

## **Sex, Drugs & RLOs: creative approaches to multidisciplinary eLearning**

*<http://www.ucel.ac.uk/sdr>*

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### **Summary**

SDR<sup>1</sup> was a collaborative multidisciplinary project to create reusable learning objects (RLOs) for use and evaluation in Sociology and Anthropology, including its constituent fields (Biological, Medical and Sociocultural Anthropology). RLOs are stand-alone “chunks” of interactive web-based multimedia, which support a single learning objective. Being flexible, they can be used and reused across disciplines.

Two broad topics were identified as particularly salient across the above disciplines: sex (including sexually transmitted disease and reproduction) and drugs (including drug dependency). These two topics formed the basis for multidisciplinary development of a collection of eLearning resources that were subsequently widely used and evaluated.

### **Activities**

SDR used the production methods pioneered by Universities' Collaboration in eLearning<sup>2</sup> (UCeL). These methods were used to ensure consistency of the RLOs and their evaluation.

The project was carried out in a sequence of staged activities:

Firstly, the ways in which subject matter could be effectively deployed and reused across disciplines were identified through face-to-face meetings and discussions with collaborators. There were originally four project partners named in the bid. Through a combination of pressures of work, some meeting date clashes and also some illness problems it was not possible for University of East Anglia and University of Sussex partners to continue with the project. The project continued successfully however, due to the combined efforts of key staff at Cambridge and Durham.

The next stage was to “unlock” subject expertise to create specifications that can be developed into RLOs. To facilitate this, three hands-on, practical workshops to create and evaluate content, were held in Cambridge, Durham and Birmingham (the latter workshop organised by C-SAP). These were attended by 60 participants and the evaluations show they were very highly rated. Participants stated that they found the content creation activities very stimulating and also enjoyed the mixture of practical group work and presentations.

A collection of RLOs was selected from the content created in the workshops and these were then developed. Two specifications from the Durham workshop were taken forward to development – these were “Classifications of recreational drugs” and “Stigma and STIs in the UK” (more on this in “Outcomes” below).

A very serendipitous coincidence arose at the Birmingham workshop. One group produced a specification for “Complex decision-making” which had a very generic format. They had created it to show how a difficult decision such as whether or not to terminate a pregnancy could be made, but it could be readily adapted for many different decisions. Another group were working on “What’s the Problem with Ecstasy” and immediately saw that their content could easily be slotted in to the “Complex decision making” framework. So the first generative learning object was born.

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<sup>1</sup> [www.ucel.ac.uk/sdr/](http://www.ucel.ac.uk/sdr/)

<sup>2</sup> [www.ucel.ac.uk](http://www.ucel.ac.uk)

The results of this can be viewed in the Ethical Decision Making section<sup>3</sup> of the UCeL website. The Complex Decision Making GLO was authored in Flash and XML and the instances are stored in a PHP database interrogated through SQL. Users with the requisite permissions can set up new examples using a simple web-based form interface and the results are described in “Outcomes” below.

A third area explored in the workshops was “Classification of Recreational Drugs” and again, the results are presented below.

## **Outcomes**

The main project deliverable is the RLO collection. This consists of 8 RLOs.

“Stigma and STIs in the UK” was produced by Helen Brook and Helen Dawes, Durham anthropology students. Although engaging and informative, the content raised some concerns about whether it was trying to be a public health advertisement rather than a learning experience. Helen Brook then took the concepts further using the GLO template and rapidly generated 6 very different examples of individuals deciding whether or not to use a condom.

“Ethical Decision Making” was first conceived by Andy Bond (Westminster) and then subsequently developed by Dawn Leeder together with Tim Crossfield at Wolverhampton.

Each GLO can be set up from scratch by a tutor so that learners can explore and critically reflect on an ethical decision-making problem. Using a web-based pro-forma, the tutor supplies the characters; these are the decision-maker and the people who influence the decision, or the ‘players’. The programme selects icons to represent each of the players, which are grouped into three broad categories: ‘Family and friends,’ ‘health professionals’ and ‘other stakeholders’. Each of these players can express up to four view-points, which are ranked according to how closely they are in accord with the default position. The decision-maker also has a response for each of these views. This results in a rich learning object with randomised multiple paths through it; each learner will take a different pathway and record a different set of reflections.

The learner takes an interactive journey through the decision-making process. By interrogating the various players - the decision-maker and the decision influencers - the learner builds up a complete picture of the complex decision-making process. As each player offers their view, the learner records their own thoughts and votes on what they think the final decision will be. Finally, they receive a print-out of the entire journey.

Ethical Decision Making has a number of associated instances including:

- Mary’s Difficult Decision (abortion)
- What’s the problem with ecstasy? (recreational drug use)
- Should Melvin/Vinny/Tara/Kylie/Becca/Frank use a condom? (Stigma & STIs)

Classification of Recreational Drugs was a specification originally generated in the Durham workshop by Andrew Russell, Tony Clamp and David Chappell. It explored the idea that rank ordering of various ways to classify drugs (legality, morbidity, social acceptability) could to a certain extent be deemed arbitrary, and encouraged the student

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<sup>3</sup> [http://www.uce.ac.uk/glos/decision\\_making/](http://www.uce.ac.uk/glos/decision_making/)

to reflect on the implications of this by challenging their assumptions. A rank order matrix GLO<sup>4</sup> was developed where the learner could drag the tiles representing the recreational drugs (coffee, cocaine, heroin, tobacco, alcohol, chocolate etc) to the position they considered appropriate in the rank ordering grid.

Like the Ethical Decision Making GLO, this GLO can be easily set up and customised by a tutor using a web-based form. Andrew Russell and his colleagues have provided additional content for the GLO and although there has not been time to complete it during the scope of this project, it will be developed subsequently as part of UCeL activities. The Rank Order matrix itself is much more widely generalisable to many other teaching and learning examples, so another highly reusable learning object has been conceived and proto-typed as part of this project.

### **Evaluations**

The SDR project has incorporated evaluation of the resources created since its conception. Every Ethical Decision Making GLO finishes with a feedback form that allows the users to report back to us. After having worked through any of the decision making GLOs, an option is offered to the user to complete the feedback form (“feed the monkey” – as it appears on the web page), together with the option of printing out the student’s journey through the GLO and also make that page a web page.

Since the evaluation form was set up (beginning of March) to the date of this report, there have been a total of 53 responses.

The locations reported by the users are: Manchester, Cambridge, Wolverhampton, Devonshire, Durham, Cleveland, York, Stockton-on-Tees, Birmingham and London.

A total of 61% of users agreed or strongly agreed to like the look and feel of the GLO; 25% agreed that the GLO was pitched at their level; 70% of users agreed or strongly agreed to have enjoyed being able to work at their own pace, 36% liked being able to obtain a print out. 53% disagreed or strongly disagreed that the GLO took longer than expected to complete. 55% disagreed or strongly disagreed that they needed more support when using the GLO. Finally, 24% of users agreed or strongly agreed that will use the GLO again.

The best liked features of the GLOs have been the attractive presentation, the interactivity, the possibility to express reflections as the information is discovered and its simplicity in the approach to the problem and in its use.

The users identified the following changes could improve the GLOs: more multi-media ingredients (i.e. more pictures, audio files), having answers emailed to students, more detailed explanation on how to navigate the GLO, explanation of what a GLO is and maybe pitching it a higher level.

### **Implications**

RLOs are pedagogically effective when they can be identified to target areas of real educational need and where they can be designed to be engaging, interactive and of “high value”. However, in terms of reusability, the unit of reuse is the entire RLO; a user (teacher or learner) can choose to either accept them in their entirety or to reject them. Hence the need for GLOs, which are customisable by local tutors to be very relevant to their teaching and learning requirements. The Ethical Decision Making GLO is highly

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<sup>4</sup> [http://www.ucel.ac.uk/glos/classification\\_drugs/holder\\_crd.php?which=7](http://www.ucel.ac.uk/glos/classification_drugs/holder_crd.php?which=7)

generalisable; ethics is now being taught across many previously unconnected subject areas such as computing science, biology, economics, veterinary science and dentistry so the possibilities for generating new learning objects are myriad.

The Rank Order Matrix GLO generated by the Recreational Drugs Classification also offers opportunities for very wide reuse across a broad range of subjects.

Time is always the single most constraining factor for the effective creation, development and evaluation of these resources. If Faculty wish to commit to these new and creative ways of teaching and learning then staff time must be freed up to allow the space for these activities to take place.

## Resources

### Websites

- UCeL: <http://www.uceL.ac.uk>
- SDR: <http://www.uceL.ac.uk/sdr/>
- GLOs: <http://www.uceL.ac.uk/glos/>
- Ethical Decision Making [http://www.uceL.ac.uk/glos/decision\\_making/](http://www.uceL.ac.uk/glos/decision_making/)
- Recreational Drugs [http://www.uceL.ac.uk/glos/classification\\_drugs/](http://www.uceL.ac.uk/glos/classification_drugs/)

### Workshop specifications

- Cambridge [http://www.uceL.ac.uk/workshops/cam\\_160604\\_specs.html](http://www.uceL.ac.uk/workshops/cam_160604_specs.html)
- Durham [http://www.uceL.ac.uk/workshops/dur\\_220604\\_specs.html](http://www.uceL.ac.uk/workshops/dur_220604_specs.html)
- Birmingham [http://www.uceL.ac.uk/workshops/bir\\_140704\\_specs.html](http://www.uceL.ac.uk/workshops/bir_140704_specs.html)

## References

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*"To boldly GLO - towards the next generation of Learning Objects"* Accepted for Panel eLearn 2004, Washington, 1-5 November 2004

[http://www.uceL.ac.uk/documents/docs/eLearn\\_2004\\_final.doc](http://www.uceL.ac.uk/documents/docs/eLearn_2004_final.doc) accessed 31 May 2005

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