Institution: University of Hull

Unit of Assessment: C25: Education

Title of case study: The Use of Digital Video in Transforming Teaching and Learning from a Subject Based to an Interdisciplinary Approach

1. Summary of the impact (indicative maximum 100 words)

This case study focuses on an innovative teaching method based on the use of digital video. This novel approach is significant because it can be shown to have changed the mind-sets of many educators who used it, by encouraging them to transform their pedagogy through adopting an interdisciplinary rather than a subject focus for their teaching. There is demonstrable evidence to show this new pedagogical method had considerable reach and impact at national, European and international level across a range of different educational settings including schools, colleges, HEIs and commercial organisations.

2. Underpinning research (indicative maximum 500 words)

The research underpinning the impacts in this study originated in a project commissioned by the Joint Information Systems Committee which sought to identify how lecturers in post-compulsory settings use digital video in their teaching, and how they could be encouraged to do so more frequently and with greater effect (Burden and Atkinson, 2009a). The research consisted of three phases:

(i) a systematic literature review to identify existing patterns of video usage for teaching amongst lecturers

(ii) a series of national and international workshops attended by academics and other users of video to test, refine and evaluate a series of learning activities based on digital video extrapolated from the findings of the systematic review

(iii) the creation of a framework and digital toolkit based on data collected from these workshops which enables educators across the world to plan for the use of video through an interdisciplinary approach(Burden and Atkinson, 2008a)

(i). The systematic literature review highlighted that many academics rarely use digital video in their teaching and those who do mainly use it as a tool to support the transmission of content within their subject. There was little evidence to show how video might be used to support the development of higher order skills (e.g. extrapolation or synthesis) or interdisciplinary teaching (Burden and Atkinson, 2009b). Consequently many potentially valuable video resources were rarely accessed or known to academics beyond their own discipline area. Based on these findings the research team adopted a Design Based Research (DBR) methodology to develop and test a set of teaching prototypes encouraging academics to adopt an interdisciplinary approach in their use of video.

(ii).The prototypes were tested with users from across the UK at a series of full day workshops. These were recorded and later transcribed to provide evidence of use. Participants also provided written and verbal feedback which showed how they had shifted their thinking and practices from a subject orientated approach to one which was more interdisciplinary and thematic (Burden and Atkinson, 2008b)

(iii). The research team used the data collected from these workshops to further refine the original prototypes, developing a framework and online toolkit of exemplars to support this interdisciplinary approach. This was tested again at a series of international workshops and conferences where further data from academics was collected in the form of written feedback and semi-structured interviews. This data further validated the findings from the original round of workshops. These claims are substantiated by the outputs in the peer refereed journals and conference proceedings

The research therefore demonstrates that educators:

(i) can be encouraged to re-conceptualise where and how they search for digital video to support teaching

(ii) can use digital video in an interdisciplinary fashion to support student centred learning (Burden and Atkinson, 2010)

In addition to the involvement of Dr. Kevin Burden who led the research from the University of Hull the research team also included Simon Atkinson at BPP University (London) and Theo Kuechel a free-lance researcher and consultant.

3. References to the research (indicative maximum of five references)

Burden, K., and Atkinson, (2010) De-coupling groups in space and time: Evaluating new forms of social dialogue for learning. Chapter 7 in Shedletsky, L., and Aitken, J. (Eds) Cases on Online Discussion and Interaction: Experiences and Outcomes., Information Science Reference, Hershey: Pennsylvania.)

Burden, K., and Atkinson, S (2009a). Personalising Teaching and learning with Digital Resources: DiAL- Framework Case Studies. Chapter 6 in J. O'Donoghue (Ed), Technology-supported Environments for Personalized Learning: Methods and Case Studies, Information Science Reference, Hershey, Pennsylvania

Burden, K. and Atkinson, S (2009b). Using video resources to engage and stimulate high-level thinking, in Proceedings of the EDUCAUSE annual conference, Denver, USA

Burden, K., and Atkinson, S. (2008a) The transformative potential of the DiAL-e framework: Crossing boundaries, pushing frontiers, ASCILITE Conference proceedings, Melbourne, Australia.

Burden, K., & Atkinson, S. (2008b). Beyond Content: Developing Transferable Learning Designs with Digital Video Archives, in Proceedings of ED-MEDIA, Vienna, Austria.

Grants

2006-2009: The Development of a pedagogical framework for the use of video in HE/FE (JISC)
Sponsor: Joint Information Services Committee - £93,000 (this was a competitive grant application)

2008-2010: Encouraging educators to use digitised resources in teaching and learning in further education (The QIA Excellence Gateway project)
Sponsor: The QIA (now the LSIS) - £150,000

2008-2011: Development of a pedagogical framework for the use of video in a multi-lingual European context (EduTubePlus)
Sponsor: European Commission - £87,000 (this was a competitive grant application)

4. Details of the impact (indicative maximum 750 words)

The research described above was conducted between 2007-2010 leading directly to the development of an innovative framework and toolkit of resources to enable educators in tertiary education to use digital video, and subsequently other digitised resources, in teaching, learning and research. It subsequently had impact on a wider group of educators, beyond the tertiary sector, which included school teachers and teacher educators. The framework has had the following four distinct levels of impact outside of the University of Hull itself.

A. Local/institutional impact

The framework and underpinning research impacted directly on a number of lecturers and teaching staff from across the UK, who used it as a resource to structure their teaching approaches and materials. Over one hundred and fifty academics attended dissemination events between 2007-2008 and evaluation data indicated overwhelming support and acceptance of the approach advocated (1). Follow up case studies in various UK Universities conducted a year after these events showed that academics were actually using the framework in their teaching to structure their use of video resources (1).

B. National Impact

Following the completion of the initial research The University of Hull was commissioned by the Quality Improvement Agency (QIA) on behalf of the Further Education sector to develop a set of teaching and learning exemplars to encourage teaching staff to use and create their own digitised resources (e.g. video, newspaper archives, images) for teaching and learning. Statistics indicate these have been viewed and downloaded over 1000 times in the period 2009-2011. This influenced the practice of teaching staff in Further Education at a national level since the resources created were hosted in a national repository on the Excellence Gateway (4). Seven FE colleges participated in this project and interviews with staff demonstrated the model had changed their mind sets and practices in the use of video. Exemplars based on these interviews are available at http://slcresources4adultlearning.net/index.php (4).

Another impact at national level is the adoption and use of the framework by EdMediaShare, a national organisation, funded by the JISC, which promotes the use of media resources in post-16 teaching and learning. This service was launched in summer 2011 and includes direct reference to the framework and the research underpinning it. It has received over 12,000 visits in the period 2011-2012 (2).

C. European Impact

Outside of the UK the research and the framework itself were used as the pedagogical basis for a major European project (2008-2011)(EduTubePlus) which created a portal and a tool to support teachers in 17 countries to integrate multilingual video clips into their practice. The framework became the central element of the EduTubePlus pedagogical framework and was translated into each of the partner countries national language. This resource is available to teachers and other educators at http://www.edutubeplus.info/ Teachers and students from seventeen European countries have used the resource (6)

D. International Impact (beyond Europe)

The framework produced from this research has gained the attention and interest of educators at an international level. The international website, established in 2011 (http://dial-e.net/), has been viewed 4631 times (as of July 2013) across 65 different countries. The project team have been invited to run workshops and speak at major international teaching and learning conventions to share the research with educators. Two specific examples are included to illustrate the impact of this research at an international level:

1. Use by teacher-educators: workshops and seminars were run at the University of Technology (Sydney) Massey University (New Zealand) and the Hong Kong University (CITE) in 2008-2009 where teacher educators explored how the model could be adapted for use by teachers and trainees. In the case of (UTS) Sydney the model now forms part of the programme for trainee teachers helping them to integrate the use of media resources into their pedagogy (3)

2. Use by teachers and advisory ICT staff: in addition to teacher education the model has been used as the basis of an international collaboration between teachers and students in the USA (Florida) and China in the Global Partnership Project. Following a dissemination event at the DIVERSE conference in Maine (2010) I was asked to provide consultancy in establishing an international inter-cultural project linking schools in Florida and China. The focus of this project was the DiAL-e model which was used by teachers in their respective schools to help students understand the use of visual artefacts. The model is currently being used by teachers and ICT advisors in both

countries. (5)

5. Sources to corroborate the impact (indicative maximum of 10 references)

1. Official JISC web-site for the project and the DiAL-e model – case studies (JISC) :http://misc.jisc.ac.uk/JISC/framework.php
2. EdMediaShare website and project manager (http://www.edmediashare.org/media/dial-e-learning-designs-in-67-seconds)
3. Academic researcher and lecturer: Associate Professor of Education, University of Technology, Sydney, Australia
4. QIA Excellence Gateway website: http://slcresources4adultlearning.net/index.php
5. Academic researcher and lecturer: Professor of Education, University of Southern Maine, USA
6. Director of EduTubePlus Project: Computer Technology Institute, Athens, Greece http://www.edutubeplus.info/