Paper Session 2 Abstracts

Option A: Dr Tom Joyce and Ms Clare Hopkins, Newcastle University

Increased and sustained student retention at Stage 1 of an Engineering degree at a traditional UK university

Retention is a concern in many courses in the UK and data from the Higher Education Statistics Agency shows that 17-23% of engineering and technology students who entered first year were no longer in higher education one year later. Although retention rates tend to be higher at traditional universities, in the School of Mechanical and Systems Engineering at Newcastle University progression rates from Stage 1 to Stage 2 had averaged 82% over the four academic years from 2005/06 to 2008/09.

Changes were instituted in the 2009/10 academic year. Students were allocated to pre-assigned 'Engineering Teams' of five and encouraged to work in these groups over their First Year. Academic ability was shared among Teams and it was also ensured that there were no lone female students in Teams. Assessment of these changes over two academic years included: online questionnaires with 68 and 103 responses respectively, 10 focus groups attended by a total of 63 students; and analysis of the progression data at the end of the 2009/10 and 2010/11 academic years.

From the on-line questionnaires for the 2009/10 and 2010/11 academic years, results included: 84% and 92% of students said that they enjoyed being part of a Team either very much/somewhat; 90% and 88% said that they had gained new skills through being part of a Team; 72% and 83% said that they had gained confidence in their interactions with lecturers; while 72% and 83% said that being in a Team increased their sense of being part of the School. Focus group comments showed that peer-to-peer learning and support had taken place. Where Engineering Teams encountered difficulties this was mainly said to be because one or more of their team was not participating equally. Equally, students could be very supportive of each other when they were unable to undertake team work for legitimate reasons such as illness. Perhaps the key overall result was that the progression rates from Stage 1 to Stage 2 were 93% and 90% for the 2009/10 and 2010/11 academic years, a significant increase from the average of 82% seen over the previous four academic years.

Progression rates increased significantly, to over 90%. Moreover this positive change was achieved for little or no increase in staff workload or expensive changes to buildings or infrastructure. As such the model is applicable to many other institutions within the UK higher education sector.

Option B: Dennis Duty, Senior Lecturer & Year tutor, University of Huddersfield.

It's not them it's us: Adapting the institution to smooth the transition into university

Retention solutions have historically focussed on helping students to adapt to the institution, with an unrealistic expectation that this process take place early on in a course. For many students this transition to university is difficult and they either perform badly or simply leave. At the University of Huddersfield in response to low year 1 to year 2 progression on the Business Degree an alternative

approach was taken which focussed on adapting the institution. This involved changing the teaching delivery system on all first year modules to small group seminars from the classic large lecture.

Evaluation was based on using a mixed methodology. Statistical data were collected on student performance, attendance and progression for students that studied under the lecture system (2002 and 2003) and compared with those studying under the seminar system (2004-2008). Qualitative data were collected from second year students who were asked to compare their experiences of studying under the seminar system in year 1 to the lecture system of year 2.

The statistics indicate improvements in all 3 key metrics of attendance, performance and progression for students studying under the seminar system. 79% of the seminar group progressed to the second year compared to 71% of the lecture group and students with lower UCAS entry points achieve higher performance gains under the seminar system. Qualitative feedback indicated a strong preference for the seminar system with the main benefits being the ability to engage with the tutor in class, and a more conducive learning environment.

It was concluded that the smaller groups better suited the learning styles of the non-traditional university student and in a sense reflected the type of learning that students would have experienced in pre-university environments. This may have reduced the transition shock experienced by many students upon first entering the university, but the transition shock may have been delayed a year as students went from year 1 to year 2.

Option C: Dr. Laurent LEDUC, Researcher at the IFRES (Institute for Research and Training in Higher Education) of the University of Liège : Coordinator of the CDS ("Centre de Didactique Supérieure" : centre for support and training of academics in charge of first-year students)

Identifying the prior informational contents that first-year and second-year students expect to receive through the Course Syllabus and the First Class Meeting. What do undergraduate students want to know at the beginning of a new course, and for what purpose?

A constantly growing number of universities world-wide are urging their teachers to draw up, for each of their courses, a so-called *Course Syllabus* (written to describe a course through several standard items supposed to reflect its planning), thus seeming to indicate a consensus on the obvious usefulness of this document for their first recipients, students. Indeed, existing literature on the Course Syllabus - and its oral introduction during the *First Class Meeting* of a given course - paints the portrait of efficient information tools conducive to increasing the engagement of students and their adaptation to the still evolving realities of higher education. Based on an in-depth study of the purposes and functions of the Course Syllabus - and the First Class Meeting - according to this literature (defining it as a "Communication tool", a "Contract", a "Cognitive map", or a "Learning tool"), this research aimed to explore and compare the expectations and perceptions that 1432 first-year and second-year students at the University of Liège (Belgium) had toward those modes of communication, by identifying the informational contents they found the most useful to be included and issued to them. In addition, this study focused on the analysis of the commented expectations - in terms of conation and cognition perspectives - that surveyed students associated with making these contents available to them. To that end, the action verbs, cognitive verbs and cognitive objects used by the respondents were classified and analysed separately with reference to different theoretical models related : to *motivational* factors (students` perceptions of the *value* of the

course; of his/her *competence* to succeed; of his/her *controllability* in the course, Viau, 2005); to students` personal *needs* (like *safety* needs and needs for *self-actualization*, Maslow, 1943); to the use of specific *learning strategies* (Wolfs, 2007); or to the definition criteria of the four main functions of the Course Syllabus and the First Class Meeting derived from the literature. The research findings indicate that first-year and second-year students have shown prior interest in receiving information about the items “Assessment of the course”; “Learning objectives / outcomes of the course” and “Course readings”. The analysis of the comments expressing the expected benefits of receiving information on those three different aspects allowed identification of specific relationships between recurring lexical units and the models used, thus offering the teachers concrete avenues to optimise their communication with undergraduate students through Course syllabi and First Class Meetings.