briefing paper

digital preservation europe

Professional development in digital preservation: a life-long requirement

Digital curation and preservation are rapidly evolving fields. To perform effectively, personnel working in these fields need to update their knowledge and skills on a continuous basis. Training is increasingly delivered through online learning technologies, and the rapidly evolving collaborative environment of Web 2.0 offers further possibilities. The e-learning context presents training opportunities that can provide the blend of theory and practice necessary for effective digital curation and preservation. It is well suited to meeting the life-long learning requirements of personnel working in this field.

An evolving scenario

The sector in which information personnel, such as librarians and archivists, work is constantly evolving. Consequently there is an ongoing need for information personnel to learn about new or changing practices and theory in order to keep their knowledge current. The field of digital preservation is no exception. It is an emerging field where new theory and practice is being rapidly developed and applied. It is already apparent that there is a severe skill shortage in digital preservation, even though the required skill-sets are still being defined. Personnel in this field will be seeking to acquire skills and knowledge. They will also, because of the demands on their time and expertise, want the flexibility and freedom to access professional development on their own terms, when and where they require it – at home at 2 am if necessary.

Into this mix comes the changing education and training practices of distance learning (also known as distance education, open learning or e-learning). Distance learners are not required to physically attend the institution offering courses of study or training; they learn from a location of their choice and often at the time of their choosing. The effects of barriers such as geographical isolation and personal and work commitments are minimised in this mode of study. Distance learning is now firmly established in many areas, increasingly complementing and even replacing face-to-face training.

Distance learning is becoming increasingly popular with information workers. It offers greater flexibility for people with learning and training needs who may be isolated by distance, by family circumstance or by employment constraints such as shift work. The distance learning mode is also increasing in popularity for continuing and further education for similar reasons; it allows skills and knowledge to be updated in one's own time, free from workplace constraints, such as lack of study leave, and it can be planned to accommodate family and social responsibilities.

Learning technologies and Web 2.0

Learning technologies are changing. Structured web-based training using an e-learning system such as WebCT or Moodle, whether courses are mediated or unmediated, is increasingly common. The rapid growth and acceptance of social networking (Web 2.0) applications, such as blogs, wikis, podcasts, YouTube and, more recently, Second Life virtual reality, also provide further new opportunities for less structured training.

Distance learning is a continuum, ranging from broadcast modes for the delivery of learning material to full interactivity between learner and teacher. The World Wide Web is used as a delivery mechanism for learning materials, supplementing or replacing print material, and as an information resource, providing resource-based learning opportunities. It can also function as a peer-to-peer communication mechanism. Peer-to-peer communication is commonly considered as a key factor in effective learning. The widespread adoption of information technology and the Internet allows greater interactivity in distance learning, transforming it with peer-to-peer communication in multiple modes. Asynchronous tools such as email, online forums, newsgroups and electronic submission of assignments are used. Increasingly, synchronous learning is possible, providing increased opportunities for participation: examples include desktop interactive video, online chat and MOO (Multi-user Object-Oriented domains).

References and further information

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E-learning

As noted, a principal driver of distance learning is the flexibility it offers to learners whose personal and work commitments prevent them from physically attending a site where training is offered. There is also an increasing move towards academic credentials being available through distance learning. E-learning opportunities are increasingly being offered in many fields, including digital preservation. Some of these are static e-learning presentations – that is, there is limited or no opportunity for the learner to gain feedback. Probably the best-known example is the Cornell University Library's online tutorial Digital Preservation Management. Another example is the PrestoSpace Preservation Guide. Others – although these are still relatively few – are more dynamic, offering asynchronous interaction (such as discussion forums, wikis, quizzes which provide answers and feedback as soon as they are completed, help lines) and/or synchronous components (such as online chat, talking directly to a tutor using VoIP, and video web-cam). These are usually courses in which students formally enrol and pay a tuition fee; they are also likely to offer a certificate or give credit towards a formal qualification. The IT industry offers many such courses leading to a formal certification – for example, certification as a Cisco Certified Network Professional and other qualifications (see http://www.ciscouk.co.uk/elearning.htm).

E-learning does have some constraints. Technological constraints include limited access to information and communication technology in some countries (e.g. high charges for Internet access) and lack of infrastructure and resources (e.g. poor technology support by the teaching institution). There are also some pedagogical aspects that need to be addressed. Chief among them is how to encourage regular peer-to-peer and faculty-to-student communication, an essential part of effective learning. To ensure that students maintain high levels of self-discipline and commitment, it is essential to create and maintain an active community of learners. For this, mechanisms such as online forums and newsgroups are used. Scepticism about whether e-learning is as effective as face-to-face learning is dissipating rapidly.

Effective training and learning

Despite the increasing acceptance and prevalence of e-learning in all aspects of training and education, there is still a place for face-to-face learning opportunities. This is especially the case for training where access to specialised equipment is required. There is also significant benefit in the social aspects of face-to-face training, where the principal benefit is derived from meeting peers rather than from the training that is imparted; for example, the value of meeting collaborators on a project at the start of the project is high. Current concerns about the effects of travel, especially by air, on global warning suggest that there will be increasing demand for education and training opportunities that do not require face-to-face meetings.

Conclusion

Distance learning is now accepted as a mainstream delivery mode for education and training, although concerns still exist about some pedagogical issues. It is increasingly popular for continuing professional development and training activities. Its popularity suggests that it will eventually eclipse other methods of delivering learning and training.

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