademy.ac.uk/resources/detail/Employability/employability542</a></p> <p>The employability challenge: full report, Appendix C UK Commission for Employability and Skills (2009) <a href="http://www.ukces.org.uk/pdf/8080-UKCES-Employability%20ChallengeFinal.pdf">http://www.ukces.org.uk/pdf/8080-UKCES-Employability%20ChallengeFinal.pdf</a></p> <p>Employability skills map, University of Kent. <a href="http://www.kent.ac.uk/careers/sk/skillsmap.htm">http://www.kent.ac.uk/careers/sk/skillsmap.htm</a> (2008)</p> <p>Winterton, J et al. (2005) Typology of knowledge, skills and competences: clarification of the concept and prototype. Centre for European Research on Employment and Human Resources Groupe ESC Toulouse Research report elaborated on behalf of Cedefop/Thessaloniki. (CEDEFOP Project No RP/B/BS/Credit Transfer/005/04) <a href="http://www.ecotec.com/europeaninventory/publications/method/CEDEFOP_typology.pdf">http://www.ecotec.com/europeaninventory/publications/method/CEDEFOP_typology.pdf</a></p>
<b>Citizenship</b> <i>Attitude: I contribute to the social life of my community</i>	<p>Digital citizenship (Managing) digital identity Participation and engagement Social enterprise Ethical awareness Political, social, personal responsibility</p>	<p>Like employability, citizenship encompasses many other skills but is included as a distinctive framework for theorising about and organising these skills, i.e. the production of the learner as a competent citizen or member of wider society. The European Commission takes a particular interest in this aspect of digital literacy, which it treats in terms of cultural and political inclusion.</p> <p>Citizenship For 16-19 Year Olds In Education And Training, FEFC, 2000 <a href="http://www.qca.org.uk/qca_4858.aspx">http://www.qca.org.uk/qca_4858.aspx</a></p> <p>General information on QCA website <a href="http://www.qca.org.uk/qca_4855.aspx">http://www.qca.org.uk/qca_4855.aspx</a> and Case studies <a href="http://www.qca.org.uk/qca_4865.aspx">http://www.qca.org.uk/qca_4865.aspx</a></p> <p>Hoskins, B and Deakin Crick, R (2008) Learning to Learn and Civic Competences: different currencies or two sides of the same coin? Centre for Research on Lifelong Learning <a href="http://active-citizenship.jrc.it/Documents/learning%20to%20learn/Learning%20to%20Learn%20and%20Civic%20Competences%20FINAL%20final.pdf">http://active-citizenship.jrc.it/Documents/learning%20to%20learn/Learning%20to%20Learn%20and%20Civic%20Competences%20FINAL%20final.pdf</a></p> <p>Mainguet, C and Baye, A. (2006) Defining a framework of indicators to measure the social outcomes of learning in Measuring the effects of education on health and civic engagement: proceedings of the Copenhagen Symposium OECD 2006 <a href="http://www.oecd.org/dataoecd/15/20/37425733.pdf">http://www.oecd.org/dataoecd/15/20/37425733.pdf</a></p> <p>de Weerd, M et al. (2005) Indicators for active citizenship and citizenship education: final report. European Commission Research report. <a href="http://ec.europa.eu/education/pdf/doc280_en.pdf">http://ec.europa.eu/education/pdf/doc280_en.pdf</a></p>

\*From the SCONUL 7 Pillars of Information Literacy: [http://www.sconul.ac.uk/groups/information\\_literacy/seven\\_pillars.html](http://www.sconul.ac.uk/groups/information_literacy/seven_pillars.html)