The current issue and full text archive of this journal is available on Emerald Insight at:
www.emeraldinsight.com/2414-6994.htm

Student persistence in open and distance learning: success factors and challenges

Oliver Tat-Sheung Au
The Open University of Hong Kong, Hong Kong
K. Li
Middlesex University London, London, UK, and
T.M. Wong
The Chartered Institute of Linguists Hong Kong Society, Hong Kong

Received 4 December 2018
Revised 20 December 2018
Accepted 20 December 2018

Abstract

Purpose – The purpose of this paper is to identify the success factors and challenges for students studying in an open and distance learning (ODL) mode and recommend strategies for student persistence based on the findings.

Design/methodology/approach – Three groups of ODL students with various levels of study performance – nine high-level, nine mid-level and eight low-level students – were invited to participate in three focus group interviews. They were asked about their motivation, success factors and challenges in their studies.

Findings – The different groups of participants showed observable variations in their response. The mid-level students believed that word-by-word rote memorisation was their best strategy in preparing for examinations. The low-level students believed that they needed to master multitasking to learn well in tight schedules. All these weak student participants considered quitting at some points, but no high-level student did so. To improve student persistence, the authors focus on meeting the needs of weak students and recommend the following actions for student persistence: add a time management and study skills component to existing courses for students to practise; appoint advisors to distance learning students to help them create an appropriate study plan and acquire a sense of belonging; make learning videos short and engaging; consider adopting student leaders or peer tutors that have been used successfully in full-time study; and conduct focus periodically with students to hear their views.

Originality/value – This study revealed the factors contributing to student persistence in ODL for the students of various levels of study performance. The results help in formulating measures to meet the diverse needs of ODL students for persistence in their studies.

Keywords Distance learning, Retention

Paper type Research paper

Introduction

The landscape of distance learning (DL) is increasingly competitive. With the availability of alternative education opportunities such as massive open online courses (Wong, 2016), open and distance learning (ODL) institutions are facing great pressure to maintain their quality of education delivery and student satisfaction for student persistence (Sembiring, 2015), and formulate measures to cater for diverse student needs (Li *et al.*, 2015).

This paper reports a study on student persistence in ODL, focusing on the case of the Open University of Hong Kong (OUHK) – an institution featuring the provision of flexible education modes with both full-time face-to-face (F2F) and part-time ODL study

© Oliver Tat-Sheung Au, K. Li and T.M. Wong. Published in *Asian Association of Open Universities Journal*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode

Asian Association of Open Universities Journal
Vol. 13 No. 2, 2018
pp. 191-202
Emerald Publishing Limited
2414-6994
DOI 10.1108/AAOUJ-12-2018-0030

programmes. When the OUHK (formerly known as the Open Learning Institute (OLI) of Hong Kong) opened its door in 1989, there were fewer tertiary institutions in Hong Kong with full-time study programmes than there are now. It is fair to say that the OLI was the only established education provider focusing on DL. The OLI gained university status in 1997 becoming the OUHK. Over the years, conventional tertiary institutions have been entering the part-time study market to compete with the OUHK. The OUHK started to offer full-time study programmes shortly after the turn of the century, and it currently has roughly the same number of full-time and part-time students. As the city's population continues to age, the number of prospective students is reducing with more education providers today than 10 years ago. We have practical reasons and a moral obligation to make sure that our DL students are successful.

Every student who drops out implies a reduction in the institution's income. Failed students have spent time and money to no avail. In this study, we aim to explore ways to improve student persistence in our DL courses.

The following section includes a literature review covering student persistence models, dropout factors, persistence strategies used by students and retention strategies employed by institutions. This is followed by the methodology for this study, the results and recommended actions for student persistence that are worth considering.

Literature review

This section reviews related work on student persistence, including various models, factors affecting student retention and dropout, persistence strategies used by students, and retention strategies employed by institutions.

Models of student persistence/attrition

Tinto's (1975) student integration model. Tinto found that students' personal characteristics (e.g. age, gender and attributes) and prior experiences (secondary school) influence their academic and social integration. Academic integration refers to students' academic performance and intellectual development, while social integration refers to students' interactions with faculty members and peers (Tinto, 1975). When both these elements are successful, students will be more likely to persist and achieve their graduation goal (Rovai, 2003; Sweet, 1986). However, Tinto's work was concerned with full-time students and may not be adequate to explain the attrition of DL students. Tinto's model spawned the development of additional models by other researchers.

Bean and Metzner's (1985) student attrition model. Bean and Metzner built a model for mature and part-time students based on Tinto's and other psychological models. They argued that older students have less interaction with each other, and usually seek support from family and friends. The model has four groups of variables, namely:

- academic variables, such as learning habits, advising and programme fit;
- background variables, such as age, goals and prior academic performance;
- environmental variables, including financial situation, employment and family responsibilities; and
- academic outcomes, such as GPA and psychological outcomes (stress, satisfaction, goal and institutional commitments).

Rovai's (2003) composite persistence model. Rovai created a composite persistence model based on the models of Tinto (1975), Bean and Metzner (1985) and research results on student skills (Cole, 2000; Rowntree, 1995), distance learners' needs (Workman and Stenard, 1996), and matching teaching and learning styles (Grow, 1991). The composite model focuses on student

persistence in distance education. Its factors are categorised as student characteristics, student skills, and external and internal factors affecting students after admission. The student skills category includes computing skills, information literacy and time management. The internal factors category contains consistency and clarity of online programmes; policies; procedures; e-learning systems; students' self-esteem in the mastery of e-learning tools; measurable learning objectives; a sense of identification with the institution; interpersonal relationships (with peers, faculty and staff); the accessibility of support services (libraries and advisors); and the matching of learning and teaching styles (a directive teaching style with self-directed students).

Factors for student retention and dropout

Recent studies on student persistence and attrition in ODL have found that facilitating factors and challenges experienced by students can be personal, motivational and institutional.

Individual student factors

Personal factors. Having realistic expectations at the beginning of a study programme about the amount of work required is a student success factor (McGhie, 2017). Those students tend to take responsibility for their own learning and are committed to their studies. They consciously choose suitable learning strategies and work hard with effective time management.

Students with unrealistic expectation lose interests in their studies in the face of a higher-than-expected workload. In Grebennikov and Shah's (2012) five-year survey, courses not being "what students had expected" (p. 228) were ranked very high as a dropout factor in the first year of study. Lacking adequate preparation and dedication makes students regard their studies as challenging (McGhie, 2017).

The amount of time and effort expended in a study programme is influential in a student's persistence (Yang *et al.*, 2017). Studying is an investment, and the more time students have invested, the less likely it is that they will withdraw (Park *et al.*, 2011).

In Sweet's (1986) study, most distance learners dropped a course due to a lack of time to adequately study its materials. In a study of attrition factors for ODL, 62.8 per cent of respondents were unprepared for the examination, among which "not enough time to study" was the major reason (Tladi, 2013, p. 79). Work responsibilities have also been cited as a hindrance. According to Tladi (2013), students who are employed and have family responsibilities have greater attrition and less commitment to study independently. They made little use of available support even when they needed it.

In online nurse practitioner study programmes, Knestrick *et al.* (2016) identified students being over 40 years of age as a predictor of attrition. They explained that students who are older than 40 have more family responsibilities and have been away from formal education for longer.

Motivational/psychological factors. Motivation is important for persistence. Over two-thirds of participants from an online programme cited "sense of accomplishment", "mastery of specific skills", "perceived utility of learning" and "meeting career goals" as important reasons for them to complete their studies (Yang *et al.*, 2017, p. 33). Personal goals, a sense of community and family support were also influential psychological motivators which boosted student persistence.

A lack of motivators may lead to dropout. In a study of engagement, Kahu *et al.* (2013) found that mature distance students who had considered leaving were unsatisfied with their university experience. Also, in a study of student nurses, Ten Hoeve *et al.* (2017) found that problems in achieving learning goals and working in a team, and uncertainty about one's knowledge and abilities, caused attrition. Perseverance and the drive to become a nurse were the keys to persistence for some.

Institutional factors

Quality of the programme. It was found that a well-organised study programme and the competence of teaching staff improve student persistence (Ten Hoeve *et al.*, 2017;

Yang *et al.*, 2017). Dissatisfaction with a training programme is often associated with the low quality of the programme and its teaching staff.

Content of the programme. The relevance of the programme in meeting personal and professional needs and the perceived amount of learning influence student persistence in online programmes (Yang *et al.*, 2017). Why do some students with enough time to study choose not to do so? Tladi (2013) found that the main reason was demotivation resulting from a high workload and difficulties in understanding the study materials. Students who considered giving up mentioned having negative experiences on the course because of difficult content or poor class organisation (Ten Hoeve *et al.*, 2017).

Institutional support. Raciti (2012) suggested that efforts to build a strong relationship between students and lecturers/tutors encourage student persistence. Institutional support was found to be helpful to students (Yang *et al.*, 2017). One participant expressed gratitude towards the faculty and staff, saying "The first person I talked to was [Mr. J]. [Mr. J] was so enthusiastic. He answered my questions and was very encouraging that it was a great programme. Throughout my two years he has been my advisor […] any time I had a question or wasn't sure which class to focus on during my electives I would call [Mr. J]" (p. 32). All student participants who considered quitting were negative about the support from the teaching staff (Ten Hoeve *et al.*, 2017). The authors concur on the importance of quality support from teaching staff and counselling services, especially for online study.

Persistence strategies by students

Expect hard work. Students who have a smooth transition from high school to university start with an expectation that universities will involve hard work and be very different from schools. They focus on their goals and are fully aware of their own responsibility in learning. When asked about how to overcome challenges, a student responded that he/she stayed focused and worked hard all the time (McGhie, 2017).

Manage time. Yang *et al.* (2017) identified time management skills as an important factor for student persistence in online programmes. Effective time management is more important for part-time students who have to balance coursework, a job and family responsibilities.

Successful students are well-organised and adopt effective time management strategies (McGhie, 2017). One participant reflected that "With all the assignments, tutorials and tests that had to be done, effective time management was going to be of utmost importance. I would then record all test dates and due dates as soon as they were made available to me and then try and allocate time that I estimated to be efficient for each task at hand. I also tried my best to study before the time for a test and not leave things for the last minute as I found that it only creates more anxiety and stress" (p. 417).

Build constructive social support. Distance learners do not meet their tutors, lecturers and classmates regularly. Faculty and support staff have problems in identifying students who are at risk of feeling isolated (Park *et al.*, 2011). The sense of isolation increases the risk of dropout. Kahu *et al.* (2013) believed that having friends is particularly important for mature distance learners who struggled to fit into the university culture.

Make the right friends. In McGhie's (2017) study, all the successful students emphasised the importance of making "right friends", i.e. those who support, encourage or assist them academically. They chose friends who were determined to succeed, and they worked together and supported each other. A student shared the following comment: "Surround yourself with positive peers or better yet help encourage and motivate others to join you in reaching a goal. Knowing you can help and support each other makes learning less stressful and fun" (p. 417).

Seek help from lecturers. Successful students in McGhie's (2017) study sought help from teaching staff as well as from peers. They reported that they were not afraid to ask

questions. As a participant explained, "not be afraid to ask for help, nobody expects you to always be good at everything". Another student remarked, "I asked questions when something was not clear and I went for consultation and I received clarification on work covered" (p. 418).

Gain encouragement from the family. Encouragement and support from family members are important motivation. They help students to stay focused and work hard (McGhie, 2017; Ten Hoeve *et al.*, 2017).

Retention strategies by institutions

Course design

Link study to student work. Yang *et al.* (2017) recommended linking coursework to students' professional work so that students can apply what they have learned.

Design courses flexibly. Park *et al.* (2011) suggested that course designers should offer choices in learning activities and assignments to accommodate students with different learning styles. This calls for an assessment of students' learning style preferences at the beginning of a course. To improve student retention, an Australian university introduced flexible timetabling as well as course design and delivery to suit the schedule of working students (Grebennikov and Shah, 2012).

Encourage collaborative work by students. Park *et al.* (2011) suggested that institutions should cultivate social interaction among online classmates to reduce attrition. Kahu *et al.* (2013) also saw a need for distance learners to work with peers on collaborative tasks. Connections with peers neutralise the sense of isolation often experienced by distance learners.

Institutional support

Make support services accessible. If a mentor has been assigned to each student to provide support in times of crisis, attrition will be reduced (Park *et al.*, 2011). Under its retention project, an Australian university extended the operation of facilities, services and consultation outside normal hours. Colleges of this university supplied part-time students with information on available financial aid, scholarships, emergency funds, the costs of books and internet access (Grebennikov and Shah, 2012).

Build relationships with students. A learning community connects students to each other, to the institution and to the resources that they need (Rovai, 2003). A strong relationship with teaching staff helps students to make the decision to stay on a course (Raciti, 2012). Yang *et al.* (2017) recommended the creation of support networks to help solve students' personal or professional problems. Rapport between students and staff should be established at the very beginning (Park *et al.*, 2011).

Contact students proactively. Park *et al.* (2011) suggested that faculty and support staff should take the initiative to contact students. They can send messages to students regularly and ask if they are encountering problems. Support staff taking the initiative to contact students is important because students who are facing problems may not seek help.

Looking after returning students. Counselling and guidance should be provided to returning students to improve retention (Park *et al.*, 2011). The services should help students to assess the available resources, set realistic expectations for their performance, maintain study-life balance and reflect more on their initial intention to withdraw.

Methodology

The previous work on student persistence has produced a broad range of relevant models, factors and strategies, but it has yet to address the divergence of students from different backgrounds. In particular, it has been widely identified that the academic results of students are highly related to their persistence or dropout (e.g. Brits *et al.*, 2011; Sæle, 2016; Wong, 2017). For students with different levels of academic performance, it is expected that there are various success factors and challenges for their persistence in studying.

This study aims to identify the success factors and challenges for the persistence of ODL students with different levels of academic results. Focus group interviews with students were conducted to elicit in-depth information with open-ended questions. A total of 135 students from two high-level computing courses in software engineering and distributed systems at the OUHK were invited to participate in the interviews. The students who agreed to participate were divided into three focus groups according to their final course scores, namely, nine high-level, nine mid-level and eight low-level students. The focus group interviews were conducted after the final examinations of the courses, so that we knew the performance of each student. The course results had not been announced when the focus groups were conducted, so the students expressed their views without knowing their final grades.

The participants were asked about the factors affecting their persistence in studying, the challenges they encountered and their overall education experience at the OUHK. Their responses were recorded and categorised according to the focus group to which they belonged.

Results

We report below the results of the focus group interviews on the students' motivation, success factors and challenges in their studies.

Motivation

Getting a degree in computing was the most common motivation for students. Three out of nine high-level students were also motivated by the practical use of what they had learned. None of these students had ever considered giving up the course/programme.

Three of the nine mid-level students needed a push from their bosses or colleagues to start their degrees. These students seemed to have had a rougher career or study path than the high-level students, with some of them having considered quitting.

The low-level students complained that the study materials and assignments were boring. They were not motivated by pleasure in their studies, perhaps due to their being in the survival mode all the time. Most of them had thought about giving up at some point.

Success factors

The success factors differed according to student performance. The high-level students named success factors that were under their full control, but the mid- and low-level students named numerous success factors that were beyond their control. The high-level students were clearly more effective problem solvers by focusing on the things they could change.

Success factors for high-level students

Time management. The high-level students identified time management as the most important success factor. They started early and allocated more time for studying the challenging topics. They made efficient use of their time and would, for example, study while travelling on a train. They also spread their study effort relatively evenly throughout the term.

Study skills. These high-level students jotted notes when reading or attending classes, with one participant even drawing mind maps to relate concepts. They were also good at using search engines and could learn independently.

Observing advice. In DL, prerequisites are often advisory rather than enforced. The high-level students observed the advisory prerequisites by taking courses in a progressive order. They also considered the course contents before enroling.

Assigning purposes to activities. These good students assigned purposes to learning activities and expected to learn by completing assignments. For example, they tried to complete all assignments in the course even when only the best three scores (out of four) were used in calculating the final score. (In contrast, the low-level students only regarded assignments as a means to pass the course. Some of these weak students would identify the most challenging assignment and skip it).

Success factors for mid-level students

Memorisation. The mid-level students considered memorisation to be the most important success factor.

Class attendance. Once every two weeks, there was an optional tutorial class. Even though these classes were video-recorded for students' review online afterwards, the mid-level students worried about technical or organisational mishaps with the recordings and, therefore, recognised the importance of attending the tutorial classes.

Examination tips. The mid-level students found it important to get an examination study guide and/or specimen examination papers from the instructor. They were delighted when a student shared a past examination question on an instant messenger chat group for the class. The mid-level students were exam-oriented.

Examination schedule. The mid-level students wanted the examination dates to be spread out more, so that they had adequate time to study between two examinations.

Success factors for low-level students

Adequate time. The low-level students thought that having adequate time was important. Their solution to a heavy workload was hoping to do less, which was not a real solution *per se*. This differed significantly from the high-level students' approach to managing time effectively to accomplish more.

Good health. These weak students acknowledged the importance of good health, without saying explicitly whether good health is a result of a specific life style or good genetics.

Good luck. The students wanted to have good luck in choosing topics to study for the examination.

Memorisation. The low-level students not only claimed that rote memorisation was useful, but they also said that they would forget everything after the examination.

Choosing easy assignments. There were four assignments in the course but only the best three scores were used in calculating the final result. The weak students preferred to take a shortcut by skipping the most difficult assignment.

Ability to multitask. The weak students thought that multitasking allowed them to learn more in a short time (despite research showing that multitasking is bad for learning (Dzubak, 2008)).

Challenges

Common challenges. Some challenges were identified by only a certain focus group, but they are still shown below as common challenges if they affected other focus groups. The low-level students tended to name less challenges than the other two groups of students.

Too much to learn. An OUHK DL course typically covers more content than an equivalent F2F course at the same or other institutions[1]. Therefore, the participating students generally regarded it as challenging to handle the extensive course contents.

Limited sharing by tutors. A course may have multiple tutorial groups led by different tutors; and the tutor of a tutorial group may not share study materials with students in another tutorial group. The participants found it beneficial to have access to all the materials used by all tutors for the same course. The course coordinator should convince tutors to share their materials freely.

Unfriendly course registration systems. The course registration system did not prevent students from enroling on courses which did not fit their intended major, courses with time conflicts or courses that could not be counted together due to overlapping contents. Students needed to be very careful in enrolment, and such checking should have been done by a computer system.

Late release of model answers. Not all model answers for assignments were disseminated for students' learning, and sometimes they were posted too late.

Expensive tuition. Employers rarely subsidise tuition for their employees, or only pay a small portion. DL students considered the tuition fee to be an important factor, and chose the OUHK because of the competitive tuition fee level in DL. For example, a student mentioned that an OUHK course cost HK$10,000 while a competitor charged HK$17,000.

Challenges for high-level students

Not enough comments on marked assignments. The high-level students would like to see more comments by the tutor who marks their assignments.

Examination not long enough. The examination normally lasts for 3 hours for a course. While this may appear to be a long time, the high-level students still wanted to have more time in the exam so that they could think deeply and write more. The mid- and low-level students did not complain about this, probably because they did not have as much to write in their answers.

Overlapping content among courses. Some topics are required background for students to handle other courses. In conventional study programmes, the topics are covered in mandatory prerequisite courses. However, in our DL programmes, we want to give students the flexibility to take courses in any order, and so we may embed fundamental topics in more than one course. High-level students interested in learning new material complained a little about seeing the same topics covered more than once in their study plan.

Contents not up-to-date. The high-level students complained that some course materials were dated. They were motivated to learn the latest contents, while the mid- and low-level students focused more on passing the course.

Assignment questions not posted at the beginning. Not posting all assignment questions at the start of a course prevented the high-level students from planning their time or starting ahead of schedule. In the worst scenarios, some assignment questions were posted less than one month from the due date.

Unclear learning outcomes. Some learning outcomes for the courses were reported to be unclear. The high-level students wanted the learning outcomes to be clear, so that they could focus their effort better.

Video-recording of tutorials not organised in small chunks. The tutorials were video-recorded as one big chunk, i.e. 2 hours for a tutorial. The video feature of our online learning environment was also not considered user-friendly. If a student had watched half of a tutorial and then stopped, to resume viewing the next day, she/he has to start from the beginning again and painstakingly advance to the previously paused point.

Challenges for mid-level students

Bad tutors and course coordinators. Although most of the tutors were good according to the mid-level students, some were viewed as poor. Also, some course coordinators were seen as irresponsive and would not answer e-mails or questions on the forum of the university's learning management system.

Bad study tips. The mid-level students claimed to have been misled by unjustified messages (from some tutors or classmates). They said that, in the marking of assignments or exam papers, some markers looked for specific keywords only, otherwise no marks would be given. This assumed that it was possible or even common for questions to have a single correct answer (which runs against our belief that there are usually different ways to answer a question correctly). Some students actually believed that these were unjustified "study tips".

Demanding examination schedule. Some mid-level students complained about having their last class just one day before an examination. The class and the examination the following day might not belong to the same course. This complaint revealed the university's tight study schedule and limited classroom resources, and that the students relied heavily on cramming right before the examination.

Challenges for low-level students

Uninformed about course selection. Some low-level students acknowledged that they were unaware of course prerequisites, and others ignored them. They had little idea about the amount of work required to complete a course.

Lack of interest in the course content. These students were motivated by the improved job prospect of having a relevant degree. None of them took courses for interest, and they complained that the theories taught and assignments were boring.

Weak aptitude. The low-level students were poor in mathematics and programming.

Not having time to study. These weak students only attended one-fifth of the (optional) classes and viewed two-fifths of the recorded videos.

Lack of motivation. The final score is calculated from 30 per cent of the assignment scores and 70 per cent of the examination score. These weak students lost interests in completing the assignments due to their low weighting of 30 per cent. They found course contents uninteresting and unrelated to their jobs.

Challenging course content. The low-level students found the course contents to be tough, and over half of them had considered quitting.

Recommendations

Based on the results of this study, the following recommendations are made for the persistence of ODL students.

Train students on time management and study skills

The high-level students managed their time well. This suggests that all students should be equipped with effective time management to improve retention. Time management is more than just knowledge. A routine behaviour is formed after it has been repeatedly preceded by a cue and followed by a reward (Duhigg, 2012). Attending a lecture or writing an examination alone cannot change a habit. We should incorporate time management practices in multiple courses throughout the study programme to reinforce students' effective use of their time.

The low-level students had poor study skills, relying too much on cramming and rote memorisation just before the examination, and they would forget much of it after the examination (Au *et al.*, 2017). These students even had the misconception that multitasking helps them to learn more under time constraints. They need to learn and practise good study skills alongside time management.

Provide self-diagnostic tests or advisors to students for course selection

The high-level students considered advisory prerequisites carefully before taking a course, making sure that they took courses in an appropriate order. In contrast, the low-level students tended to ignore the advisory prerequisites. For students exempting from a course because of their advanced standing, the challenge may be even greater if the contents of their previous study do not completely match those of the course exempted. If students have a weak background or aim for a high final grade, they need to study more.

Two measures may help to resolve this problem. First, we can provide students with an online self-diagnostic test before they enrol on a course. The test score can predict roughly how challenging the course will be for a student. The diagnostic test can have multiple-choice questions graded automatically online.

Second, we can appoint a faculty member to serve as an advisor to the students. The advisor may meet the students F2F or talk with them on the phone. The advisor and the student may go through the student's background and interests together to make sure that the student is making a right choice. This has the added benefit of

putting a human face on the institution. Our recommendation on advising ODL students is consistent with Simpson's (2013) view that institutions have a moral obligation to inform and counsel ODL students, which can improve retention and reduce students' sense of isolation. Students should be encouraged to explore and think through the advice before coming to a decision. A supportive and empathetic advisor can help to motivate weak students. To save commuting time, an advisory session can take place online.

Improve learning videos and learning management systems

Guo *et al.* (2014) listed some suggestions for making learning videos. For example, they argued that short videos within 6 min are more engaging; the videos should be interspersed with the instructor's talking head with slides; and Kahn-style tablet drawings are better than static slides. The video-recordings of tutorials that our students watch on our learning management system currently last for 1 or 2 h and are unedited recordings of the computer screen and voice during tutorials. As noted earlier, the worst outcome is that, if a student does not finish the video, she/he will have to repeat watching the video from the beginning and advance to the right place. Our learning management system currently does not support pre-download for a smooth play regardless of the network speed, despite preloading being a common feature of many MOOC platforms.

Facilitate peer learning

A sense of community is an important part of online students' learning experience (Sadera *et al.*, 2009), but the best practices are hard to establish. Our learning management system provides a discussion forum for students to ask questions. However, the students preferred to use the instant messenger chat group they had set up. They may feel more comfortable communicating with fellow students than with teaching staff. In our full-time F2F programmes, students are recruited and trained as leaders and peer tutors to help others in sports programmes and computer laboratories. Peer learning is a cost-effective means to achieve the desired learning outcomes. We need to find out how to do this in ODL.

Although prior research suggests that group projects may be beneficial for DL students (Kahu *et al.*, 2013), our DL students explicitly asked us not to give them group projects to do. DL students vary greatly in their time commitments, and having a non-committed teammate is frustrating. As many DL students already practise teamwork in their full-time jobs, the benefit of having group work in ODL may be less than that in full-time study.

Conduct focus groups to get student feedback

Questionnaires have been commonly used to get feedback from students. Surveys by mail or e-mail get dismal response rates, sometimes as low as 10 per cent or even lower. For our full-time students, we distribute the questionnaire in the last class to increase the response rate to around 75 per cent. Our participants told us that they had never been invited to a focus group before. They enjoyed the opportunity to communicate their needs to the university staff. The presence of teaching staff in the focus groups increased their confidence that some of their feedback would be used to improve the course. Some universities have published guidelines for teaching staff to conduct focus groups (Miller, 2010). ODL providers may explore the benefit of conducting focus group throughout the course instead of doing so at the end or combining the peer learning effort with focus groups. In this study, we invited students to come after the final examination. We set aside a budget to pay travel expenses for each student. If the focus group is conducted at the end of a regular class, we may even reduce or eliminate the travel expenses.

Concluding comments

Actions involve costs. But if we do not take appropriate actions, we may pay the price in the form of attrition. In distance education, it is desirable to achieve economies of scale, and resources invested to reduce attrition should be financially appealing. The decision to take a recommended action may also depend on the calculated return on the investment, and not all recommendations suit all DL courses uniformly. In addition, education providers have a moral obligation to help students succeed. We hope that DL institutions will invest wisely in the future of their students.

Note

1. This is the result of how DL courses are developed at the OUHK, which involves a course author and field experts in the course development team. Each member identifies topics that they consider important, and the resulting course materials often include all the members' favourite topics, exceeding the topics favoured by an instructor on a F2F course.

References

Au, O., So, R. and Lee, L.K. (2017), "Prior knowledge dwarfs hard work in achieving academic performance", in Cheung, S., Kwok, L., Ma, W., Lee, L.K. and Yang, H. (Eds), *Blended Learning, New Challenges and Innovative Practices, ICBL 2017, Lecture Notes in Computer Science*, Vol. 10309, Springer, Cham.

Bean, J. and Metzner, B. (1985), "A conceptual model of nontraditional undergraduate student attrition", *Review of Educational Research*, Vol. 55 No. 4, pp. 485-540.

Brits, H.J., Hendrich, U., Walt, C.V. and Naidu, Y. (2011), *Student Dropout at the Vaal University of Technology: A Case Study*, Vaal University of Technology, Vanderbijlpark, available at: www.vut.ac.za/images/stories/units-and-support/centre-for-academic-development/student%20dropout%20study.pdf

Cole, R.A. (2000), *Issues in Web-Based Pedagogy: A Critical Primer*, Greenwood Press, London.

Duhigg, C. (2012), *The Power of Habit: Why We Do What We Do in Life and Business*, Random House, New York, NY.

Dzubak, C.M. (2008), "Multitasking: the good, the bad, and the unknown", *The Journal of the Association for the Tutoring Profession*, Vol. 1 No. 2, pp. 1-12.

Grebennikov, L. and Shah, M. (2012), "Investigating attrition trends in order to improve student retention", *Quality Assurance in Education*, Vol. 20 No. 3, pp. 223-236.

Grow, G.O. (1991), "Teaching learners to be self-directed", *Adult Education Quarterly*, Vol. 41 No. 3, pp. 125-149.

Guo, P.J., Kim, J. and Rubin, R. (2014), "How video production affects student engagement: an empirical study of MOOC videos", *Proceedings of the First ACM Conference on Learning@ Scale Conference, ACM*, pp. 41-50.

Kahu, E.R., Stephens, C., Leach, L. and Zepke, N. (2013), "The engagement of mature distance students", *Higher Education Research & Development*, Vol. 32 No. 5, pp. 791-804.

Knestrick, J.M., Wilkinson, M.R., Pellathy, T.P., Lange-Kessler, J., Katz, R. and Compton, P. (2016), "Predictors of retention of students in an online nurse practitioner program", *The Journal for Nurse Practitioners*, Vol. 12 No. 9, pp. 635-640.

Li, K.C., Wong, B.T.M. and Wong, B.Y.Y. (2015), "Catering for diverse needs for student support: differences between face-to-face and distance-learning students", *The 29th Annual Conference of the Asian Association of Open Universities*, *Kuala Lumpur*, *November 30-December 2*.

McGhie, V. (2017), "Entering university studies: identifying enabling factors for a successful transition from school to university", *Higher Education Journal*, Vol. 73 No. 3, pp. 407-422.

Miller, B. (2010), *Student Focus Group Guidelines*, The University of Sydney, Sydney, available at: https://sydney.edu.au/arts/teaching_learning/academic_support/Student_focus_group_guidelines.pdf

Park, C.L., Perry, B. and Edwards, M. (2011), "Minimising attrition: strategies for assisting students who are at risk of withdrawal", *Innovations in Education and Teaching International*, Vol. 48 No. 1, pp. 37-47.

Raciti, M.M. (2012), "Predicting first year student transfer intentions: do relationships matter?", *Australasian Marketing Journal*, Vol. 20 No. 1, pp. 65-72.

Rovai, A.P. (2003), "In search of higher persistence rates in distance education online programs", *Internet and Higher Education*, Vol. 6 No. 1, pp. 1-16.

Rowntree, D. (1995), "Teaching and learning online: a correspondence education for the 21st century?", *British Journal of Educational Technology*, Vol. 26 No. 3, pp. 205-215.

Sadera, W.A., Robertson, J., Song, L. and Midon, M.N. (2009), "The role of community in online learning success", *Journal of Online Learning and Teaching*, Vol. 5 No. 2, pp. 277-284.

Sæle, R.G. (2016), "Academic performance and student dropout", Results from two Studies in Upper Secondary and Higher Education in Northern Norway, UiT The Arctic University of Norway, Tromsø, available at: https://munin.uit.no/bitstream/handle/10037/9507/Thesis.pdf?sequence=4&isAllowed=y

Sembiring, M.G. (2015), "Student satisfaction and persistence: imperative features for retention in open and distance learning", *Asian Association of Open Universities Journal*, Vol. 10 No. 1, pp. 1-11.

Simpson, O. (2013), *Supporting Students in Online Open and Distance Learning*, Routledge, New York, NY.

Sweet, R. (1986), "Student dropout in distance education: an application of Tinto's model", *Distance Education*, Vol. 7 No. 2, pp. 201-213.

Ten Hoeve, Y., Castelein, S., Jansen, G. and Roodbol, P. (2017), "Dreams and disappointments regarding nursing: student nurses' reasons for attrition and retention: a qualitative study design", *Nurse Education Today*, Vol. 54, pp. 28-36.

Tinto, V. (1975), "Dropout from higher education: a theoretical synthesis of recent research", *Review of Educational Research*, Vol. 45 No. 1, pp. 89-125.

Tladi, L.S. (2013), "Factors affecting examination attrition: does academic support help? A survey of ACN203S (cost accounting and control) students at Unisa", *Open Learning: The Journal of Open, Distance and e-Learning*, Vol. 28 No. 1, pp. 67-82.

Wong, B.T.M. (2016), "Factors leading to effective teaching of MOOCs", *Asian Association of Open Universities Journal*, Vol. 11 No. 1, pp. 105-118.

Wong, B.T.M. (2017), "Learning analytics in higher education: an analysis of case studies", *Asian Association of Open Universities Journal*, Vol. 12 No. 1, pp. 21-40.

Workman, J.J. and Stenard, R.A. (1996), "Student support services for distance learners", *DEOSNEWS*, Vol. 6 No. 3, pp. 1-11, available at: http://learningdesign.psu.edu/assets/uploads/deos/deosnews6_3.pdf

Yang, D., Baldwin, S. and Snelson, C. (2017), "Persistence factors revealed: Students' reflections on completing a fully online program", *Distance Education*, Vol. 38 No. 1, pp. 23-36.

Corresponding author
Oliver Tat-Sheung Au can be contacted at: oau@ouhk.edu.hk

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: **permissions@emeraldinsight.com**