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Retention and progression of online global students: a pilot approach

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Abstract

Higher education institutions are making increasing use of online course delivery as part of their standard offering. E-learning can support the move toward global student bodies and the possibility of more responsive teaching and learning environments. The Open University Business School has offered online distance learning courses for over 10 years and supports thousands of students each year. As student numbers have grown, the capacity to provide truly personalised academic, pastoral and administrative student support is clearly affected.

This case study describes a pilot approach to delivering more intelligent and proactive intervention to students registered on an online, open entry, level 3 undergraduate programme. We briefly outline the programme and existing comparative data on known differences between the retention and final achievements of students receiving support solely online compared to those receiving a more traditional blended means of course delivery and tuition support. The study goes on to describe the developing work of the pilot team in setting in place a number of key interventions thought most likely to support the student through their study journey and optimise their chances of completion.

The Open University in the UK, like other HE institutions, knows a great deal about its students before they start to study, and, perhaps like others, has not always fully exploited this information. The pilot team is now using profiling data to identify key student characteristics which suggest that additional pre-course contact would be helpful. This may be a discussion of how we might best support the student whilst on course, or may include advice about transferring to another course more suited to their experience or circumstances given the open entry nature of the courses.

Systems have been developed and refined which allow the team to track student behaviour once the course has begun, and since the courses within the pilot make heavy use of a Moodle-based Virtual Learning Environment (VLE), there is much that is transparent to us. Each course has a number of defined milestones which have been agreed to be key or at least facilitative to the students' eventual completion and success. Our systems help us to work closely with course tutors and students to trigger additional contacts from the support team. Other support activities are designed to complement this ongoing work and will be described more fully in the paper.

It is crucial that all of the work has the potential for automation and scalability – currently the pilot team is working with over 800 students in around 30 countries. This paper aims to demonstrate that the piloted levels of intervention are both achievable in the long term and cost-effective. Results from the first 2 pilot presentations will be shared alongside results from a comparator cohort.

Key words: student support, retention, proactive, online, global

1. Background Information

The Open University in the UK (UKOU) supports almost 200,000 distance learning students each year across a range of over 600 undergraduate, postgraduate and professional courses. Teaching is delivered through course materials and on-course academic support from a tutor and faculty staff. Ongoing study support is provided by student service teams based in one of 13 regional or national centres in the UK.

The Open University Business School (OUBS) is one of 8 faculties within the UKOU, and has provided distance learning business and management education to students in the UK and Europe for almost 30 years. Students receive course materials in both electronic and hard copy, and are supported through each course by a course tutor, working in groups of 16-20 students. Tutors facilitate students' learning and understanding through a variety of approaches, for example, at local tutorials, through assignment marking, and interaction and discussion via online tutor group forums, as well as through personal email and phone contact, where needed.

Since 2000, OUBS has offered a number of core courses with online-only support. The tutor:student relationship is supported and developed as before with tutorial support provided online rather than face-to-face. In 2006, OUBS made its provision of online-only courses almost entirely global.

2. Introduction to the Pilot

The size and complexity of the UKOU model has resulted in a number of localised approaches to student support which may not always offer students a consistent experience during their studies. At the scale at which UKOU operates, student recruitment is a resource intensive activity. For reasons of both cost and the benefit of students, a UKOU priority is to maximise retention and progression of its students.

In 2005, the University decided to review the ways in which students are supported. The review aimed to establish a new model, or models, that would provide integrated learning and teaching to:

- enhance the student experience,
- be flexible and adaptable in responding to changes in student needs and the University's environment,
- be cost-effective for students and the University, and
- improve course completion and progression onto further study.

Having established key areas of investigation and developed early recommendations for change, seven pilot teams from across the faculties were established to pilot the study recommendations. This report discusses a pilot study involving students registered on online-only courses as part of the Professional Certificate in Management qualification within OUBS. The scope of the pilot explicitly recognises many of the issues mentioned in the review of Beetham et al (2009), for example, that there needs to be recognition of the diversity of learners and the need to support learners in developing study practices which are based on technology, particularly at key 'transition points' of study.

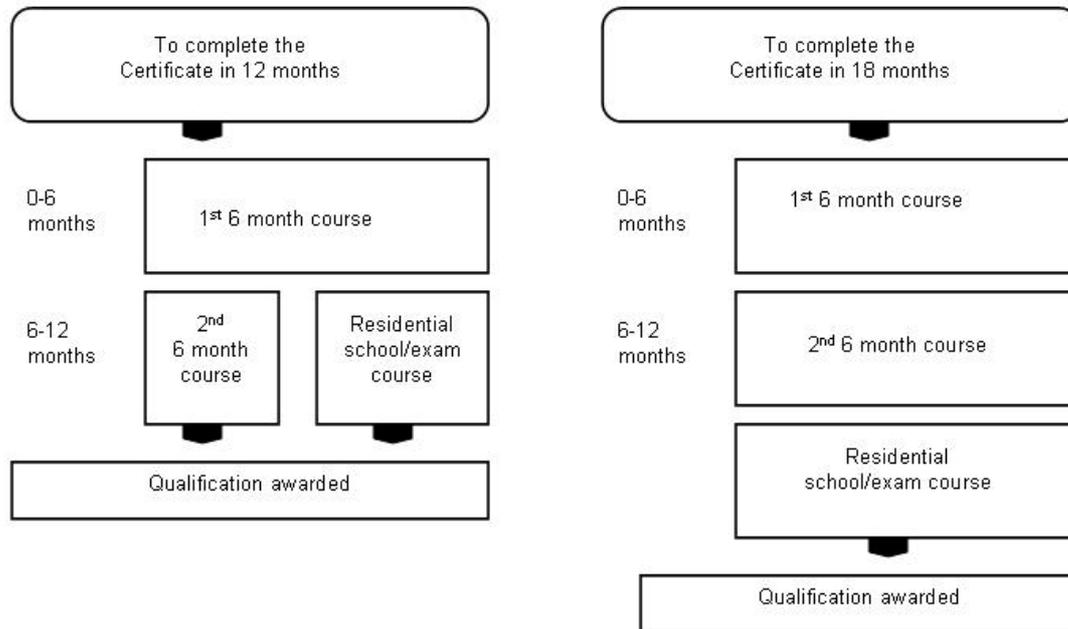
2.1 Professional Certificate in Management

This open entry, UKOU Level 3 qualification (FHEQ Level 6, SCQF Level 10) provides entry onto the Masters in Business Administration, and its component courses can also be studied as part of a number of named degrees, including the BA (Hons) Business Studies. Students are typically newly appointed or recently promoted managers, or may be more experienced managers with little formal management training wishing to progress within their organisations. Each course is problem-based, and involves both engagement with theory and subsequent application to the student's own organisational context.

The current Certificate structure, introduced in 2009, comprises 3 six-month courses, each running in May and November – one covering human resources and organisational behaviour, and another

focusing on marketing and finance. The third course facilitates an integrative problem-solving approach, has a compulsory residential school and an examination, and is designed to be studied in parallel with one of the other two. Typically then, students will complete the award in 12 months, although some students opt to study over 18 months, see Figure 1.

Figure 1 Structure of the Certificate in Management qualification



Students are guided through each course by the course website, hosted on a Moodle-based Virtual Learning Environment (VLE). The VLE comprises a suite of tools for online teaching and learning, including course websites, collaborative tools and e-assessment tools. Students can access a range of resources from the course website, including their tutor group forum (TGF), electronic copies of materials, assessment materials, a study calendar and a student social forum, see Figure 2 for an example.

Figure 2 Example course website



While students on the face-to-face versions of these courses may attend days schools run by their tutors, online-only students have tuition support provided via Elluminate, a synchronous conferencing tool with audio, whiteboard and chat facilities. There are no other differences between the two versions of the course.

In practice, students living outside of the University's traditional designated study area (UK and Continental Europe (CE)) study via the online-only route, although this route is also chosen by a reasonable proportion of UK and CE students. Around 35-40% of the total number of students who register for the Certificate in Management courses currently opt to study via the online-only route.

2.2 Background to the OUBS Pilot

The online-only version of the Certificate in Management qualification was selected as the pilot for the Business School for a number of reasons. Key differences have been noted between those students on online-only versions of previous Certificate courses and those with face-to-face tuition support:

- completion rates for online-only students were typically 3-5% lower;
- pass rates for completing students have also been up to 10% lower;
- student satisfaction is often lower. Research (Price et al, 2007, Muilenberg and Bergeb, 2005) suggests that there are a variety of reasons for this, which have been mostly linked to the characteristics of the student cohort opting for online-only study rather than course design or differences in tutor delivery.

Differences had also been noted in the delivery of standard support services to students based outside of the UKOU's traditional designated study areas. It was agreed that there was an opportunity to assess whether a revised approach to support might improve retention, success and progression rates, as well as impact positively on the student experience. The pilot was established as including all those students opting for the online-only versions of the Certificate courses, with the student cohort studying by the more traditional route offering face-to-face tutorial support as the comparator.

Currently, the pilot has involved over 800 students across two presentation starts (beginning with the May start of one course and subsequently supporting the November start for all 3 courses) from around 30 countries, working with 30 course tutors who are remotely based around the UK and CE.

2.3 Student Support Team

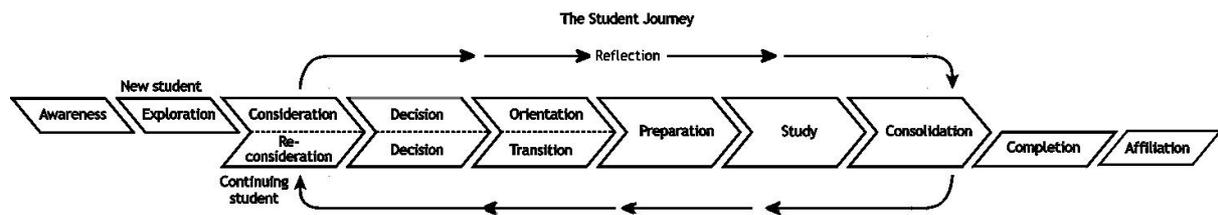
One of the key recommendations of the University's Student Support Review has been to create a single contact point for students. Currently, students may be contacted by a whole range of different functional areas and offices in addition to contact from course tutors. It can be confusing and disruptive to students to receive repeated, even conflicting, contacts as they move through and between courses. A recommendation was made to have all students registered on a pilot course directed toward a single Student Support Team (SST). As students study, pause between courses, or consider which course to study next, support and advice is consistently provided by the same team, with the same contact details throughout. This allows team members to provide differing elements of support without diluting the impact of the single point of contact.

During the pilot phase, the team are conducting SST activities as part of their normal role, with the exception of a Pathway Tutor, who is a course tutor contracted for additional student facing duties.

3. The Pilot Approach

Currently, the UKOU uses the concept of the 'student journey' to plan and deliver services to meet the requirements of students at each stage of their relationship with the University, see Figure 3.

Figure 3 The student journey



In the 'preparation' phase of the journey, students establish what they might expect from a course, for example, the learning materials or style of tuition. Students may need information and advice on what to expect.

In the 'study' phase, students interact with course content and tutors and submit formative and summative assessment tasks. In this phase, they may need support more closely aligned to their academic experience and motivation for study.

In the 'consolidation' phase, students process concepts and other course experience in preparation for the final assessment task, and move into the 'reconsideration' phase which supports them in decision-making for future study.

On a pilot basis, the SST has closely aligned interventions to the tutorial schedule, assessment strategy and profile of students registered for the course. Unlike other retention projects which aim to improve the connectivity of the student to both the university and through improved community building between students (Davis and Quick, 2001), this study aims to pre-empt and guide student behaviour and rapidly respond to situations where students are not engaging as expected. A series of judgements was made by the team about which students are most likely to encounter obstacles to successful study; which technical aspects of study might present challenges to students (for example, using Elluminate for tutorial sessions); and key points in the course calendar at which students might fail.

3.1 Systems

Each of the three course calendars are used to identify key milestones established within the four-week period before courses start in November and May; during the on-course study period when students are working online with their tutors and with each other; and within the end of course period up to and after submission of the end of course assessment (ECA) or the examination.

Each milestone prompts the team to make proactive interventions, when needed, and deal with resulting student responses. In order to track effectively and react to evidence that a student may be at risk, a 'dashboard' brings together, for the first time at UKOU, data from separate University systems, including:

- student registration records;
- the electronic assignment submission system;
- the customer relationship management (CRM) system;
- tracking data from the University's VLE, recording student engagement with electronic course materials; and
- electronic 'registers' recording student contact with course tutors.

The dashboard uses SAS (Statistical Analysis System) software to display information contained in a number of databases. This facilitates targeted communications either with the whole cohort or a selection of students and has allowed changes to the information displayed as the team has gained experience and re-prioritised its efforts.

3.2 Staff roles

3.2.1 Team roles

In order to pilot the principles of team-based student support, membership of the SST has been formed from both the OUBS team responsible for the delivery of teaching and the University's regional Student Services teams providing information, advice and guidance and educational administration to those students. The team comprises an Academic Lead; an Operational Manager; an Educational Adviser; three Student Support Assistants and a Team Assistant. Further, a Pathway Tutor (a course tutor with an extended role) supports continuity for students, both at the start and end of each course and in progression to further study.

The team is not entirely co-located, and so uses Elluminate to meet fortnightly to review progress and activities.

3.2.1 Tutor input

Individual course tutors, although not core SST members, have been essential to the team's understanding and development. They teach and provide academic support to their student groups as the first contact point for advice.

Tutors are asked to record key information which could be monitored by the team by manually inserting a tick or a date on an electronic register. The majority of tutors have used the register diligently, and their cooperation means that the team can focus support communications with a high degree of accuracy. For example, the dashboard indicates clearly those students who have not submitted an assignment by a deadline; but the tutor's record of any agreed extensions to the deadline allows the team to leave those students undisturbed until the extended deadline has passed.

The team prompts tutors to take certain actions on the course at the appropriate time, and has used Elluminate meetings to brief and update tutors on the progress of the pilot. Both course tutors and team have found these opportunities invaluable to support shared understanding and an environment of collaborative support for the students.

3.3 Course milestones

3.3.1 Pre-course

An online induction website was tailored for pilot students with information about the courses, assessment and study skills for those continuing their studies, new to studying with the UKOU or who are studying outside the UK, similar to work trialled elsewhere (for example, Carrant, 2010). The site includes a discussion forum moderated by the team's Pathway Tutor, which encourages questions about the course, supports referral of students for any specialist advice needed and provides a welcoming environment for students before the final allocation of course tutors and the opening of course websites. The Pathway Tutor also directs students to a closed Facebook group for pilot students. In the first presentation of the course, 40% of the students visited the forum with 25% asking questions or interacting with the Pathway Tutor or other students.

In addition, student registration data is used to develop a profile of 'at risk' students. Initially, a wide range of different indicators was used, and these have subsequently been refined as completion and pass data has emerged. The most significant indicators of potential vulnerability are suggested as:

- The student is not in employment (based on registration data),
- Registration on an inappropriate combination of courses, or on multiple courses,
- Disclosure of a disability or long term medical condition,
- Residence in a country where UKOU study is not currently supported across the full curriculum, and
- Previous failure of UKOU courses.

Each student identified in this way is contacted by telephone and email to discuss their course and provide advice; the team expects to contact approximately 25% of the students in each cohort

individually (200 in the most recent presentation). While this has so far been achievable, one-to-one advice is clearly more resource intensive than one-to-many advice. A refinement of the system now allows the team to weight the student's risk, for example by identifying those at risk against more than one criterion. In this way, the team's activities can be prioritised, although it is hoped to encourage more students to participate in the induction forum as a first line of support.

After making contact, a few students are directed to the team's Educational Adviser if it becomes clear that they might struggle with study. This is an opportunity to alert individuals to specific study skills resources, to discuss adjustments to be made for a disability, or even to change course if necessary, before study begins.

3.3.2 On course

Once allocated to an individual course tutor, the majority of students are able to build an online relationship with their tutor and other students in their tutor group and progress through study. Progress milestones tracked include making initial contact with tutors, a first posting in a tutor group forum, submission of summative assignments and submission of the final assessment task by the deadline. For students registered on the course which requires satisfactory residential school attendance and sitting an examination, additional milestones include booking of an appropriate residential school and, for students overseas, booking and allocation to an appropriate examination centre used by the University.

Generally, dashboard data allows the SST to identify those students who miss key milestones and offer targeted advice to them, leaving other students undisturbed. In this way, progressing students are not overwhelmed by irrelevant information and advice is personalised and administratively efficient.

Course tutors also alert the team to any concerns about a student's progress by sending an electronic referral into the University's CRM system. This has brought the benefit of closer engagement by the team with the 30 course tutors and facilitates exchange of advice and course knowledge.

3.3.3 End of course

Toward the end of each course, an additional forum opens to provide information and advice on registration for further study. All students are alerted to the forum by email.

In the first presentation, the number of students actively participating in the forum was low. The Certificate in Management is a clearly structured qualification, and many students are able to register onto their next course without advice. However, the courses included in the pilot may be counted towards a range of qualifications and, for some students, detailed and personalised guidance about future study is needed. The Pathway Tutor works with the team's Educational Adviser to moderate the forum, and the team is currently considering the optimal balance between one-to-many advice via this route and more direct one-to-one guidance. The team has also experimented with encouraging students to seek career advice at this stage, both through the forum with a Careers Adviser as co-moderator, or by booking an individual consultation.

In addition, tutors and students are prompted about the importance of submitting the end of course assessment (ECA) which is compulsory and for which submission may not easily be extended. This provides an opportunity for both tutors and students to discuss in advance any likely difficulty in submitting the ECA; and to ensure that the Examination and Award Board for the course would have any necessary special circumstances information for individual students in good time.

While the pattern of interventions is proving to be similar for all pilot courses, the team is also able to use the new systems to advise students when the unexpected occurs; for example, students whose examination arrangements were affected by the disruption to air travel caused by volcanic ash in April 2010 could be immediately advised.

3.4 Costs

One aim of the project is to explore whether focused, team-based approaches to student support can be more efficient than the current system. The staff involved are supporting students who would be supported anyway, but in a more anticipatory and more closely connected way. While the additional cost of the pilot to date has been a small number of day contracts each month allocated to the Pathway Tutor, another factor will be the extent to which the SST approach can pre-empt later, more complex contacts.

3.5 Summary

The team's challenge has been to provide student support which is personalised to student's different needs – but at scale. The approach to student support can be summarised as 'inform all, target advice, guide the individual'. Table 1 shows the interventions discussed above, in each phase providing some interventions for all students; some targeted at selected students; and a minority provided for individuals.

Table 1 Summary of team interventions

	Pre-course →	On course →	End of course, looking to next
Whole cohort (all courses)	Induction site and Pathway Tutor-moderated forum Email briefing with relevant links to resources	Academic support by course tutor Pathway and peer support via student social forum Peer support via Facebook group Reminders to tutors	'Next course choice' forum moderated by Pathway Tutor and Educational Adviser, encouraging reflection and questions about options (collated as FAQ)
Targeted cohort	Illuminate drop-in sessions for students who have had difficulty using initial set-up instructions Proactive pre course contact with students at risk (e.g. high study load)	Follow up students who do not submit TMAs without agreed extensions Checks on residential school and exam bookings for overseas students	Individual careers advice for students who request it after looking at the Careers Service website
Individual student	Problem-solving to enable student to start	Additional academic support Advised withdrawal (not just informed)	Individual end of course issues (e.g. exam deferrals)

4. Early outcomes

The OUBS pilot outcomes will be fully evaluated as part of the University's overall evaluation following completion of all 7 pilots in 2011. At the time of writing, course results are available only for the first cohort of students who started in May 2009 and have been measured against cohorts from the face-to-face versions of the comparator courses; and against the historically poor performance of online-only students already noted above (2.2).

4.1 More interaction with students and course tutors

Compared with the face-to-face version of the Certificate in Management courses, the activities of the team have generated more student contacts and referrals from tutors. There were five times as many contacts about submission of assignments; 21 times the number of contacts relating to course content; ten times as many about general study problems and five times as many referrals to the SST from tutors. Through its anticipatory approach, the team has encouraged increased contact in order to identify and resolve problems before they become too serious. By promoting the team as a resource to both students and tutors, incoming queries are typically less complex and take less team resource to resolve satisfactorily. The SST has analysed queries from the first presentation using the University's CRM system to draw up a 'frequently asked questions' document. Queries range from

difficulty using Elluminate to advice on continuing study when moving location. A way to record the extent to which students use FAQ information is currently being sought.

4.2 Actively managed withdrawal and reduction of passive attrition

By encouraging students and tutors to seek SST advice, the number of withdrawals (course cancellations) after course start was seven times greater than on the face-to-face version of the course. While this could be seen as an undesirable outcome, the team's approach has been to proactively offer advice and educational guidance to students who become at risk of not completing or failing a course. An alert to the team of a study problem results in an advisory discussion which aims either to resolve the problem or, if completion is not possible, to advise the student of more suitable study. As a result, 79% of the students continued with further UKOU study compared with 76% on the face-to-face version. Although this is a small increase, it becomes more significant when considering the longer term historical pattern of a 3-5% poorer completion rate for online Certificate courses.

4.3 Improved pass rates

Given the impact of the managed withdrawals reported above, the first pilot students achieved a completion rate of 65% against a completion rate of 71% for students on the face-to-face version. However, of those completing, 94.5% of pilot students achieved a pass grade compared with 92% on the face-to-face version. Again, this compares well to the longer term historical performance of online students which suggests that completion pass rates are typically up to 10% lower than those for face-to-face students. It is too early to draw firm conclusions as to whether the pilot approach will raise student performance for this award (and across the range of the seven pilot UKOU programmes involved). The team is hopeful, though, that further refinement of the approach will continue to redress the historically low success rates of online study.

4.4 Enhanced student satisfaction

Students on the first presentation of any UKOU course are surveyed to establish student satisfaction. Pilot online students rated their study experience and enjoyment of the course more highly than those on the face-to-face version (with 100% of all pilot students stating that they were satisfied with the support offered by their tutor and study support team compared to 78% for the comparator cohort). They were also more willing to recommend the course to potential students and more satisfied that their expectations had been met. Interestingly, they also rated the quality of the course, satisfaction with teaching materials and with tuition more highly than on the face to face version. Since these are exactly the same on both versions of the course, it is possible that there is an overall 'enhancement effect' resulting from confidence that support is available if needed.

5. Future plans for additional work

Clearly there is more work to be done to ensure that the interventions offered by the Student Support Team are efficient and effective and, perhaps most importantly, offer personalised support at scale. In particular we expect detailed qualitative survey data on the seven pilots to yield further insights.

- As completion data becomes available, it will be possible to analyse patterns of study to ascertain which SST interventions have the most positive impact and allow the team to use its limited resources most effectively. In addition, although the use of profiling data helps the team to identify students at risk of non completion, more analysis will provide insight into the key stages at which students passively withdraw, that is, stop studying without formally informing the University. If these stages are known, additional support can be proactively offered, in the form of text, email prompts or additional planned tutor contact to prevent student drift.
- Further systems enhancements are planned to support the ongoing work of the pilot. The first seeks to increase what is known about UKOU students by increasing data collected at the point of registration. This 'profile' can be used to refine the approach to predicting potentially vulnerable students who share a range of characteristics with students who have previously not completed their courses, as well as offering an opportunity to provide enhanced services

to improve the student journey for particular cohorts and thus improve retention and progression. The second will conduct further systems work on the University's VLE so that ongoing tracking data can be employed rather than relying on a combination of systems checks and manual prompts. In this way, it would be easier to predict when students are not regularly engaging with their online resources and avoid passive withdrawals.

- While the SST maintains an overview of student progress on all pilot courses, some students study other UKOU courses simultaneously up to an allowed maximum of 120 credit points per year. Difficulties in these courses are less 'visible' to the team and a potential limitation of this approach is that these students may experience inconsistent support.

Finally, it should be noted that the student experience is influenced by a whole range of staff, each with a bounded understanding of the necessary involvement and input of others. This can lead to differences in course design and assessment strategy as well as differences in provision for student support. While the SST is well placed to provide feedback to course designers, these issues currently lie outside of the remit of this pilot. They will need consideration in the longer term if the aims of the Student Support Review are to be effective.

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