

Supporting student success: A data-driven approach to improving student retention

Ruby S. Alleyne, PhD

Vice-President, Quality Assurance & Institutional Effectiveness
University of Trinidad & Tobago
O'Meara Industrial Estate, Arima, Trinidad
Email: ruby.alleyne@utt.edu.tt

ABSTRACT

Government initiatives to widen access to tertiary education and make it more affordable resulted in a reported increase in the participation rate in Trinidad and Tobago from 7% in 2001 to 40% in 2008. Open admission policies and more flexible learning options, coupled with funding of up to 100% of tuition fees under the Government Assistance for Tuition Expenses (GATE) programme, have largely accounted for the higher participation rate.

According to Government sources, expenditure on the GATE initiative increased exponentially from \$102 million in the 2004/2005 fiscal year to \$625 million in fiscal 2010/2011. The cumulative cost to taxpayers of subsidising this initiative over the seven-year period is estimated to be in the vicinity of \$3 billion and concern has been expressed over issues such as the quality of education and the loss to the country when students do not complete their programmes.

As the participation rate increases, student populations become more diverse with a larger number of non-traditional learners among whom retention rates tend to be lower. The literature reveals that there are institutional and personal factors which are related to student withdrawal. In light of increasing diversity and the rising economic cost, universities should place more emphasis on analysing reasons for student departure.

This study presents a case study of student retention data for one university. A survey of students who did not return to continue their programmes seeks to analyse their reasons for leaving, and to examine the conditions under which they may be encouraged to re-enrol. Major retention theories and best practices in the literature and research are examined to determine key factors in developing effective retention programmes. A model is proposed that attempts to align reasons for student departure with institutional actions that may increase persistence if effectively implemented. The study also identifies opportunities for enhancing the institutional environment and proposes specific interventions geared towards increasing student support and improving student persistence.

Keywords: *student withdrawal, attrition, institutional effectiveness*

Introduction

Student retention is widely accepted globally as a key indicator of institutional effectiveness. It has been used by accrediting agencies in the United States of America for some time in making decisions on quality. It also influences resource allocation in some states and is used by bodies such as US News and World Report for ranking institutions. In Trinidad and Tobago, the state allocated \$9.1 billion to education and training out of a total budget of \$58.4 billion for the fiscal year 2012/2013 (Ministry of Finance, 2012). This represents 15.6% of the national budget and a significant proportion of this finances the Government Assistance for Tuition Expenses (GATE) programme. This programme was introduced in fiscal year 2004/2005 and has been expanding steadily each year, providing up to 100% funding for tuition to citizens of Trinidad

and Tobago enrolled in approved tertiary education programmes. Expenditure on GATE is reported to have increased from \$102 million in the 2004/2005 fiscal year to \$625 million in fiscal 2010/2011 (Trinidad Express Newspaper, 2012). Through this policy initiative, the state has further democratised tertiary education by making opportunities available to persons who ordinarily may not have been able to pursue education at this level. This is particularly important in the context of the role that higher education plays in determining an individual's success in an increasingly knowledge-driven and technology oriented global environment.

Trinidad and Tobago has reportedly expended over three billion dollars (\$3B) on funding for GATE over a seven-year period. Access to funding for tuition comes with several conditions which are outlined in an agreement that each student must sign. Although it has never been administered as such, the Student's Terms and Conditions for Tertiary Tuition Funded by GATE describes the funding as a "loan from the Government to the Student which shall be repaid to the Government with interest". A period of obligatory service ranging from one to five years is also stipulated for different loan sums. In accepting the funding, a student also agrees to apply him/herself diligently to the studies, to maintain minimum performance standards and to refund to the Government the full amount of the loan if he/she:

- a. abandons the course of study,
- b. fails to obtain the qualification where such failure is due to the Student not applying himself/herself diligently to his/her studies; or
- c. fails to accept employment in the public or private sector in the Republic of Trinidad and Tobago after the conclusion or termination [of the programme].

Source: Student's Terms and Conditions for Tertiary Tuition Funded by GATE, 8a-c

Internationally, research reveals that the higher education student population is increasing in diversity. Traditional student demographics are changing as growing numbers of students enter institutions at varying stages of life from a variety of backgrounds. While this diversity bolsters the claim that education is the great equaliser, the expansion and diversification of admission brings with it new challenges. Student retention is one of those challenges. When students exit institutions without completing their course of study, the failure to achieve their academic and personal goals has several implications. Not only is it an unprofitable investment for the funding agent, whether it is the student, his or her family or the state, but it is also a loss of revenue for the institution and often negatively impacts the student's earning potential and career advancement (Seidman, 2012).

A report by American College Testing (ACT) on colleges in the USA indicated that 25.9% of freshmen at four-year institutions do not return the following year. Highly selective institutions reported a dropout rate of 8% and for less selective institutions the figure was as high as 35%. The dropout rate at open enrolment institutions was reported to be as high as 50% (Devarics and Roach, 2000). According to Devarics and Roach (2000), the dropout rate is highest among average achievers and students facing multiple obstacles. Delayed entry into college after graduating high school, no previous college experience in the student's family and full-time employment while attending college were identified as risk factors. Persistence was also lower among minority groups and those from lower economic backgrounds. This gave rise to the need to place greater emphasis on the development of effective policies and programmes to improve student persistence (Seidman, 2012).

While retention statistics are not readily available for tertiary education institutions in Trinidad and Tobago, government has indicated its intention to get more value in return for its investment in tertiary education by holding institutions and students more accountable for the quality of educational outcomes and individual achievement. Measures such as the monitoring of student GPAs have been introduced, so that institutions are required to submit to the Funding and

Grants Administration Division (FGAD) of the Ministry of Tertiary Education and Skills Training (MTEST), the names of all students who fail to maintain the academic standard required by the institutional policies. Consequently, consistent with the terms and conditions for the award, the student can be withdrawn from the GATE programme. Students so affected can re-apply to FGAD for GATE when their GPA improves. In this context, it is imperative that institutions seek to examine the reasons for student departure and to analyse the factors which impact students' decisions to withdraw. A deeper understanding of the factors, personal or institutional, which may precipitate student withdrawal, can aid in the design of interventions geared towards increasing student retention. Access to reliable statistics, and an analysis of institutional as well as sectoral trends, would provide administrators and policy makers with valuable information to support evidence-based decision making and policy formulation.

Retention theories and models

Retention refers to an institution's ability to keep students enrolled from admission to graduation. There are several retention theories which seek to explain factors related to recruitment and enrolment of students by institutions and the persistence of these students to successful completion. Student departure from an institution can be voluntary or involuntary. Voluntary departure occurs when the student takes a decision not to continue the course of study to completion and involuntary departure occurs when the student is not permitted to re-enrol. Berger, Ramirez and Lyons (2012) also make the distinction between students who depart from an institution but may enrol at another and those who depart the higher education system. They also distinguish between dropouts who do not intend to complete their education and stopouts who temporarily withdraw for a variety of reasons.

Studies on attrition have explored factors related to withdrawal and the impact of student departure on college enrolment. Early studies examined the causal relationship between student withdrawal and variables such as gender, type of institutional control, geography, size of student body and location. Factors such as academic failure and financial difficulties were found to be linked to student withdrawal (McNeely, 1937). While McNeely's research focussed more on institutional and administrative factors, Summerskill (1962) and Astin (1975; 1985) suggested that reasons for student withdrawal were complex and their studies also examined psychological, personal, familial, social and economic issues and environmental factors. Psychological factors included internal and external motivation (Summerskill, 1962). More recent studies have also examined psychosocial predictors of freshman academic achievement and retention (DeBerard, Spielmans and Julka, 2004).

Among the personal factors in Astin's study (1975) were academic and family background, age, marital status and expectations about college. Environmental factors included employment, academic environment and characteristics of the college. Later on, the work of Bean (1980) would explore the importance of environmental factors. Astin also argued that experiential factors should be taken into account as students who participated in extra-curricular activities were more likely to persist to the completion of their degrees. He contended that these findings supported the 'involvement theory' that students who were more directly involved in the academic and social life of the college are more likely to persist (Astin, 1985).

While the present study does not focus on the importance of external environmental factors in student retention, it is noted that this theory is also supported by Kamens (1971). Essentially Kamens (1971) suggested that the more prestigious a college's perceived identity, the higher the level of economic positions and occupational roles its graduates are likely to occupy. This he argued resulted in stronger organisational commitment and lower dropout rates. Kamens' research extended the sociological paradigm developed by Meyer (1970) who concluded that students were encouraged to persist because of the belief that graduation would bestow privileges and prestige that were not otherwise available.

The present study utilises the conceptual framework proposed by Spady (1970) and Tinto (1987). Noting that research on student attrition could be categorised as census studies, autopsy studies, case studies, descriptive and predictive studies, Spady adopted a sociological model highly influenced by Durkheim's suicide theory. Spady (1970) suggested that student withdrawal is best explained by examining the interaction between the student and the academic and social systems of the college. He posited that students who successfully integrated into the academic and social systems were more likely to persist. According to Spady, successful integration into the academic system could be characterised by the quality of academic performance or intellectual development and close relationships or friendships were indicative of successful social integration. This was supported by Tinto (1987; 1993) who identified the student's experiences within the college as the most important factor affecting integration. Tinto also identified the need for students to assimilate into both the academic and social communities of the college. Spady (1970) acknowledged that changing enrolment demographics due to democratisation of higher education were a limitation to his model. Later Bean and Eaton (2001) would propose a model that examined psychological processes that lead to individual persistence decisions. This model lends itself to wider application among diverse student populations.

Methodology

The Student Records System (SRS) at the University of Trinidad and Tobago (UTT) was used to generate a list of 108 students who were expected to re-enrol to continue their studies in the 2012-2013 academic year but did not do so. Students who were made to withdraw for academic or disciplinary reasons were not included. Neither were students who officially requested leave of absence which was approved. The population of students who voluntarily withdrew was 108.

A telephone survey was conducted in which attempts were made to contact all students by telephone and 44 students (40.7% of the target group) participated. A 40-item structured interview schedule with a mix of closed and open-ended questions was used. The questions probed areas which the literature presents as being related to student retention such as:

1. personal and institutional factors influencing the decision to withdraw
2. student expectations of the university
3. reasons for enrolment
4. social interaction on campus
5. assessment of in-class experiences
6. assessment of out-of-class experiences
7. assessment of student support
8. interest in re-enrolment

Student demographics, family and academic background and academic achievement were surveyed to present data on the diversity of the student population.

Data analysis to determine the reasons for student departure was primarily qualitative. The content of the interviews was recorded in the notes taken by survey administrators and, through a process of data reduction, the researcher was able to sort, focus and organise the data into two categories – personal and institutional factors. Consistent with the exploratory nature of this study, the frequency of student responses was recorded and descriptive statistics were applied to generate percentages. Pearson's Chi-Square test was also used to test for significance. Where open-ended questions were asked, such as interest in re-enrolment, the content of the responses was analysed and summarised under appropriate descriptive headings, indicative of the categories or themes under which the findings are reported.

Results and discussion

Student demographics

Changing student demographics present many challenges, as wider access to opportunity increases the diversity of the student population. Thirty-seven respondents (84.1%) were between 18-31 years of age; thirty-nine (88.6%) were pursuing diploma or bachelor degree programmes and twenty-seven (61.4%) were enrolled as part-time students. There were thirty-one men (70.5%) among the respondents (see Figures 1-4, p.18).

Reasons for withdrawal

The majority of students who participated in the survey (thirty-six) withdrew for personal reasons (81.8%). Personal reasons included in descending order of importance:

- 1. challenges coping with tertiary-level studies (14 respondents - 31.8%)
- 2. difficulty balancing the demands of private life, employment and study (10 respondents - 22.7%)
- 3. family, medical and other issues (8 respondents - 18.2%)
- 4. financial problems (4 respondents - 9.1%)

The remaining 8 respondents (18.2%) cited institutional reasons of an academic nature such as dissatisfaction with the lack of programme accreditation or academic regulations (7 respondents - 15.9%); or of an administrative nature such as problems accessing accurate student records (1 respondent - 2.3%). It was also interesting to note that twenty-seven of the respondents (61.4%) stated that their out-of-class experience contributed more to their decision to withdraw than their in-class experience.

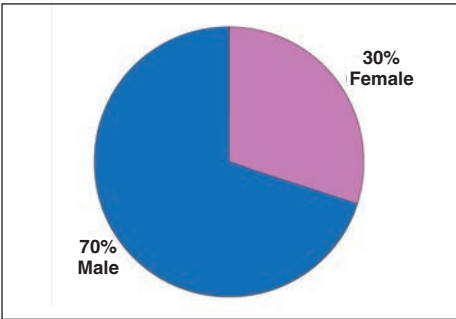


Table 1: Distribution of non-persisters by gender

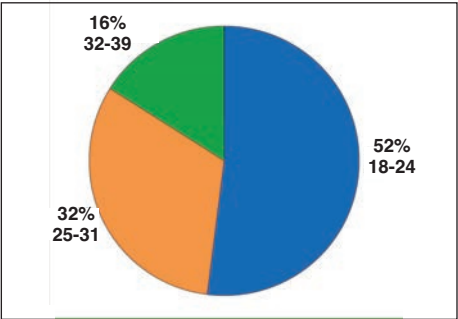


Table 2: Distribution of non-persisters by age group

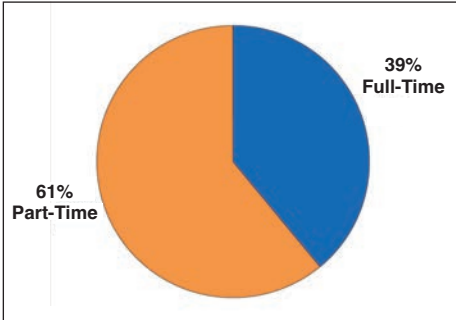


Table 3: Distribution of non-persisters by student status

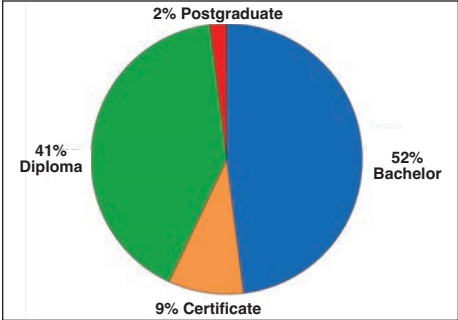


Table 4: Distribution of non-persisters by programme level

Re-enrolment potential

Thirty-three respondents (75%) said that they would be interested in re-enrolling at UTT and approximately half of this figure would want to do so within the next year. Of those respondents who do not wish to re-enrol at UTT, four of them would prefer to enrol at another local institution, and in fact, two of them had already done so. Respondents who said that UTT could encourage them to re-enrol suggested that the university could do so by:

1. providing more academic advisement and support for part-time students, freshers and younger students (17 respondents - 50%)
2. improving programme administration (9 respondents - 25%)
3. getting specific engineering programmes accredited (4 respondents - 12.5%)
4. monitoring more closely the ability of students to cope with the demands of university life (1 respondent - 4.2 %)
5. providing small group tutoring to support instruction particularly when class size is large (1 respondent - 4.2%)
6. offering programmes at different geographical locations to make it easier for students to commute (1 respondent - 4.2%)

Academic integration

A clear majority of students expressed satisfaction in the following areas:

1. Useful feedback from lecturers on assignments (37 respondents - 84.1%)
2. Fair assessment of student academic performance (36 respondents - 81.8%)
3. Quality of instruction (33 respondents - 75%)
4. Grades earned (29 respondents - 65.9%)

There were some areas in which students were less satisfied. When asked whether they had problems coping with the academic demands, 26 respondents (59.1%) indicated that they did, but only 12 of them (47.7% of that figure) sought any academic advice or mentoring. Of 17 respondents (38.6%) whose personal problems made it difficult for them to study, only 2 of them (11.8%) reported that they sought counselling. While only 6 respondents (13.6%) reported having problems getting along with their lecturers, 4 of them (66.7%) said that they reported the problems to officials at the university. All of 4 of those who made reports indicated that there were no attempts by the university to address the problems. In contrast, when problems getting along with peers were reported by 3 respondents (6.8%), 2 of them said that UTT provided assistance in dealing with the problems.

Social integration

The bond of social relationships with peers and family members appeared to be strong among respondents. It was notable that 40 respondents (90.9%) said that despite the decision to withdraw, they had benefited from the time they spent at UTT. Of this figure, 25 respondents (62.5%) identified the major benefits as the formation of friendships and other positive social interactions and the remaining 15 respondents (32.5%) said that they had acquired useful knowledge and practical skills.

On the issue of whether UTT provided adequate opportunities for social interaction/extra-curricular activities, 21 respondents (47.7%) did not think that this was so. When asked whether they had formed any close friendships while at UTT, 40 respondents (90.9%) of respondents responded affirmatively, but only 10 of them (25%) were actually involved in clubs or student committees. It can also be noted that in making the decision to withdraw from UTT, 37 respondents (84.1%) had consulted primarily with their peers, 4 (9.1%) with family members and only 3 (6.8%) with UTT faculty.

Student characteristics

Employment status

A total of 28 respondents (63.6%) reported that they were working while studying at UTT (24 (54.5%) full-time and 4 (9.1%) part-time). Following their withdrawal, the figure for those employed rose to 32 (72.7%) as some of the students indicated that they left UTT because they needed to seek employment.

First generation students

18 respondents (40.9%) were the first person in their family to enrol in a tertiary level institution.

Geographic location of secondary school

31 (70.5%) of those who were surveyed completed their secondary schooling at a school in south or central Trinidad.

Reasons for enrolment in UTT

The majority of respondents (34 - 77.3%) indicated that their course of study at UTT was relevant to their current career or their career aspirations. Among the specific reasons why respondents had enrolled were:

- 1. Study was related to career choice or current employment (18 respondents - 40.9%)
- 2. UTT offered a programme in an area of interest (15 respondents - 34.1%)
- 3. Coercion or influence by family members or friends (7 respondents - 15.9%)
- 4. UTT was the only institution offering the programme (4 respondents - 9.1%)

Expectations of the University experience

Respondents were asked whether their experience at UTT met their expectations and 31 of them (65.9%) responded affirmatively. When their responses were tested for significance by gender, age group, programme level and part-time/full-time status using Pearson's Chi-Square test, observed differences were not statistically significant except for gender (Table 5, p.20).

Proportionally, males who withdrew appeared to be less satisfied with the UTT experience than females. $\chi^2 (1, N=44) = 5.72, p < .05$.

Table 5: Expectations of the UTT experience by gender

			Was the UTT experience what you expected?		Total
			Yes	No	
Gender	Male	Count % within Was the UTT experience what you expected?	17 58.6%	14 93.3%	31 70.5%
	Female	Count % within Was the UTT experience what you expected?	12 41.4%	1 6.7%	13 29.5%
Total		Count % within Was the UTT experience what you expected?	29 100.0%	15 100.0%	44 100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson's Chi-Square	5.723	1	.017
No. of Valid Cases	44		

The present study revealed that the majority of students who subsequently withdrew had selected programmes based on their career goals and areas of interest. Students were also generally satisfied with the instruction and support for learning and engaged in positive social interaction with peers. An examination of the reasons for withdrawal and conditions which would encourage students to re-enrol indicates the need for:

- 1. more timely and in-depth analysis of skill deficiencies;
- 2. enhanced learner support and remediation;
- 3. effective and accessible counselling and academic advisement;
- 4. learning approaches that are flexible and facilitate skill mastery and student progression and
- 5. support for working students and those coping with multiple personal demands.

Retention strategies and programmes

The New Student Survey (2011) at UTT revealed that 74% of students were primarily dependent on GATE to finance their tertiary education. Global economic trends point to the need for greater financial stringency as developed and developing countries experience significant challenges. It is envisaged that a decrease in government subsidies will eventually impact initiatives such as GATE and that this is likely to negatively affect student enrolment. Even without the impending reduction in state funding, there are concerns at the national level about the need for institutions to provide better quality support for students to achieve their academic and personal goals. This would contribute to the development of a more enlightened citizenry, capable of making a more valuable contribution to community-based problem solving and national development.

For many years, colleges and universities worldwide have implemented programmes and services aimed at improving retention by easing student transition into the academic and social systems of the institution (Seidman, 2012). Some of these measures, according to Seidman (2012), include:

- 1. orientation programmes;
- 2. counselling and student development;
- 3. assessment, remedial and academic support services; and
- 4. development of educational communities within the classroom.

The findings of the present study have provided useful information for the design and development of effective retention programmes for UTT. The strategies and interventions proposed are also believed to have wide applicability in institutions within the tertiary education sector in Trinidad and Tobago, given the wider context within which they operate.

The researcher adopted the Seidman Formula and Success Model because it is not limited or constrained by diversity of students' characteristics or institutional contexts. According to Seidman (2012), the formula applies to "all students: right out of high school, adults, and retirees; from any economic status, culture, or religion; brick-and-mortar institutions, Internet delivered programmes, hybrid institutions, undergraduate, or graduate schools" (Seidman 2012, p.268). The formula is:

$$Ret = Early_{ID} + (E + In + C)_{IV}$$

What this signifies is that Retention equals Early Identification plus (Early plus Intensive plus Continuous) Intervention. The formula is based on the premise that if these strategies are employed, scarce funding allocated to implement retention programmes will generate greater returns through enhanced retention and graduation rates. The formula can be explained as follows:

- Early identification is assessment of student skill levels
- Early intervention starts an intervention at the earliest time possible after identification
- Intensive intervention creates an intervention that is intensive or strong enough to effect the desired change
- Continuous intervention persists until the change is effected

Seidman's formula was tested with favourable results by Young (1999) and Silverman (2010). Young (1999) found that colleges that had intensive intervention programmes that started early in a student's college career had higher retention rates.

In light of the findings of the present study and a review of the literature, the research posits that the Seidman formula can be applied and the following retention programmes implemented:

1. Pre-enrolment Skills Assessment
2. Modular Skills Mastery programmes
3. Transition Assistance
4. Early Alert System
5. Active Learner Communities

Pre-enrolment Skills Assessment

It is widely accepted that students require reading, writing, computation and information technology skills for successful academic integration into tertiary level institutions. The ability to read, understand, critically analyse and produce verbal, written or practical work of acceptable quality is essential. Consequently, a standardised college-administered assessment of these key skills is recommended. Seidman (2012) suggests that the assessment can be administered online and the student made to take a pledge of authenticity that he/she is the one taking the test. If student performance during enrolment is inconsistent with the pre-enrolment assessment results, the student can be made to re-sit the assessment. If the results confirm that the student could not have been the one who took the initial assessment, measures can be taken to correct the situation including disciplinary action against the student for academic dishonesty.

The purpose of the assessment is to identify skill gaps that must be filled for the student to cope with the academic requirements of the programme in which he/she is seeking to be enrolled. Although somewhat controversial, the institution's student database can be used to store and generate a wealth of information overtime that can provide a profile of unsuccessful students or non-persisters. This information can be used to identify at-risk students who may require early intervention.

Modular Skills Mastery Programmes

Students who are identified as being at risk, either on the basis of the pre-enrolment assessment results or of the institution's 'profiling' (from information stored in the database), are required to enrol in modules that target improvement in the skill areas in which they are deficient. The intervention must be designed to bring about the desired improvement in the student's academic performance or personal behaviour. It must also be sustained until the desired outcome has been satisfactorily achieved. The modular structure reduces the need for students to be required to spend time on the development of competencies which they already possess. Instead, the programme structure allows for a customised approach to targeting the skill gaps identified.

Transition Assistance

Transition assistance programmes can assist students in coping with social and academic challenges they frequently encounter in the transition to college (Tinto, 1993). The programmes are designed to support both academic and social integration. Some of the areas that should be emphasised for successful academic integration are study skills and habits; time management; use of libraries and other institutional resources. Stress management; healthy lifestyles; personal goal-setting; emotional intelligence and interpersonal skills are areas that are emphasised as supporting social integration. Interventions should be designed to facilitate smooth and effective transition through pre-enrolment and post-enrolment orientation to university life (Habley, Bloom & Robbins, 2012).

Early Alert System

Too often the early warning signs are ignored for students who, for academic or personal reasons, are experiencing problems coping with the demands of college-level education. Student performance and conduct should be monitored by faculty and staff and early signs of problems must be addressed either through academic advisement, remediation, faculty or peer mentoring, or counselling. Early warning systems are used to identify students at-risk for dropping out, poor academic performance or social problems (Habley, Bloom & Robbins, 2012). Figure 5 (p. 23) displays Cumulative Grade Point Average (CGPAs) for the students who participated in the present study. The mean CGPA for survey participants was 1.62 which was the same for the population of non-persisters (Figure 6, p. 24). In comparison, the average CGPA for the students who persisted was 2.41.

Figure 5: CGPAs of survey participants

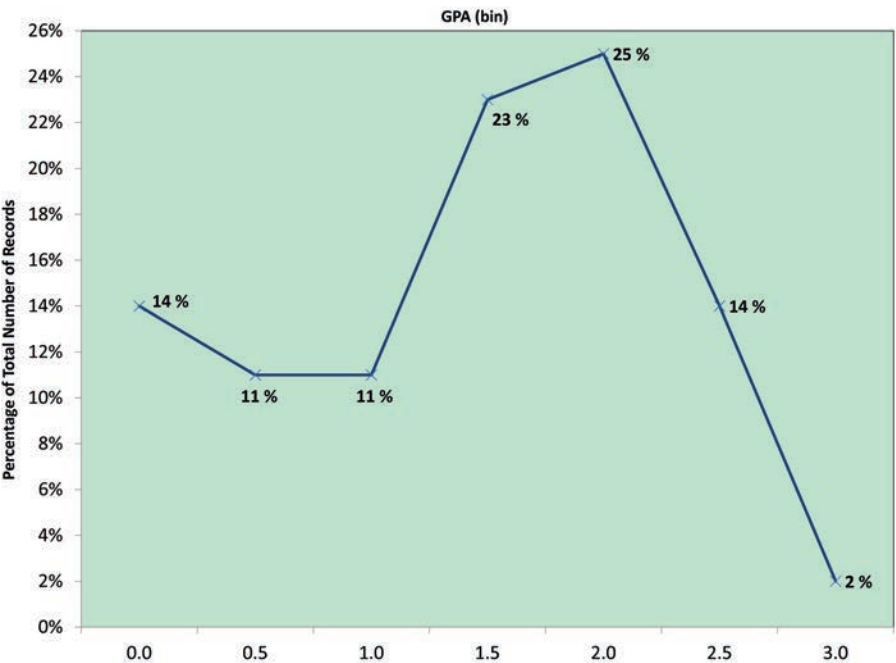
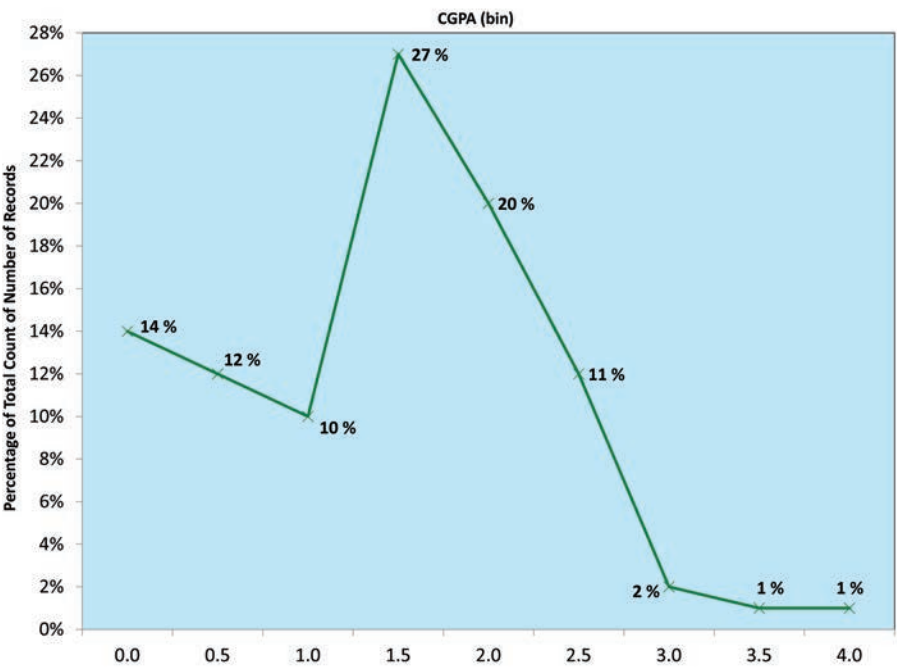


Figure 6: CGPAs for population of students who withdrew voluntarily



An Early Alert System can be set up using the university’s website so that it is widely accessible and offers the student a less intrusive, or observable, avenue for requesting support or assistance. The institution can create a Web Adviser. This would be an online academic advisement system through which students would be able to send an e-mail identifying their challenges or concerns. The student’s request would be logged and a case file opened electronically so that the student can be referred to a faculty member or university staff who can provide appropriate guidance and assistance. Faculty and staff can also use the system to submit the names of students that they have valid reasons to be concerned about. Strong and continuous learner support, and peer and faculty mentoring, must be made available to students experiencing academic problems. Measures such as peer tutoring can yield positive results and there are several options for peer cooperative learning strategies which can be explored (Arendale, 2004).

To address students’ personal problems, the institution can create a Web Counsellor as a similar portal through which a student can initiate contact and be referred to a counsellor for support. Since the research shows that students generally are reluctant to seek help, the use of the technology may assist, as the university would then be able to follow up on any contact initiated by the student. It is important for effective counselling and guidance to be provided, and followed through on, for students experiencing personal and social problems. The Early Alert System also makes it easier for the institution’s responsiveness and quality of student support to be monitored and evaluated.

Active Learner Communities

Friendships, networking and interacting with peers were highly desirable among over 90% of respondents in the present study. Most acknowledged, however, that they experienced difficulty coping with the multiple demands of family, employment, studying and commuting to classes, particularly during late evening and night. Learner communities can make instruction more effective by facilitating and encouraging active learning and developing reciprocity and cooperation among students (Chickering and Gamson, 1987; Habley, Bloom and Robbins, 2012). They can be online or face-to-face. Information technology allows students to collaborate in real time, video chat and participate in online meetings. They are also able to create and share documents and work collaboratively.

To enhance learning effectiveness, while maximising the benefits of social interaction among students for motivation, support and personal enjoyment, the establishment of learner communities is proposed. These learner communities can be integrated into the curriculum so that students communicate and work as teams on projects or assignments. Systems for online interaction would reduce the need for commuting in some instances and provide more flexible learner interaction and peer cooperation that are not limited by time and space. Clubs and committees can meet as virtual communities which would facilitate meaningful online communication as students engage in planned and structured interaction with targeted outcomes. These online communities would reduce the need for face-to-face contact, not replace it, as they facilitate higher levels of student interaction, engagement and participation.

Conclusion

The real benefits of retention programmes can only be realised when they are effectively implemented and sustained. Too often institutions are reluctant to commit the resources required to finance retention programmes and to address fundamental structural issues that are root causes of student attrition (Tinto, 2006). When a student leaves an institution without achieving his/her educational goals, not only the student but the family, the community, the economy and the society suffer loss (Habley, Bloom and Robbins, 2012). More importantly, the student may lose a dream and an opportunity to lead a better life.

The literature shows that many students drop out of college instead of seeking help. They assume that college personnel will provide the assistance they need but this is often not so. Research also shows that students are surprised when contacted by an institution to discuss their reasons for leaving and many of them often re-enrol (Seidman, 2012). In the present study, 88.6% of students said that they were surprised that UTT had called them. A clear majority of 99.3% said that they appreciated UTT's interest in their reasons for leaving. They also appreciated the opportunity to identify ways in which the university could provide more support for their learning if they chose to re-enrol. It is important for students who have exited without completing to become a part of the recruitment database for the university. However, strategies and interventions discussed in this study must be implemented to ensure that the students are offered a second chance at success, in which the odds are in their favour.

Acknowledgements

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