1. **CAUDIT Digital Literacy Working Party Report**

The objective of the Working Party was to report to CAUDIT members at the 2014 Autumn Members Meeting on developing a national standard for basic digital technology literacy and skills in higher education and identifying best practices and case studies for up-skilling and technology learning in higher education.

**What is Digital Literacy?**

"Digital literacy defines those capabilities which fit an individual for living, learning and working in a digital society"  
(JISC, 2014)

The ability to use ICT and the Internet becomes a new form of literacy – “digital literacy”. Digital literacy is fast becoming a prerequisite for creativity, innovation and entrepreneurship and without it, citizens can neither participate fully in society nor acquire the skills and knowledge necessary to live in the 21st century. (European Commission)

Governments around the world have emphasised the importance of digital literacy for their economy. Digital literacy allows people to communicate, stay abreast of discourse in their fields, to critically evaluate the quality of different information sources, reduce vulnerability to hoaxes, fraud and identify theft. It enables them to be critical thinkers and be mindful of the ethical considerations in their professional and personal lives.

Educational institutions are responsible for teaching digital literacy to prepare students for their realities of their working life. In order to prepare students, academic staff need digital literacy skills for the purposes of a) teaching (e.g. use of a learning management system or digital devices, and b) knowing what skills should be taught to students, and how to teach them, and c) knowing how to conduct effective research. There is also an argument that the HE institution is responsible for ensuring the digital literacy of professional staff, enabling them to be responsible members of the University and of society.
2. EXECUTIVE SUMMARY
The following report provides an overview of the Digital Literacy Models available in the higher education’s sectors in Australia and Europe. A compiled set of chosen resources are presented to direct CAUDIT members to examples of best practice.

Finally, recommendations and possible future directions are presented in the concluding paragraphs.

3. BACKGROUND / INTRODUCTION

3.1. Members of the group:
- Jeff Murray Chair Chief Information Officer, IT Services University of Tasmania
- Simon Collyer Teaching and Learning Support Manager University of Queensland
- Beena Doolabh ICT Client Services Director Auckland University of Technology
- Gabrielle Gardiner Senior Manager, Connected Intelligence Centre University of Technology Sydney
- Michael Kirby-Lewis Chief Information Officer University of New South Wales 2
- Tim Lane Acting Director, Technology Services Southern Cross University

Proxy Members
- Dr Trish Andrews Teaching and Educational Development Institute University of Queensland
- Brent Feike Associate Director, Enterprise Business Services University of Tasmania

3.2. Activity:
Derived from recorded comments at 2013 Spring Members Meeting sessions, the Working Party determined that their remit was to describe:
1. Digital Literacy and educational approaches for students, researchers, academic and general staff including how Digital Literacy is achieved
2. Models for Digital Literacy for academic and professional staff
3. ICT’s role e.g. the T in TPACK [Technological Pedagogical Content Knowledge]

3.3. Reason:
The CAUDIT 2013 Spring meeting held in Brisbane involved a planning session for members. The afternoon sessions were interactive on each of four keynote themes for members to identify key implications of each topic and then vote for their top three to define the priority areas for
2014. Digital Literacy was a prioritised topic - with a theme of developing a national standard for basic digital technology literacy.

3.4. **Activity undertaken:**
The Working Party met on seven occasions using video conference meetings. Initially, it was planned to conduct an Australian survey of members to identify activities within the sector on Digital Literacy programmes.

However, there are extensive materials available globally and many programmes of best practice. Therefore, the group focussed attention on summarising and compiling available materials.
4. FINDINGS

Digital Literacy Models

JISC Model for Digital Literacy

The Joint Information Systems Committee (JISC) is a United Kingdom body responsible for supporting higher education and research, by providing leadership in the use of information and communications technology in learning, teaching, research and administration. The JISC Developing Digital Literacies programme provides a set of practical guides and approaches to meet the needs of students, academic staff, teachers, researchers, librarians, administrators, technical staff, support staff and senior managers. It examines the ‘top down’ strategic considerations involved in developing digital literacies across an institution as well as an ‘on the ground’ view of what this means in practice.

The JISC Digital Literacy model breaks literacies down as follows:

![Figure 1 - JISC Digital Literacy Model](image-url)
5. KEY CONSIDERATIONS

Supporting Staff
Developing staff digital literacies is an essential first step in the effort to support students more effectively to enhance their own professional competences. Higher Education institutions still contain pockets of resistance that can occur due to e.g. lack of confidence, lack of time to engage with new tools, distrust of the academic benefits or cultural attitudes. Universities should provide a range of services from conventional IT training to more tailored e-learning support to help staff explore technology options and how they can enhance the curriculum. Professional development programmes should also be used to raise awareness of digital tools in support of teaching practice.

Supporting Students
University students vary in their understanding of technology, but even proficient users of social and digital media need support using digital technologies effectively for learning and in employment-related contexts. Support for student digital literacy can be provided with a range of distributed, yet coherent services. The JISC sums up examples as follows:

European Digital Competence Framework
The European digital competence framework can provide a basis for evaluating and progressing digital capabilities. The model covers digital literacy comprising Information, Communication,
Content Creation, Safety and Problem Solving. The safety aspect relates to information security and personal health when using various devices. This is a unique contribution of this model.

The paper describes the DIGICOMP study: a self-assessment tool used for evaluation. The self-assessment used in the study may be helpful to organisations or individuals looking to baseline their digital literacy.

Also look at
Open University UK: [open.ac.uk/libraryservices/beingdigital](open.ac.uk/libraryservices/beingdigital)
University of Southampton: [elanguages.ac.uk/digital_literacies.php](elanguages.ac.uk/digital_literacies.php)
Public Library Association: [digitalallearn.org](digitalallearn.org)

From the investigations of the working party, neither Europe nor the United Kingdom had adopted an approach based on an identified standard, with JISC developing a model and the EU adopting a framework. Therefore, the Working Party bypassed compiling a standard.

**Current State of Digital Literacy Practice in Higher Education**

In this section, we give examples of the current state of digital literacy practice and programs at Universities around the world. Digital literacy is increasingly embedded into programme curriculum, and into staff performance development objectives. These requirements are complemented with a range of online and face to face support and training courses. Examples of these trends are provided below.

**Deakin University**

Deakin have made digital literacy as one of eight graduate learning outcomes and provided online resources for staff and students [http://www.deakin.edu.au/library/study/digital-literacy.php](http://www.deakin.edu.au/library/study/digital-literacy.php)

**Oxford Brookes University**

The Brookes [Strategy for Enhancing the Student Experience 2010-2015](http://www.deakin.edu.au/library/study/digital-literacy.php) requires all programmes to include the development of five graduate attributes, one of which is Digital and Information Literacy. Every programme is now required to explain the digital and information literacies their graduates will develop and the learning activities and assessments that will support this development. The strategy is taken forward by faculty Associate Deans and Digital Media and e-Learning Developers (learning technologists), supported by a central Course Design initiative and wiki-based resources.
University of Bath
The University of Bath PriDE project used action learning to define and develop digital literacies across its four faculties, using focus groups made up of staff, students and researchers. These groups developed statements to describe the digital literacy skills required of learners, researchers, teachers and professionals within the context of their subject disciplines. This has been a catalyst for significant change at the university and a number of the project’s achievements are showcased in the special edition of Better@Bath.

Worcester College
Worcester has developed online digital literacy courses for staff which are accredited at Level 2 by the Open College Network. The PADDLE project also established an online Digital practice for teachers course to encourage digital practices in the curriculum.

Cardiff University
Cardiff University ran a project (Digidol project) to identify and bridge the gap between the practices of academic staff and students on the one hand and staff development, libraries and information services on the other, in order to enhance digital literacy support. The Digidol project set out to establish an institution-wide, strategically-driven, systematic and sustainable approach for contextualising and embedding digital literacy into Cardiff University’s core activities.

Exeter University
Exeter is a research intensive university that ran the ExeterCascade project which aimed to develop institution-wide models for student skills and graduate employability, with digital literacy as a cornerstone. They have developed online courses for researchers to provide key research and career management skills.

University of Waikato
Digital Literacy Framework for Staff at the University of Waikato:
Waikato: https://sites.google.com/a/waikato.ac.nz/digital-literacy-awareness-week/resources
6. OPTIONS

- Adopt a framework as a tool for engagement. The JISC Model is commended by the working party.
- Embed digital literacies in continuing professional development and staff development programmes. Provide online guides and face to face training on digital literacies that help them:
  - teach;
  - understand the digital literacy skills students require to learn;
  - understand the digital literacy skills students require to work and be employed;
  - conduct effective research.
  - understand the digital literacy skills required to participate in society
- Consider adopting the digital literacy skills as an academic staff performance measurement criteria.
- Consider assessing digital literacy skills during the recruitment stage, performing a gap analysis and recommended training.
- Provide online resources and face to face training for staff on digital literacies that help them:
  - teach;
  - understand the digital literacy skills students require to learn;
  - understand the digital literacy skills students require to work and be employed;
  - conduct effective research.
  - understand the digital literacy skills required to participate in society
- In the development of resources, members should consider making use of the JISC Toolkit for digital literacy: [http://www.jiscinfonet.ac.uk/infokits/digital-literacies/](http://www.jiscinfonet.ac.uk/infokits/digital-literacies/)

Alternative directions CAUDIT may consider:
- Should digital literacy planning and coordination be incorporated into the CAUDIT leadership program?
- Should CAUDIT incorporate measures of digital literacy into the benchmarking programme?
7. CONCLUSION

The curriculum provides a framework for engaging students with technologies that are educationally relevant. Digital practices in the learning environment are shaped within the student’s programme of study where they tend to look to teaching staff for guidance on recommended technologies or adopt those required by the curriculum. Embedding digital capability into the curriculum helps align graduate outcomes with educational aspirations, and helps make sense of the tasks and technologies in use. It is important for institutions to engage staff and students in development activities and systematic design of digital literacy into the curriculum.

8. RECOMMENDATIONS

The working party makes the following recommendation to CAUDIT members

Recommendation 1:

- In Teaching and Learning plans, consider adopting the principle that digital literacy should be built into all courses.
- Adopt digital literacy as a key graduate learning outcome across all programs.
- Consider a faculty by faculty approach using focus groups to identify the digital literacy skills required of learners, researchers, teachers and professionals within the context of subject disciplines.
9. References


Appendixes

JISC, 2014,
http://jiscdesignstudio.pbworks.com/w/page/46421608/Developing%20digital%20literacies
accessed 11 June 2014.

10. Glossary

JISC  Joint Information Systems Committee (JISC) is a United Kingdom body responsible for supporting higher education, and research.

11. Digital Literacy Resources

JISC present a range of resources here:
http://jiscdesignstudio.pbworks.com/w/page/46421639/General%20digital%20literacy%20resources

National Information Literacy Framework (Scotland) Working Draft: Provides a guide to adoption of a framework at National Level:
http://www.educationscotland.gov.uk/Images/information_literacy_framework_draft_tcm4-433724.pdf
http://www.therightinformation.org/

digitalliteracy.gov An initiative of the Obama Administration to serve as a valuable resource to practitioners who are delivering digital literacy training and services in their communities.

- **ECDL Foundation** ECDL Foundation is the global standards and certification body for the ECDL and ICDL end-user computer skills certification programs.
- **Microsoft Digital Literacy Curriculum** Free digital literacy courses with examples from Microsoft software

Certiport Provider of digital literacy courses and certifications.
Global Literacy HotChalk articles about digital literacy around the world.