University of Birmingham

Start Date: October 2003

Students: 3rd year (Level H)

Type: Distance

Discipline: Education

Scope: programme

Technology: WebCT, Photo Story, Articulate

No. of students affected: 34

Approach: Problem-based learning (PBL), Enquiry-based learning (EBL), eLearning, role play, group work

Learning Environment: independent learning

Initial Funding: Learning Development Unit LEaP

Initiative Introduction: across a module

Impact: design adopted by School and College

Design Team: Mike McLinden (Senior Lecturer), Annette Weston (Lecturer) and Danielle Hinton (Learning Design Consultant)

Introduction

The introduction of an online study component was a key strand in the redesign of the two years distance education programme. As part of these developments, an innovative online learning and support resources was designed and structured around the principles of PBL/EBL.

Learning Design

As the result of a successful pilot with 10 students, EBL activities were initially embedded into Modules 1 and 2 of the programme. The 34 participants were divided into one of six online EBL tutorial groups (5 per group). A novel feature of each scenario was the incorporation of role play, with group members assuming the role of a newly appointed specialist teacher of children with visual impairment, and with opportunities provided for students to enact their theoretical knowledge in a real-world situation.

Within each scenario participants work in their online EBL tutorial group to complete an assigned task every two weeks. Each group is assigned a name (fruit, birds or minerals), combined with the EBL tasks helping the distance students to develop a close group identity and relationships. Discussions takes place within private group WebCT bulletin board areas. For each task groups are assigned a "chairperson" and "summarizer", each member taking turns to fulfill these roles over the course of the scenario(s).
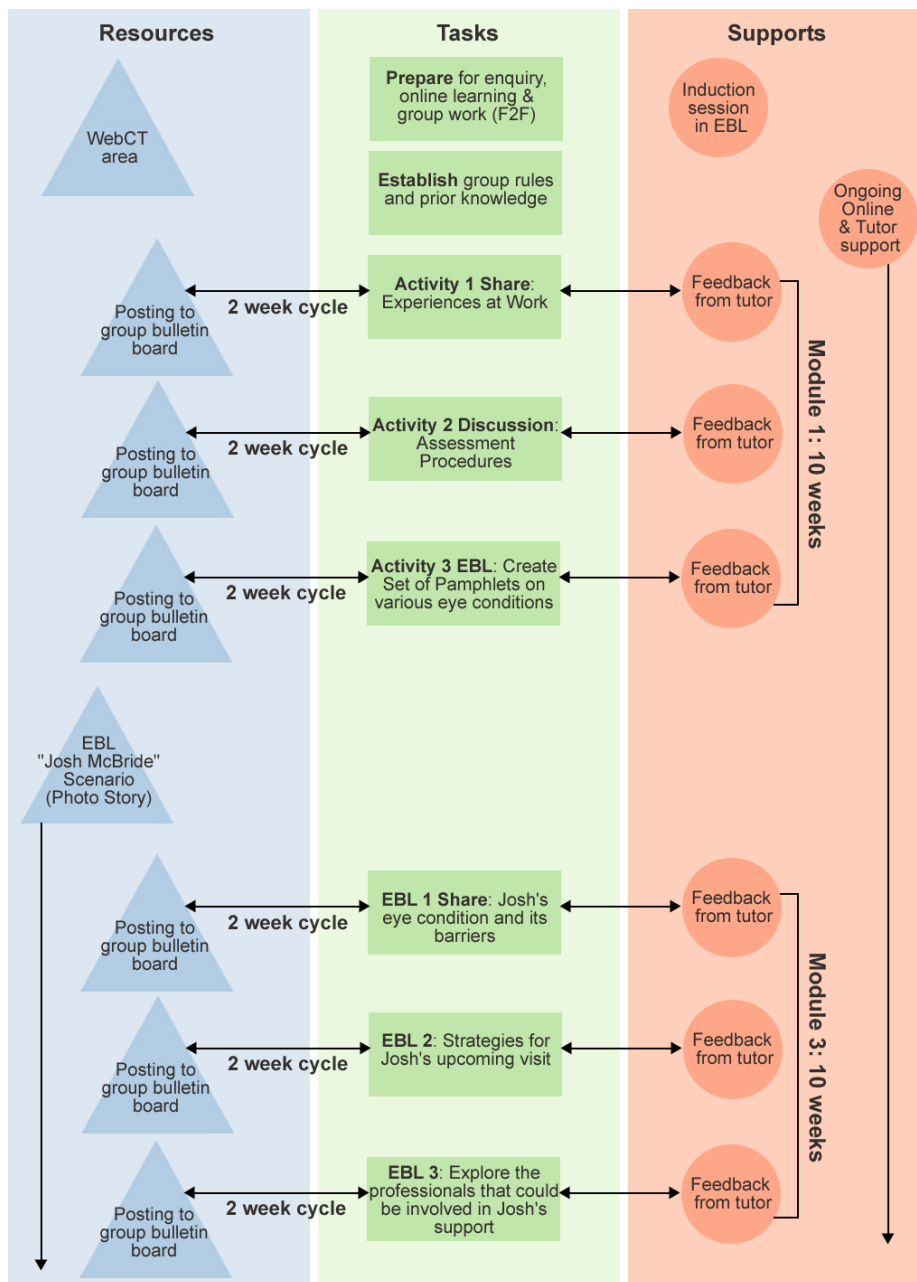
To add authenticity, feedback and tasks were presented in memo format through the workplace's "pigeon holes" located on a dedicated bulletin board. Tasks are designed to address specific learning outcomes from each module and are based around realistic and plausible "problems" that might be encountered by teachers of the visually impaired in their practice. Five tasks were originally created for inclusion within Case Scenario 1 (Module 1) to run over a period of ten weeks during semester 1.

Initially, case study scenario resources were delivered as traditional text and image web pages within WebCT. This has evolved into the development of "video" type case study resources developed using Photo Story (with accompanying audio). During the 2009/10 academic year, a range of supporting module resources was developed and piloted using Articulate.

Summary

Initial feedback (induction and workload) from the first full cohort of students provided information which led to the adaptation of the learning design. It was recognised that distance students required an extended period of time within the first module "to learn new skills and procedures" (ie WebCT and EBL). Currently students engage in EBL scenario and activities within Module 3 of their studies (April – June). The learning design has proved to be flexible in that it has been adapted for 1st year Academic Skills Development modules within the College of Social Sciences.

Temporal Plan: Learning Design Sequence

Resources	Tasks	Supports
WebCT area	**Prepare** for enquiry, online learning & group work (F2F)	Induction session in EBL
	Establish group rules and prior knowledge	Ongoing Online & Tutor support
Posting to group bulletin board — 2 week cycle	**Activity 1 Share**: Experiences at Work	Feedback from tutor
Posting to group bulletin board — 2 week cycle	**Activity 2 Discussion**: Assessment Procedures	Feedback from tutor
Posting to group bulletin board — 2 week cycle	**Activity 3 EBL**: Create Set of Pamphlets on various eye conditions	Feedback from tutor

Module 1: 10 weeks

Resources	Tasks	Supports
EBL "Josh McBride" Scenario (Photo Story)		
Posting to group bulletin board — 2 week cycle	**EBL 1 Share**: Josh's eye condition and its barriers	Feedback from tutor
Posting to group bulletin board — 2 week cycle	**EBL 2**: Strategies for Josh's upcoming visit	Feedback from tutor
Posting to group bulletin board — 2 week cycle	**EBL 3**: Explore the professionals that could be involved in Josh's support	Feedback from tutor

Module 3: 10 weeks

Further Information

McLinden, M., McCall, S., Hinton, D. and Weston, A. (in press). Developing Authentic Online Problem-Based Learning Case Scenarios for Teachers of Students with Visual Impairment in the United Kingdom, *Journal of Visual Impairment and Blindness.*

McLinden, Mike , McCall, Steve , Hinton, Danielle and Weston, Annette(2007) 'Embedding online problem-based learning case scenarios in a distance education programme for specialist teachers of children with visual impairment', European Journal of Special Needs Education, 22: 3, 275 — 293

McLinden, Mike , McCall, Steve , Hinton, Danielle, Weston, Annette and Douglas, Graeme (2006) 'Developing online problem-based resources for the professional development of teachers of children with visual impairment', Open Learning: The Journal of Open and Distance Learning, 21: 3, 237 — 251.

McLinden, Mike , McCall, Steve , Hinton, Danielle and Weston, Annette(2006) 'Participation in Online Problem-based Learning: Insights from postgraduate teachers studying through open and distance education', Distance Education, 27: 3, 331 — 353.

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Video Case Study: http://www.ebl.bham.ac.uk/bham/case10.shtml