Enhancing the first-year experience with online quizzes and screencasts

Brid Lane & Orna Farrell
Dublin Business School (DBS)

2011 Administrative and Quality Conference, Cardiff
## Table Of Contents

1. Introduction
2. Background literature
3. Background to group/programme & rationale for project
4. Project phase 1 completed
5. Project phase 2 to be completed
6. Conclusions
1. Introduction

Why introduce online quizzes and screen casts to first years?
2. Background literature

Transition from school to HE is a difficult time for students:

– **Sense of unpreparedness**, unsure of their skills/ability to succeed [1]

– **Perceived fit between 2nd and 3rd level**: teaching practices, program content, study load, pre-university expectations [2]

– **Inadequate information** about chosen course / institution, funding, personal commitment to progress, lack of contact with lecturers, adapting to varying teaching styles [3]

– **Change Management**: academic (teaching & expectations), social (independent living, new circle of peers) [4]

Tinto (1987) stated that “students who do not feel that they belong both academically & socially are likely to leave”
2. HE Progression in Ireland

HEA (2010) study on Progression in Ireland found:

– Students on lower level (6 & 7) Bachelors’ programs at greater risk of non-progression

– 26% non-progression to year two on Irish Level 7 (www.nfq.ie) [5] (equivalent to the UK NQF level 5 award)

– Compared to between 4% and 16% at level 8
3. Background & Rationale for Current Project

• Teaching & learning approaches for “Introduction-To-Computing” module on a Level 6/7 Legal Studies program
  – 2010-2011 profile: N=32, equal split between male and female, predominantly Irish nationality, dominance of learning problems (particularly dyslexia), low entry points on the State Leaving Certificate
  – 29% non-completion rate at Summer 2011
  – Strong reluctance to read text
  – Short attention span
  – The “Facebook self-distraction” problem
3. Aims of project

Aims of current project:

– Decreasing the attrition rate
– Enhancing the student learning experience
– Support development of independent study habits
– Explore the use of elearning to support student learning
– Encourage experiential learning
4. Project Completed: 2010-2011

First Component: Secondary Screen casts of Learning Content:

- Learning software applications in conjunction with underlying theoretical concepts [6]
- Useful for the new demographic i.e. students who cannot always attend lectures [7]
- YouTube for informing / displaying, critical analysis / commentary [8]

What we used:
- An incomplete, and conveniently-selected set of YouTube videos to complement paper-based manuals
- Linked to from the module Moodle page.
- Intended for reference purposes only
- Students showed a preference for videos over the written manuals when they missed a class.
4. Project Completed: 2010-2011

Second Component: Quizzes:

- Popular means of formative assessment in terms of time-savings and efficiency for both student and teacher [9]
- Frequent use of web-based practice quizzes leads to improved performance in final exam [10]

- Web-based (Moodle) multiple choice format
- Used for the non-hands-on aspects of the program content
- Intended for student self-assessment, and in-class revision before a class test
4. Project Completed: 2010-2011

In-class focus group discussion feedback from students:

- Liked the tools and appreciated their value
- Videos particularly useful for catching up on work missed
- Quizzes useful as a revision aid for class test

However:
- More reference could be made to them in class
- Not enough instances of the tools
- Specific features of the tools:
  - Clumsy screen interface for quizzes
  - Quizzes embedded in Moodle could not be easily ported
  - Video set incomplete, only covering portions of some topics
  - Too much variety of presentation styles across the various videos
  - Videos not based on law-related content
First component: Screen casts

- More complete set of video screen casts instead of paper notes for at least 1 of the 5 core topics
- Screen casts to replace the limited YouTube videos
- Camtasia Studio used to create the video screen casts
  http://www.techsmith.com/camtasia/
- Creation informed by proven checklist of screen casting instructional strategies [11]
5. Project Plan: 2011-2012

Second component: Quizzes

- Using Articulate software instead of Moodle
  - More attractive user interface
  - Higher level of interactivity
  - Easier creation process
  - Easy download of completed quizzes
    http://www.articulate.com/

- Formative assessment
- Structured learning by doing elements
- Instant feedback responses
- Scaffolded quizzes with increasing degrees of difficulty
- Implemented at strategic points during the year
- Used as part of the student’s summative assessment towards the end of the year.
6. Conclusions

- Expected results from proposed plan
  - Higher performing students
  - Increased student motivation
  - Greater progression to year 2
  - Positive spill-over effect into other modules on the program

- Feedback: success will be measured by feedback questionnaire, analysis of progression statistics, qualitative interviews with students
6. Future plans

– Apply similar tools and approach to other first year introductory computing modules
– Investigate and measure effect of new approach on retention and success
References


5. Mooney, O., Patterson, V., O’Connor, M., & Chantler, A. (2010). A study of progression in Irish Higher Education. *HEA (Higher Education Authority Ireland).*


