

To boldly GLO – towards the next generation of Learning Objects

Panel members

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Abstract

The session will commence with a demonstration of RLOs currently in use followed by a brief panel discussion of the factors considered crucial for reusability: community of practice, quality assurance, flexibility etc.. A major challenge for the next generation of RLOs is to develop Generative Learning Objects (GLOs) that support adaptable modification to meet a range of learning demands. How this might be achieved, and the educational benefits of such flexible learning objects will then be discussed and this general discussion will form the largest part of the panel session. The panel offers extensive experience of successful uptake and embedding of RLOs in teaching and learning practice as well as deep understanding of the theoretical and technical issues that underpin this practice.

Presentations/discussion

The concept of RLOs ultimately works because there is a community that shares in the reuse of common resources. This first theme takes the community of practice one stage further to emphasis the collaborative development of RLOs. The panel will outline and discuss the system developed by UCeL (Universities Collaboration in eLearning). UCeL has established itself as an effective community of practice, involving several UK universities who are collaboratively producing and sharing reusable learning objects, mainly in the area of health education. This involves the close collaboration of teams of tutors and multimedia developers located in different institutions. The panel will outline the progress to date, and open for discussion how this collaborative model for developing RLOs can be further developed and scaled up.

A second key theme in developing eLearning objects is quality assurance. UCeL has developed a two-stage development model with quality assurance testing at each stage. The first stage culminates in the specification for the new RLO. This specification is sent for peer review where the specification is evaluated against a set of quality criteria. If it passes this assessment, the RLO is then passed to the multimedia developers (often located in a different institution) who develop this specification into a multimedia product. The second stage of quality assurance again involves external assessors who evaluate, in this case, the proposed operational RLO. The discussion on this theme will involve consideration of the adequacy of such tutor based quality assurance systems.

The third theme focuses directly on the structure of the learning objects being developed. Learning objects tend to act as fixed ‘chunks’. The local tutor can select or reject these RLOs, but they cannot easily, or at all, adapt them for local use. A major challenge for the next generation of RLOs is to develop RLOs that support adaptable modification to meet a range of learning demands. The panel will outline the ideas of generative learning objects (GLOs). Generative learning objects are specifically constructed to allow the adaptation of the basic object structure to meet the needs of different learning situations. The discussion themes concern how this might be achieved, and the educational benefits of such flexible learning objects.

The Panel

Professor Tom Boyle is Director of the Learning Technology Research Institute at London Metropolitan University. He has extensive knowledge, both theoretical and practical, of the pedagogy of reusable learning objects and his work with embedding good pedagogy into learning objects in Computer Science has shown increased student retention and pass rates.

Dawn Leeder is Director of Universities' Collaboration in eLearning (UCeL), University of Cambridge. UCeL is a partnership between a number of major UK Universities to produce, share and evaluate multimedia RLOs in health professional education. UCeL has pioneered methods of unlocking content, distributed production processes and quality assurance and run acclaimed national workshops and innovative residential developer training programmes.

Dr Raquel Morales is Eduserv research Fellow in Collaborative eLearning, University of Cambridge. Her PhD was in Astrophysics at the Institute of Astronomy, Cambridge. Since then she has worked at the Harvard Science Education Department with the Science Media Group contributing to teacher professional development videos and to the public understanding of science. Actively involved in eLearning since her arrival back in Cambridge, contributing to the second developer training workshop (12 – 16 April 2004) and co-authoring several papers.

Dr Heather Wharrad is Principal Lecturer in the School of Nursing, University of Nottingham where she is lead for nurse education and health informatics and co-ordinator of School of Nursing Educational Technology Group (SONET). With a background in Physiology research she teaches biological sciences, research methods and IT. She led a team that developed a series of CAL packages on cell biology for nursing and medical students and her current research interests include the role of technology in nurse education.

Dr Paul Garrud is Associate Dean, School of Medicine, University of Nottingham, with particular responsibility for the new Graduate Entry Medical Course (GEM) based at Derby, which utilises many innovative teaching and learning methods. He has created and published several award-winning multimedia CD-ROMs in health education. The Schools of Medicine and Nursing at Nottingham are founder members of UCeL.

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