Effective Action Strategies to Improve Retention, Progression and Completion of Transitioning Students

Elaine M. Clafferty and Barry J. Beggs
Glasgow Caledonian University

ABSTRACT: A challenge faced by some Higher Education disciplines is that, when compared with other disciplines, retention, progression and completion rates are consistently lower. Technology subject areas often face this challenge, particularly with respect to students making the transition from college to university. The research study reported in this paper illustrates that it is possible to perform an analysis of an existing difficult situation and to then design and implement an action strategy aimed at improvement. Very positive and important outcomes are elaborated and quantified. Both quantitative and qualitative approaches were taken to discover what factors may be contributing most to the ongoing performance issues. The results from the action strategy have been very significant and have taken place rapidly. A key headline outcome of the action strategy and its implementation is that overall retention and progression rates were improved by around 10%. This improvement has been consolidated.

1. Introduction

The subject disciplines of engineering and computing often report relatively high undergraduate degree non continuation rates (Higher Education Statistics Agency, 2012). This national pattern was mirrored for a number of years in the technology school at Glasgow Caledonian University (GCU) that offers degrees in technology subject disciplines. A comparison between this school and other GCU schools offering degrees in business and health disciplines highlighted differences. The technology school had lower degree completion rates and different patterns in progression. For example, unlike the other schools, the technology school had its best progression at Level 1 of its full time undergraduate degrees (Beggs, 2008). The trend in the other GCU schools was to realise improved progression rates sequentially with the best pass rates recorded in the final honours year of the four year undergraduate degree. The school offering degrees in technology subject disciplines had a number of obvious differentiators: more modest entry qualification tariffs; a higher proportion of male students (85%); a higher proportion of students transitioning into university degree programmes at advanced levels having studied at a Further Education (FE) college.

2. Problem Analysis and Action Strategy Design

Detailed analysis of a number of student cohorts and their performance was undertaken to look for evidence of what factors were contributing most to disappointing retention, progression and completion figures (Smith, 2011 and 2012). In addition to statistical analysis
of student performance at programme and module level, evidence from student surveys and staff student consultative groups was also harvested and reviewed. The intention of this thorough investigation was to identify contributing factors that, if modified, could potentially bring about positive change. A desire for rapid improvement suggested that an action research approach would be appropriate (Kember, 2000 and Koshy, 2009).

The initial overview of the available data confirmed that students studying for part time or post graduate degrees were performing consistently well. It was evident, however, that disappointing progression and completion reported in university statistics was concentrated in some full time undergraduate degrees. The decision was therefore taken to focus attention on full time undergraduate cohorts since this was where greatest impact could potentially be achieved. Each year cohort considered was approximately 400 students.

In the process of reviewing all of the quantitative data that was being harvested from the full time undergraduate statistics and the additional qualitative data coming from student surveys and staff interviews, it was confirmed that transitioning students gaining advanced entry from FE college into year 2 and year 3 of the university 4 year full time honours undergraduate degree programmes were doing even less well than those students who came from secondary school into year 1. It was already known from previous cohort analysis that a high percentage of students coming from FE college to university had ‘widening access’ backgrounds and were in the lower 20% quintile of the Index of Scottish Deprivation (Scottish Government, 2012). It was not known if this could be a differentiator so a review of the literature reporting on the possible impact of widening access on student attrition was undertaken. This review produced conflicting information. Some research found that it was the less financially secure students who were most likely to withdraw early (Forsyth and Furlong, 2003), (Yorke and Longden, 2008). Other studies suggested that the most influential contributor to attrition was entry qualifications (National Audit Office, 2007).

As the analysis continued a more detailed review of first and second diet module pass rates was undertaken. This review highlighted a group of high impact outlier modules with pass rates significantly lower than average. Some of these outlier modules had very high student populations. It was realised that student performance in a sub-set of modules with high fail rates and high populations would have a disproportionately severe impact on retention, progression and completion rates. An initiative was immediately introduced to identify such modules. A simple threshold technique was devised using initial filters of a 20% fail rate combined with a student population of 20 or more (known as ‘The 20/20 Initiative’). Modules, identified using this procedure, were considered to be the most fertile areas for consideration with a view to performance improvement.

A remarkably high percentage of the full time undergraduate population appeared to routinely rely on the second diet (resit) period to complete an academic year. Discussions with students revealed that rather than failing modules because of low marks, they often selected which first diet examination not to attend or which first attempt coursework not to submit. There was evidence of some students deliberately using the re-sit period as part of their study plan. When the data relating to this behaviour was analysed, it indicated that this approach had little impact on student performance in early years of study. Due to capping of second attempt marks (Assessment Regulations), if continued into later years of study this behaviour ultimately contributed to under performance and/or could prevent the achievement of good honours classifications. When students were asked about their reliance on the re-sit period they often blamed assessment workload and congestion with deadlines for coursework submission. In response to this feedback from students and with a view to changing the reliance on second diet assessment there was a major school wide review of all module descriptors. This revealed that in some modules there was evidence (based on University guidelines for examination duration and coursework word count limits) of over assessment of students taking place. Some actions were taken in an attempt to change this
’resit culture’. A significant number of module descriptors were revised to comply with guidelines with a view to achieving more appropriate volumes of assessment. Better guidance to students on time management was also added into induction activities.

Pre-requisite mathematical knowledge surfaced as another potential contributor to transitioning student failure during detailed data analysis. In addition to a review of module descriptors to determine the required pre-requisite mathematics knowledge, opinions were gathered from module leaders using questionnaires and interviews. This part of the study led to the organisation of a Mathematics Summit involving university academic staff and representatives from local secondary schools and FE colleges. Detailed discussions about interface and transition issues specific to mathematics were conducted and valuable recommendations were produced with the aim of making the transition from secondary school or FE college to university much smoother for students.

3. Action Strategy Implementation

As a result of the study and analysis of the data there was strong evidence showing that students transitioning from FE colleges to year 2 or year 3 of full time undergraduate programmes were less likely to progress into the honours year (year 4). The scale and extent of the challenges faced and issues of concern identified meant that module or programme specific initiatives were considered to be of potentially limited value. In order to make the kind of dramatic and widespread improvements that were sought it was thought that major transformational change across a wide range of modules and programmes was required. This type of large scale change would, if successful, have the capacity to realise rapid and significant performance improvements. A number of initiatives and new enhancement measures were put in place across the academic school over a two year period spanning the 2011/12 and 2012/13 academic years. A holistic approach was taken informed by the problem analysis discussed earlier, a literature review, previous performance improvements realised locally in first year retention and progression by adopting the ‘Triple C Model’ (Beggs, 2008) and participation in the Higher Education Academy’s “What works? Student retention and success change programme” (HEA, 2013).

A mature variant of the ‘Triple C Model’ was designed with the intention of achieving improvement in retention, and progression for students in all years of study. The intentional main focus was made to be on year 2 and year 3 direct entrants from FE colleges.

The main activities implemented in practice under the overall action strategy are described briefly below.

Absence management – Attendance data was gathered centrally and students whose attendance was poor were contacted on a weekly basis to offer them support. It is often the case that absence is an indicator of an underlying issue that is getting in the way of student progress. Early identification and empathetic handling of absence is known to enhance retention.

Assertive outreach emphasising a personal approach – A student ‘success centre’ was established to ensure that students had easy access to the best advice locally and were appropriately signposted to specialist central services. A more local rather than centralised service of this type can be considered to be more approachable by many students.

Focus on outlier modules with low pass rates (20/20 initiative) – Significant improvements were realised in this group of modules by applying a series of structured interviews and using a mentoring approach to support module teams. Module teams were supported in efforts to identify aspects of the delivery of the modules that may be of some concern and that could be enhanced.
Focus on improving academic feedback to students – Significant effort was made to improve general communication to students including the provision of high quality feedback on academic performance. The importance of such feedback was emphasised to students and academic staff in various ways. In addition to the obvious academic reasons for considering academic feedback to be very important, another objective was to enhance the student feeling of being a valued partner in their own learning experience.

Online peer support and student led study groups – Students with resits were attached to an online community and provided with extra study resources and support videos. Study groups were implemented during the re-sit summer period. An academic staff supported online resource called ‘Back on Track’ was set up. The objective of this initiative was to provide an easily accessible platform for student academic support during a period when the availability of many academics was limited.

Maths underpinning, summer school and drop-in sessions – It was felt that a specialist mathematics full time academic member of staff was required to address the issues associated with mathematics pre-requisite knowledge. A business case was made to justify the creation of such an academic post. A number of mathematics support activities resulted including a preparatory summer school specifically for FE college students joining year 2 and year 3.

Student assessment workload – A major one day academic staff event was arranged to identify modules where assessment workload was greater than the university guidelines. Module descriptors were systematically updated to ensure that overall assessment workload was appropriate.

Staff development workshops – A series of staff development workshops were arranged to facilitate enhancements related to many of the previously mentioned activities. Included were workshops on providing feedback and using technology in teaching.

Classroom assistant staff development - An online self-learning module was developed for classroom assistants (normally PhD students) with a view to helping these assistants to become more effective supporters of the student learning experience.

4. Conclusions

Having clearly identified the issues that were contributing to poorer progression and completion early in 2011/12, a strategy was agreed and an implementation plan was put in place and monitored. Evidence, over a two year period, of the successful impact the holistic approach taken to enhance the student experience and the various initiatives can be seen in the graph of Figure 1. The graph shows the two year previous to and the two following years where the matured ‘Triple C Model’ was implemented.

It is apparent from the data that the total cohort progression and retention improved. Further analysis was undertaken on the component of the student population that was identified in the action strategy as the intentional main focus. This analysis showed a proportionately higher improvement in progression and retention for year 2 and year 3 direct entrants from FE colleges.
The work reported in this paper and the results obtained are significant and have some important features. Because of the number of students and range of programmes involved, the results can be considered to be of general relevance rather than being small scale and/or discipline specific. The improvements in retention, progression and completion obtained are very significant and could potentially be replicated in other situations where similar difficulties in these areas exist. The changes took place over a relatively short period of time during which no other changes of significance were impacting on the student experience. There can therefore be confidence that the improvements gained are as a direct result of the action strategies described in this paper. Higher Education and Further Education institutions may wish to consider implementation of some or all of these strategies in efforts to improve retention, progression and completion rates.

The ‘Triple C Model’ is an academically centred paradigm of optimum student retention which has been designed, implemented and evaluated over a number of years. It is a model of the student experience as an adult learner based on the integration of Care, Control and Consistency. More information is available at: http://triplecmodel.org/
References

Beggs, B J (2008) Student progression – reflections on an approach to supporting engineering and computer science students in their first year, EE2008, Loughborough University


Higher Education Academy available at: https://www.heacademy.ac.uk/ (last accessed 02/11/14)

Higher Education Statistics Agency available at: https://www.hesa.ac.uk/ (last accessed 02/11/14)


Scottish Government Report available at: http://www.scotland.gov.uk (last accessed 02/11/14)

Smith, E (2011 and 2012) Internal University Reports