


# E-Learning and the Digital Library

Andrew McDonald, Emeritus Professor

**E-Learning  
and the Digital Library**



**Andrew McDonald**  
Emeritus Professor, University of East London

1

---

---

---

---

---

---

---

---

**Broad structure**

- Nature, challenges and trends in e-learning
- Challenges, opportunities and trends for digital libraries
- Generic view with a UK lens!

2

---

---

---

---

---

---

---

---

**Defining e-learning**

- *'Learning facilitated and supported through the use of information and communications technology'*

Learning Teaching Support Network (2003)  
Joint Information Systems Committee (2012)

3

---

---

---

---

---

---

---

---

# E-Learning and the Digital Library

Andrew McDonald, Emeritus Professor

## A more technological definition

- *'An individual or group use of electronic mediums that provide access to online learning tools and resources.'*
- *'These dynamic mediums offer shared community spaces, support digital communication and collaboration, and link to information sources, such as streamed video, podcasts, webcasts, digital libraries, web pages, and videoconferencing.'*

Saleh (2012)

4



---

---

---

---

---

---

---

---

## A wider definition

- *'The use of the internet to access learning materials; to interact with the content, instructor and other learners; and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and grow from the learning experience.'*

Sharifabadi (2006)

5



---

---

---

---

---

---

---

---

## e-learning

- Huge growth
- Strategic decision
- Culture and investment
- Enhance the learning experience
- Choice, access and competitiveness
- Online and 'blended' learning
- Widening access and distance learning
- Employability and lifelong learning

6



---

---

---

---

---

---

---

---

# E-Learning and the Digital Library

Andrew McDonald, Emeritus Professor

The screenshot shows a JISC webpage with the following content:

- Header:** JISC logo, search bar, and navigation links (Home, About JISC, Supporting your institution, Projects, programmes & services, Funding, Publications).
- Breadcrumb:** Home » Supporting your institution » Student learning » Develop online learning to your institution's competitive advantage
- Section:** Develop online learning to your institution's competitive advantage
- From:** Digital Resources » Portfolios » Learner Experience » Learning Environments
- Published:** 12 January 2012
- Why is this important?** UK universities and colleges need to make online learning a central part of their strategies if they are to stay competitive globally, according to the report from the [Online Learning Task Force](#).
- In a nutshell** While online education brings opportunities, such as greater flexibility and new ways of learning for students, it cannot substitute entirely for face-to-face interaction. Consequently many courses benefit from being delivered through a blend of online and campus-based learning.
- Our thinking** Making the transition involves much more than simply moving current courses to an online environment. Our advice and guidance can help you consider how to balance online and face-to-face learning, the effect on students and staff, how your online courses will be designed, delivered and promoted and how resources... [\[Read more\]](#)
- What does the future hold?** Our future work will focus on developing open educational resources and students' digital literacy to ensure that all learners have access to a wide range of learning materials and the skills to take full advantage of them.
- Footer:** Support from JISC Services

---

---

---

---

---

---

---

---

---

---

### JISC e-learning programme

- *'Enable UK further and higher education to create a better learning environment for all learners, wherever and however they study...'*
- *'The vision is of a world where learners, teachers, researchers and wider institutional stakeholders use technology to enhance the overall educational experience by improving flexibility and creativity and by encouraging comprehensive and diverse personal, high-quality learning, teaching and research.'*

---

---

---

---

---

---

---

---

---

---

### Some benefits of e-learning

- New way of learning
- Flexible, creative learning
- Convenient, any time, any place learning
- Personalised and collaborative learning
- Engagement, feedback and assessment
- Access to learning materials
- New digital skills
- Diverse learning styles, needs and disabilities
- Simplifies administrative tasks

---

---

---

---

---

---

---

---

---

---

# E-Learning and the Digital Library

Andrew McDonald, Emeritus Professor

## A new culture

- Learner, pedagogy and the learning experience
- Quality and satisfaction
- Teacher and the delivery of learning
- Technology and VLE are tools
- More than materials on the web
- Who creates e-learning?

10



---

---

---

---

---

---

---

---

## How good is the learning?

- Behaviourism
- Cognitivism
- Constructivism
- Cognitive development, academic success and social skills

11



---

---

---

---

---

---

---

---

## Some drivers for change

12



---

---

---

---

---

---

---

---

# E-Learning and the Digital Library

Andrew McDonald, Emeritus Professor

- *'The quality of the learning experience is still the prime consideration, but our understanding of what constitutes quality has grown to recognise the importance of aspects, such as personalised learning and increasing emphasis on learner satisfaction and preparing students for future employment'*

JISC (2011) Emerging Practice in a Digital Age

13



---

---

---

---

---

---

---

---

- *'Educators are increasingly using Web 2.0 e-learning tools to transform the way students are learning in a virtual environment...'*
- *'Students are now at the centre of the learning experience, with the result that it is sometimes difficult to determine who is designing and leading the learning experience – the educator or the student?'*

Carnaby (2010)

14



---

---

---

---

---

---

---

---

- Digital natives
- Social media
- Social, open, collaborative learning
- Demanding students
- Personalisation and choice
- Work-based, distance and overseas learners
- Mobile and tablet ownership

15



---

---

---

---

---

---

---

---

# E-Learning and the Digital Library

Andrew McDonald, Emeritus Professor

- Future work will focus on developing open educational resources and students' digital literacy to ensure that all learners have access to a wide range of learning materials and the skills to take full advantage of them

JISC (2012)

16



---

---

---

---

---

---

---

---

- *'Open source virtual learning environments have become very popular among educators around the world, providing tools for creating online dynamic websites for their students'*

Carnaby (2010) 16-17

17



---

---

---

---

---

---

---

---

## What does the future hold?

- National strategies and collaboration
- Institutional leadership, strategy and policy
- Wider access to institutional platforms
- e-assessment, e-portfolios, e-administration and course data
- Collaboration between educators and students
- Learning resources and support services
- Costs and risks
- Evaluation and ROI

18



---

---

---

---

---

---

---

---

## And changing technologies

- Streaming, e-content, VLEs
- Cloud computing
- Embedded device technologies
- Adaptive e-learning
- Portfolio collections
- Collective intelligence and communities
- Games as learning tools
- Advanced online mind tools
- Augmented reality
- Next generation interfaces (voice, touch and 3D)

19

Yengin (2010); JISC (2012)



---

---

---

---

---

---

---

---

## Digital libraries

- Enabling and supporting e-learning

20



---

---

---

---

---

---

---

---

## Leadership and influence

- University strategy and its learning & teaching strategy
- Institutional collaboration
  - Faculties, IT, learning services and library
- IT architecture, infrastructure and systems
- Design of e-learning and choice of VLE

21



---

---

---

---

---

---

---

---

# E-Learning and the Digital Library

Andrew McDonald, Emeritus Professor

## New models of learning support

- Service convergence
  - Information services, learning services, academic support services
- Collaboration with academic support services
- Reach new learners
  - International, distance and lifelong learners
- Digital library services
- Feedback from e-learners
- Risk that bypassed

22




---

---

---

---

---

---

---

---



23




---

---

---

---

---

---

---

---

- *'Enrich the learning experience through the development and embedding of e-learning'*  
 SCONUL e-Learning Task Force (2005)

24




---

---

---

---

---

---

---

---



# E-Learning and the Digital Library

Andrew McDonald, Emeritus Professor

## Developing services

- Link the digital library and learning resources with the VLE
- Embed the discovery and delivery of e-resources
- Influence the design of e-materials, support and services
- Develop digital literacy skills

25



---

---

---

---

---

---

---

---

- ... Facilitate access to electronic resources in various formats
  - ... Embed the virtual library in curriculum design and development
  - ... Provide enriched learning experiences
  - ... Contribute to internal and external e-repositories
- University of East London E-Learning Strategy 2008/9

26



---

---

---

---

---

---

---

---

## Taking the library to the student

- Library services embedded in the VLE
    - Virtual reference services
    - Access to the catalogue and federated search facilities
    - My Library with loans and reservations
    - Digital reading lists linked to full-text resources
  - Library services for mobiles and portable devices
    - Downloadable apps
  - Web.2.0 and virtual reality to enhance communication
- McKnight (2011), 207-8

27



---

---

---

---

---

---

---

---

# E-Learning and the Digital Library

Andrew McDonald, Emeritus Professor

## Digital learning assets

- Open education resources
- Learning objects
- Institutional repository
- Image libraries
- e-portfolios
- e-books, journals and course packs
- Federated, single searching services

McKnight 2011, 208-210

28



---

---

---

---

---

---

---

---

## Sophisticated library systems

- Integrated systems management
- One-stop discovery and delivery
- e-resource management
- Access to digital assets
- Meta-searching
- Recommender services
- Open cloud-based architectures

29



---

---

---

---

---

---

---

---

- *'Gone are the days of multiple sign-ons and barriers to access; instead we have free and open access to a plethora of technologies, tools and information, and all at our fingertips'*

Carnaby (2005) 346-54

30



---

---

---

---

---

---


---

---

## Exploit technologies

- Streaming, e-content, VLEs
- Cloud computing
- Embedded device technologies
- Adaptive e-learning
- Portfolio collections
- Collective intelligence and communities
- Games as learning tools
- Advanced online mind tools
- Augmented reality
- Next generation interfaces (voice, touch and 3D)

31

Yengin (2010); JISC (2012) 

---

---

---

---

---

---

---

---

## Our digital expertise

- Access to full-text digital content
- Licences, payments and rights management
- Metadata, standards and security
- Scholarly communication
- Content creation, preservation and curation
- Remote access and authentication
- Resource discovery and delivery services
- Personalisation and customisation

32



---

---

---

---

---

---

---

---

## Our broader experience

- University strategy and leading change
- Collaboration and customer relationship management
- Information needs and customer-focused services
- Manage quality and satisfaction
- Digital literacy skills
- Workforce development and new staff structures, roles and skills

33



---

---

---

---

---

---

---

---

# E-Learning and the Digital Library

Andrew McDonald, Emeritus Professor

## Successful e-learning

- Leading role in e-strategy
- Integrate with traditional services
- Embed digital library services
- Adopt emerging technologies

34



---

---

---

---

---

---

---

---

## References

- Carnaby, P. (2012) *The delete generation: how citizen-created content is transforming libraries*; In *Envisioning future academic libraries*, ed. by S.McKnight. London: Facet, pp1 5-30
- Gruca, A. N. (2010) E-Learning in Academic Libraries; *New Review of Information Networking*, 15 (1), pp16-28
- JISC (2011) *Emerging Practice in a Digital Age*; London: Joint Information Systems Committee
- JISC (2012) *E-Learning* <http://www.jisc.ac.uk/whatwedo/themes/elearning.aspx> (27th January 2012)
- LTSN (2003) *LTSN Generic Centre e-Learning Series*; York: Learning Teaching Support Network
- McKnight, S. (2011) *Envisioning future academic library services: initiatives, ideas and challenges*; London: Facet Publishing
- Melling, M. (2005) *Supporting E-Learning: A guide for library and information managers*; London: Facet
- Rosenberg, M. (2001) *E-Learning: Strategies for Delivering Knowledge in the Digital Age*; Columbus: McGraw Hill
- Saleh, N. (2012) *What is e-Learning?* [http://library.queensu.ca/wiki/elearning/doku.php?id=what\\_is\\_e-learning](http://library.queensu.ca/wiki/elearning/doku.php?id=what_is_e-learning) (27th January 2012)

35

---

---

---

---

---

---

---

---

36

---

---

---

---

---

---

---

---