
Unpacking Success: Why Is Bahrain Polytechnic Student Retention Rate So High?

Maryam Salman and Chris Coutts, Bahrain Polytechnic, Kingdom of Bahrain

Abstract

In countries like Australia, New Zealand and the United Kingdom, about a third of students withdraw in their first year of tertiary study but in Bahrain there is a dearth of published information on this topic. Bahrain Polytechnic, a newly established institution offering technical and applied professional qualifications, established an innovative Quality Assurance model and developed a holistic approach to student services aiming to reduce the likelihood of withdrawal. The initial findings of a comprehensive longitudinal study indicate a higher than expected retention rate which, if it translates into higher rates of completions, may provide useful policy options for governments wanting to achieve improved outcomes for their higher education investment.

Keywords: Dropout rate; withdrawal; retention; transition; mentoring

Introduction

International concern over student dropout has emerged because employment opportunities for young people with only a basic level of education decline rapidly (Ashton & Maguire, 1983, cited in Coleman & Hendry, 1990, p. 169) as countries undergo the transition from industrial to

knowledge-based economies. Dropping out is associated with lowered self-esteem, giving rise to problems that affect the individuals, their families and society.

Higher rates of unemployment, drug and alcohol abuse and criminal activity are commonly cited. The complex interaction of factors known to be associated with dropout on all these levels is captured in an ecological conceptualization of dropout in context (Coutts, 2007) that underpins a longitudinal study of dropout and retention planned for the newly established Bahrain

Polytechnic. Initial findings, presented here, indicate a higher than expected retention rate to date which, if it translates into higher rates of completions, may provide useful policy options for governments wanting to achieve improved outcomes for their higher education investment..

The growth and diversification of Bahrain's economy created a demand for a more highly skilled labor force which is not able to be filled by Bahrainis. An interim solution has seen the private sector employing expatriates, but in the longer term the Economic Development Board (EDB) seeks to replace expatriates with Bahrainis, reducing high youth unemployment through a system of labor market regulations and education reforms. The EDB's analysis of existing education provision identified a shortage of technical and applied professional graduates that led to the establishment of Bahrain Polytechnic. To ensure that Bahrain Polytechnic becomes recognized as a leading and exemplary provider, it is referenced to world-class education practice.

One of the common components of tertiary education reforms internationally has been a focus on getting better value for government investment, with an explicit focus on recognizing and raising the quality of teaching and learning and improving outcomes for students (Scott, 2005, pp. 3-17). In many countries, retention has been adopted as a key benchmark for assessing institutional and teaching performance. While not the only outcomes, retentions, completions and progressions are important in establishing stakeholder confidence in the quality of education delivery for all higher educational institutions (Scott, 2005, p. 1), research indicated that the transition from school to tertiary study was a particularly difficult adjustment for students to make, with the result that about a third of students

drop out in their first year of tertiary study (Zepke & Leach, 2006, p. 108).

In Bahrain, there is a dearth of published information on the topic of student participation, retention and completions, although the PINZ Inception Report (Polytechnics International New Zealand, 2007) indicated that Bahrain has a pattern inconsistent with trends in OECD countries, with approximately 80% of students leaving secondary school progressing to university education. Of the 25,000 students participating in higher education in Bahrain, 78% are enrolled at the University of Bahrain, representing a threefold increase over the last decade (ibid.). “However laudable this may appear, it is a regrettable fact that the failure rate of these students (at the university) is very high. Approximately 50% of all students entering the university reportedly failed within the first two years (ibid.). Included in these data are students who dropped out over the course of study, as well as those who failed to meet credit requirements to progress. A number of reasons were suggested to account for this high failure rate, including insufficient entry level skills.

These factors, and the strategies recommended in dropout studies, were taken into consideration in the development of the Bahrain Polytechnic model. The Polytechnic offers a preparatory foundation program ahead of degree and diploma qualifications; an innovative Quality Assurance model was developed; and a holistic approach to Student Services was introduced to enhance retention and the likelihood of qualification completion.

Since the Polytechnic opened, nearly 500 students have enrolled in one of the pre-degree foundation programs. Insights into the meaning of student retention and dropout behavior from a number of

different perspectives were gained through a retrospective analysis of institutional documents, student records, student end of program evaluations, a written intentions survey, and follow up interviews and discussions to gain the perspectives of both selected students and key staff.

The various definitions of dropout and the differing admission criteria around the world necessitate some caution in comparisons of international literature. Indeed, this topic is fraught with definitional, measurement and data collection issues. This study is limited to high school graduates enrolled in pre-degree foundation programs for which there was a common selection process. The age of students at Polytechnic overcame ethical considerations associated with parental consent to participate in the study. Enrolment forms cover the use of Polytechnic records and other institutional data for research purposes.

Because readers may wish to make comparisons between the findings in this study and those of other researchers, the following section clarifies terms used in the present context:

- Foundation program is a pre-degree program of study designed to assist students to meet the entry criteria for diploma and degree programs and prepare them for the challenge of higher-level study.
- Retention refers to the number of students entering a program who persist in their studies until the expected year of completion.
- Dropping out is the act of leaving before completion a program of study for which a student was enrolled in a given year.

- A dropout is any student who leaves in this way. This term includes both those who formally indicate their intention to leave (withdrawers) as well as those lost by way of attrition.
- Attrition describes the process whereby an enrolled student ceases to attend classes and fails to respond to follow up procedures initiated by the Polytechnic.
- Push-outs are those student who are encouraged or told to leave for disciplinary or similar reasons. This group does not leave the Polytechnic voluntarily and this term includes those students who are suspended or whose enrolment is terminated.

Examining Dropout in Context—An Ecological Perspective

There is an extensive literature covering transition, attrition and performance in education and the knowledge gained about dropout through studies of individual students, and at institutional and national levels, is the result of a diversity of approaches found in education, psychology, sociology, statistics and economics literature (Evans, 2000, p. 2). A common theme, linked to concerns over institutional viability, was to identify potential dropouts so preventative strategies can be put in place to support individual students and increase retention and achievement levels (Coutts, 2007, p.7). Previous studies suggest that students' persistence and performance are related to their academic and social background and their goal commitment, as well as to institutional factors (class size, selection processes, academic and pastoral support services) that affect their experiences after entry (Evans, 2000, pp. 1-2)

Indications from Australia, New Zealand and the United Kingdom are that about a third of students withdraw in their first year of tertiary study (Zepke & Leach, 2006; *ibid.*), suggesting that the transition from school to tertiary study is a difficult adjustment for many students. Several studies suggest that there are declines in progress during transitions (Galton et al., 1999 cited in Wylie, Hodgen, & Farral, 2006, p. 82). However, failure to make the adjustment from one educational environment to another may result in a setback from which some students do not recover. For many, this is because they are insufficiently prepared for the scale of academic and social change expected of them when they moved from school to tertiary study. Such findings have resulted in the development of a variety of institutional strategies for selection, orientation, mentoring, academic advising and support (Evans, 2000)

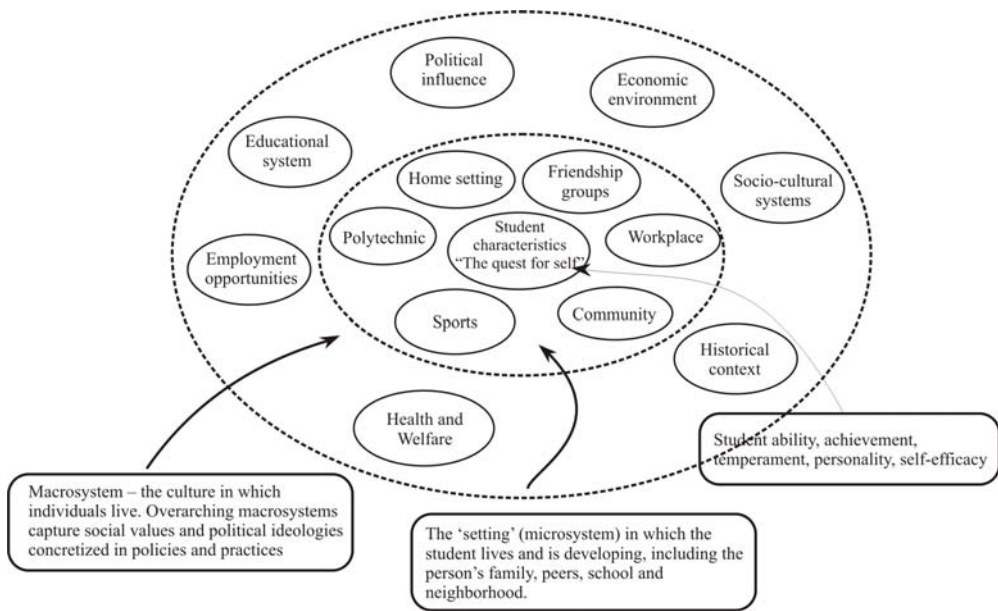
Over the last thirty years, dropout research based on the theoretical models of Tinto, Spady and Bean has predominated (Evans, 2000). The ecological model (Coutts, 2007) facilitated a greater understanding of New Zealand senior high school students' dropout because it allowed for the investigation of leaving behavior within the settings in which dropout occurred. Polytechnic retention patterns also require interpretation within the context of time, place and policy and thus this model, which sees individuals as both the products and producers of their own development (Bronfenbrenner, 2005, p. 96), appeared to have applicability.

This multilevel, multidimensional approach views the person as developing within a complex system of relationships affected by the multiple levels of the surrounding environment: the microsystem, mesosystem, exosystem, macrosystem and

chronosystem layers, as shown in Figure 1. The central location of the person is in keeping with Bahrain Polytechnic's student-centered approach and the model incorporates individual characteristics, and institutional and family factors, which previous research indicates are significant, as well as allowing consideration of bigger picture political, economic, employment and educational systems that influence dropout. The student's experiences within his/her

immediate settings (microsystems), especially within the Polytechnic setting, are of major importance in dropping out, but the model also indicates how the wider macrosystem context comes to have an important bearing on the behaviors of individuals within their own unique microcosmic settings. This big picture environment is summarized in the next section to provide a context for the study of dropout at Bahrain Polytechnic.

Figure 1: Ecological model of dropout behavior



The “Big Picture” Context: Macrosystem and Exosystem Features of Student Dropout

The ecological conceptualization of dropout facilitates consideration of both students' interactions within local settings (Polytechnic, family and friends), and the impact of bigger picture influences, such as changes in ideologies and values (macrosystem) revealed through the policies and procedures adopted to implement the reforms (exosystem) that

led to the establishment of Bahrain Polytechnic.

Concerns about high youth unemployment (estimated at 28% in the PINZ Inception Report, *ibid.*) are not unique to Bahrain, but are part of a trend observed in many countries as they shift from a relatively predictable, industrial-based economy towards a knowledge economy, a term used to describe today's fast-moving business world, where innovation and entrepreneurship are required to stay

ahead of competitors: Vadim Kotelnikov, Ten3 Business e-Coach, explains that “we are living in a chaotic transition period to a new age defined by global competition, rampant change, faster flow of information and communication, increasing business complexity, and pervasive globalization” (Kotelnikov, n.d.). Businesses are concerned by the prospect of “being faced with a workforce that is under-educated and without the necessary skills to succeed in the changing job market.” (Jasinski, 2000). In response to economic demands for a more highly skilled labor force, many governments are now facing the challenge of maintaining the quality of tertiary education whilst balancing the rising costs of rapid sector expansion.

The Bahrain Reforms Project Board identified the need for additional education and training that was work relevant, linked to the needs of the economy and informed by applied research. As a result Bahrain Polytechnic was established by Royal Decree in 2008 to meet the needs of the economy and to provide an alternative career path for the large number of unemployed high school graduates. Bahrain Polytechnic aims to be a world class Higher Education Institution (HEI), recognized as a leading and exemplary provider of high quality, relevant applied professional and technical education delivered in cooperation with industry and the wider community.

The Polytechnics International New Zealand (PINZ) consultants engaged to establish an appropriate model of polytechnic education for Bahrain concluded, after extensive stakeholder consultation (Polytechnics International New Zealand, 2007, p. 12), that the ongoing success of the Polytechnic would depend on developing a strong learner-centered approach. In this approach, learners and

their needs sit at the center of the learning process, with tutors acting as facilitators, building on the prior knowledge and experience of students and utilizing a diversity of delivery methods to cater for a range of learning styles, as they assist students to become work-ready graduates. These critical aspects of provision have been incorporated into the design of Bahrain Polytechnic, and continue to be monitored through systems and procedures which form the Quality Assurance System.

Mesosystem Features of Student Dropout at Bahrain Polytechnic

The mesosystem incorporates the linkages between the microcosmic settings of family, friends, work and Polytechnic in which the developing person is central.

Family

Parents' influence on their children's aspirations and career destinations are mesosystem effects which are likely to be associated with retention and dropout. Socio-economic data, such as parental occupations or family income, was not available and the school location and student address are apparently not a useful correlate. However those students who previously attended an international or private school, for which a fee is charged, are more likely than students from government schools to be in the upper socio-economic bracket. It is consistent with previous research (Wells, 1990, p. 12) that no students from international and private schools dropped out.

Institutional

As well as family background, previous research (Wells, 1990, p. 10) suggested that students' persistence and performance are related to institutional factors including size, selection policies, program and support structures. Bahrain Polytechnic opened its

doors on 14 September 2008 with just 222 students enrolled for Semester 1. A further intake of 240 enrolled in the second semester (February 2009), bringing the total number of students to only 462 enrolled in one of the pre-degree foundation programs or in an intensive English language program over that academic year.

Marketing targeted high school graduates, and there was a high level of interest despite the newness of the Polytechnic: 4898 registration of interest forms were received at the end of the school year, yielding 1390 applications for the September 2008 intake; and mid-school year, a further 602 registered interest, yielding 429 applications for enrolment.

Places were limited by facilities and staffing availability, so preference was given to Bahraini nationals who showed the greatest promise of success as determined by applicants' prior school achievement, the results from Polytechnic entry tests, and results from Bahrain Polytechnic courses (applicable to second semester applicants only). When students applied to the Polytechnic they were required to sit an entry test comprising mathematics, English and computing and the results formed part of the selection criteria. Other entry requirements included a Secondary School Certificate ("Thanawiya") with a GPA of 70% or more over final 3 years, and a School Behavior Report that showed they were punctual and engaged learners. If applicants did not attend a Bahrain government school, they were required to provide a formal equivalence letter issued by the Ministry of Education.

Programs

There were two six month long Foundation Studies programs initially planned, aiming to provide students with the core skills and

knowledge needed for entry to Degree or Diploma programs. They covered English, Academic Study Skills, Data Analysis, ICT and an elective that provide a taste of future specializations (ICT, engineering, business, transport freight and logistics, office management and, more recently, design).

Quality Model

Bahrain Polytechnic applied an innovative quality assurance model as it faced the challenge of establishing stakeholder confidence in the absence of a national qualifications framework and in the context of a developing national quality assurance system. The model incorporates a multi-level accreditation system; with industry validation of programs; implemented in conjunction with a Quality Management System comprising internal policies and a self review system. Accreditation is an external validation process by which the Polytechnic can be evaluated against established standards to ensure a high and consistent level of educational delivery, through which Bahrain Polytechnic's promise of work ready graduates can be realized.

Quality Assurance ensures that all the activities required for the design, development and delivery of services, and their ongoing review, are effective and efficient with respect to the system and its performance, and meet compliance and stakeholder requirements. Student surveys were administered half-way through semester 1 and at the end of semesters 1 & 2 as one of the mechanisms to assist program review in order to improve how well the Polytechnic meets student needs and stakeholder requirements. These surveys indicated a high level of satisfaction with the Polytechnic's performance in all areas (Meeting Learning Needs, Student Support, Student Services, Mentoring, Buildings and Facilities,

Technology and Equipment). The responses in the surveys to the statement “Overall I have found the performance of Bahrain Polytechnic to be:” produced 94 - 98% at “satisfactory” or better. However, it was noted that the surveys were completed by only 28 and 25% of the student population, so it is possible that these views were not representative of the whole cohort.

Student Support

A holistic approach was taken to the provision of student services, aiming to enhance the likelihood of student persistence through a range of institutional strategies that began with orientation and included career development support and guidance; health and counseling services, mentoring and academic monitoring and learning development support. The usual facilities were provided to facilitate student social and academic engagement, including a recreation centre; cafeterias; computer access for study and leisure; support for the Student Council activities, free car parking and bus transport, and a range of hardship and other financial scholarships.

The mentoring program, learning development centre, language laboratory and academic skills components of the foundation program were unique features of the Polytechnic model implemented with the aim of easing the transition from school and enhancing student success in tertiary level studies. The foundation program aims to develop learning skills, providing opportunities to enhance verbal and non-verbal communication skills, study skills, time management, team work, reflection and problem solving skills required for academic success and also for employment. A variety of teaching strategies are used including small group interactions and individualized experiences.

Demonstrating an understanding of discipline-specific requirements of academic writing and being able to access and evaluate relevant information using critical thinking processes is also a key objective of the foundation program.

As an important component of student support, the mentoring program provides pastoral care for students. In the first semester of 2008, ten students and a Bahraini and expatriate mentor were assigned to each of the 22 groups and, wherever possible, a gender balance was maintained. There were weekly timetabled meetings, with a focus of building rapport and trust between mentors and group members, as well as follow up of non attendance. Mentors provided first-level counseling for individual students but when they presented with specific problems requiring intervention, referrals were made to other support services, such as the Learning Development Centre or counselor.

The mentoring model was reviewed for the second semester. The student feedback given in institute-wide surveys indicated that 82% found the mentoring system “satisfactory or better.” Comments were varied and ranged from “boring” and “not needed”, to “helpful” – there was no uniform trend evident. Tutors reported that many students were not attending the timetabled meetings: ‘they felt uncomfortable discussing problems in a group context and students felt reluctant to seek help from someone that they did not know well’, the Mentor co-ordinator said. Mentors felt the requirement to follow-up on non-attendance created a tension in their role, creating a barrier in the development of rapport with students. A compounding issue was the staff to student ratio. With training requirements

for Bahraini staff, and an imbalance in gender, the model first implemented proved unsustainable: there were more expatriate staff employed than Bahraini, as well as more males employed than females, as the Polytechnic grew. The second semester model paired an experienced mentor with a new staff member: the experienced mentor continued to mentor five students from their previous group, as well as co-mentor ten new students. In response to student and mentor feedback, only four formal group meetings were timetabled at the beginning of the semester, and thereafter mentoring was on a one-to-one basis, where mentors set up a mutually convenient time to meet with individual students in their mentor group.

In both semesters, mentors were supervised by the mentor co-ordinator, and training was provided. Common issues, which ranged from academic to pastoral care, were identified through weekly mentors' meetings and included attendance, stress management, dealing with conflict and the need for clubs and social activities at the polytechnic. Where necessary, policy and procedure changes were implemented as a result, with changes made to the attendance policy, student

rights and responsibilities and assessment regulations.

Patterns: Who Left, When, Where and Why?

Method

On enrolment, data was collected on each students' age, previous education [English results, cumulative grade point average for their first secondary school year (2 semesters), cumulative grade point average over 2 year and a half years (5 semesters), cumulative grade point average over three years of secondary schooling and IELTS or TOEFL results, if applicable]. Students' attendance and progress was monitored through the mentor scheme and if students withdrew or failed to attend classes, a follow up was made with students or their family to capture the reasons behind that.

What is the Extent of Dropout from Foundation Programs?

The three foundation-level programs enrolled a total of 677 students over the academic year September 2008-July 2009. Of these, 43 students left the program of study for which they were enrolled, giving an overall dropout rate of 6% (Table 1).

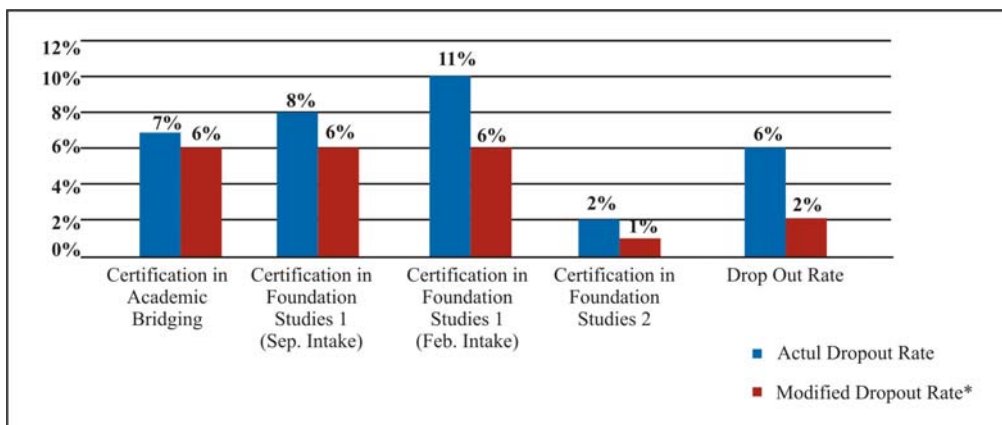
Table 1: Dropout Rates for Each Program

Program	Enrolments #		Completions #	Dropped out #		Dropout rate (% of cohort)
	Sep Intake	Feb Intake		Sep Intake	Feb Intake	
Certificate in Academic Bridging	46	86	127	0	9	7%
Certificate in Foundation Studies 1 (Sep intake)	222	-	205	17	-	8%
Certificate in Foundation Studies 1 (Feb intake)	1	112	102	0	12	11%
Certificate in Foundation Studies 2	158	48	204	0	5	2%
Total	673		638	43		6%

The comparison of the three programs indicated that the highest dropout rates occurred in the lower level programs of Academic Bridging and Foundation Studies 1 (both February and September intakes), an expected finding as these students are likely to be less able academically. Students struggling academically have a propensity to dropout, previous studies found (Donnelly, 1987, p. 1)

Establishing exactly who had left was one of the frustrating aspects of this research, as some students had enrolled at another institution which was their preferred destination, with the result that in the week after orientation these students failed to attend: they had not even got as far as being allocated an elective stream. When these early leavers were removed from the data set, a 3% dropout rate is the overall result from the 438 students who persisted past the two week fees grace period.

Figure 2: Early Leavers Compared to Total Leavers as Percentage of Total Population by Program



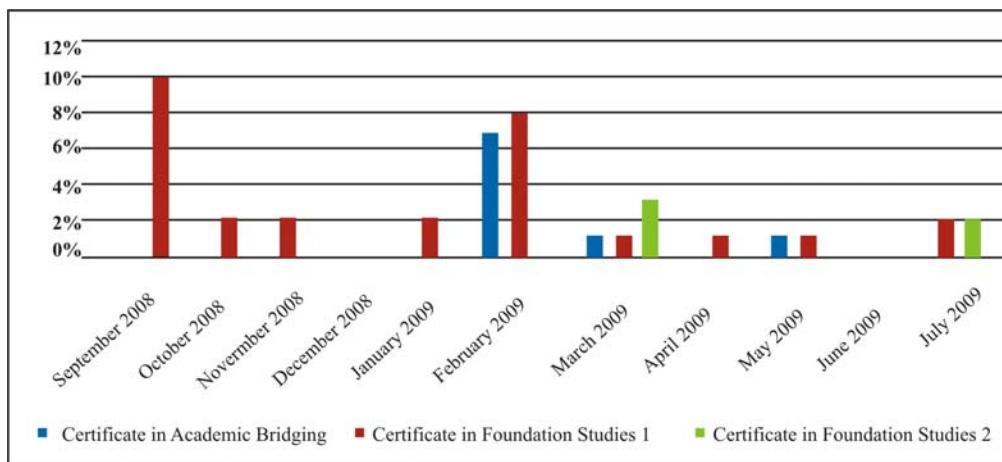
*Numbers excluding students who left during the first 2 weeks of the semester

The grace period is where the student gets 100% refund of fees.

When Did They Leave? Time of Leaving and Other Chronosystem Effects?

A semesterial pattern to dropping out became apparent, as shown in Figure 3.

Figure 3: Student dropout over the academic year



In the first semester of the academic year, commencing September 2008, there was a peak of 10 early leavers in the first month from those enrolled in the Foundation Studies 1 Program (which was the only one on offer at that time). Some appeared to have been dual enrolled and, having

received confirmation from their first choice in the week after orientation, which ended with the holiday of Eid Al-Fitr, these students failed to return. Interestingly, one other student also left after a holiday period, suggesting that breaks from study provide the opportunity to review the benefits of

carrying on. While some students' time of leaving corresponded to the notification of the offers from universities, for others it was the announcements of scholarships before and during the semester (4 students), which appeared to provoke the decision to leave. A further four students faded away during the semester, skipping the odd day initially, then having increasing periods of absence until it became obvious to both themselves and the institute that they would not be resuming studies. Despite Student Services follow-up with the students and their parents, the students did not attend classes nor sit the examinations.

In the second semester of the academic year, commencing February 2009, 451 students, including 246 new students, enrolled across the three programs then available, and 26 students dropped out from that new intake. The greatest number, 19 students, left in the first two weeks of the semester. The rest (6) continued but with a high number of absences (the highest absence rate was 36.7% of class time). A range of barriers to attendance were given by students including sickness, incompatible class times with working hours and family reasons, and in most cases promises were made to attend classes in future. An exception to this pattern was one very able student who left after sitting the final exams: she was described by student services personnel as 'a good student, enjoying her studies at the polytechnic, but she left to continue her studies in another institute where they can transfer some of the credits she accumulated from study at the university before joining Bahrain Polytechnic'.

What Figure 3 fails to show is whether there was any 'leakage' which occurred between programs. Surprisingly, there was no loss of students between Semester 1 and Semester 2.

Who left? Characteristics of Leavers Compared to Total Polytechnic Population

School origin

All those students who left during the academic year 2008-2009 were from government schools, not a surprising finding because the Polytechnic comprised 91% from government and only 9% from private and international schools.

Gender

Of those who left, 56% were male, although the Polytechnic has a slight favor towards female participation overall (56% females). There was no gender related pattern to dropout from the raft of foundation programs.

Preferred degree program destination

On enrolment students are asked to identify their degree program preferences and there was a gender bias for program preference across the institute, with males favoring Engineering or Technology and Logistics Management, whereas girls were more likely to choose Business and Office Management programs. Information and Communication Technology (ICT) was selected equally by both sexes (Table 2). There were more dropouts among students with a Bachelor of Business degree preference (being a total of 19 students: 6 from first intake, 13 second intake); however, the dropout rate for this program was only 8%, most of whom were males. An equally low dropout rate of 8% was recorded for ICT, which was the only program where males and female participation rates were on a par, though the dropout rate for males was double that of females.

Table 2: Dropout Rate per degree program

Program	Dropout Rate per program by gender as a %		Dropout rate per program
	Female	Male	
Bachelor of Business	Female	6.13	8%
	Male	13.04	
Bachelor of Engineering Technology	Female	22.22	13%
	Male	11.76	
Bachelor of Information and Communications Technology	Female	5.97	8%
	Male	9.37	
Diploma in Office Management	Female	21.42	20%
	Male	0	
Bachelor of International Logistics Management	Female	0	10%
	Male	15	

Academic achievement

Only the lower level program (Certificate in Foundation Studies 1) was offered in the first semester and of the 222 enrolled, 205 students completed the program. One hundred and eighty two students passed all Foundation 1 courses. However, only 150 students met the criteria to progress to Foundation 2 (120 credits in the Foundation program and an IELTS equivalence of 4.5 in the common English test). It became evident that some 46 students required an additional program of intensive English to meet the entry criteria for higher level study, so a third program, Certificate in Academic Bridging (CAB), was added to the Foundation suite for Semester 2 to enable them to develop English language proficiency skills to the level required for entry.

All the 46 students who failed the first program took up the offer of the intensive English program even though this was thought to be associated with the stigma

attached to being placed in what was, in effect, a lower level program of intensive English. Student Services staff said “Many students, especially those 32 who achieved 120 credits, were unhappy with an intensive English program which doesn’t make sense for them as they passed the foundation 1 courses including the English course and many parents too were upset about it and tried to talk with Student Services and English and Foundation faculty about trying to find a solution that will shorten that period or will guarantee the enrolment in year one of degree in the semester after it.”

Age group

Consistent with the age profile of Polytechnic participants, students who left were mostly between 17 and 20 years of age. In first semester, most dropouts were 18 years old (only two were aged 17), but in the second semester the majority were 19 years (11 students), with three aged 20 and the remaining 12 were aged between

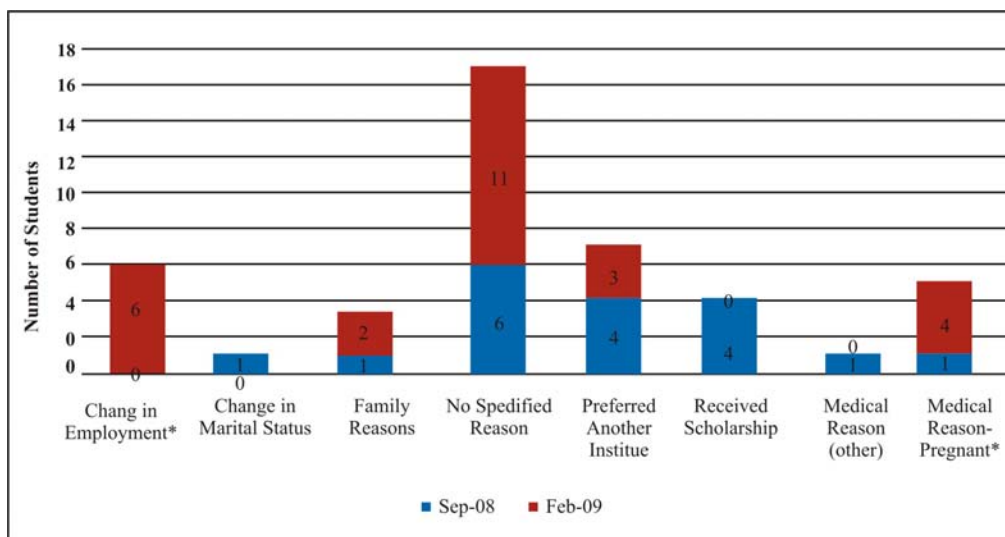
21-26 years and were working or had been studying at another institute.

Reasons for leaving?

Forty percent of the students left without revealing their reasons for doing so: 6 from the first intake (3 Males, 3 Females), and another 11 from the second (6 Males, 5 Females).

32 students who gained 120 credits from foundation 1 but failed to meet the English requirement and another 14 who failed one or more courses.

Some students gave more than one reason.



Of those who indicated a reason (either by completing the withdrawal form or advising staff when they were followed up over telephone, following non-attendance), 16.3% (7) preferred another institute, 13.9% (6) students left in February after a change in employment, and one left due a change of employment and pregnancy. In total 11.6% left as a result of pregnancy (1 in September intake, 4 from February intake).

Student Services staff felt that the reasons given by leavers were not the ‘real’ reasons, however. As one staff member explained, lack of timetable choice was a major factor in leaver discontent: “The students in foundation were timetabled into a block within a program, so they cannot select different timings or tutors according to their preference, and they have no

control over what group they would be in, unless they request the change in the first two weeks of the semester and only then can a change be made if the seats are available, which made some of them, if not many, unhappy about it. Some other reasons that made the students think of leaving, and made some of students leave already, even though none of them wrote on the withdrawal form, was the program timeframe where the Diploma, Higher Diploma, Bachelor takes them three, four and five years to complete at Bahrain Polytechnic whereas in another institute it would take them less time, especially with the availability of more courses and the flexibility of opening hours where evening classes are available, which will also help those who are working”.

This anecdotal information needs to be considered in program reviews and acted on, even if the link with leaving is tenuous: these issues were obviously a major cause of student discontent.

Goal commitment

An 'Intentions Survey' was administered to all founding (first batch) students during orientation week of September 2008 and, of the 222 enrolled at that time, 202 participated in the survey. Most students were clear on the reasons (some students gave more than one reason) for enrolling in the program of study they had selected at the Polytechnic, with 69.8% reporting it was a good match with their dreams/aspirations/strengths and 61% chose it because of the excellent employment prospects. A further 9.4% mentioned some aspect of the study program that appealed and for some, 2.9%, it was the advice from family that influenced their decision.

The majority were happy with their program selection, though nearly a quarter of participants stated that they would have preferred to be studying in another field, including disciplines not currently available at the Polytechnic (aviation, law and design). Goal commitment was clearly evidenced by consistent career plans (reasons for studying matching their future destinations), with 48% stating that they want to continue studying at a higher level (masters, doctoral studies) and 60.9% who indicated that they want to get a job on completion of their Polytechnic program.

Of the survey participants, nine subsequently left (3 females and 6 males) and there was no pattern evidenced by school background or career aspirations, though it was significant that three who wished to be pilots subsequently left because they did get offered a place in pilot training institutions. A further two did not

specify a reason and one wished to change their program of study for Design, a program not offered by Bahrain Polytechnic until September 2010.

The survey was conducted because previous research (Evans, op. cit.) had suggested a correlation between goal commitment and persistence. So this data supported the notion that having a clear career goal did affect a student's decision to stay or leave, but not in the way anticipated: for many leaving students it appeared that the Polytechnic was their second choice and they were dual enrolled.

Another interesting fact was that three students (a third of leaver participants) mentioned that they had felt like leaving school or college earlier in their education, though only one of those stated the reason (academic). This may indicate that academic issues or unresolved personal problems were more of an issue than the Polytechnic program itself, though the numbers are so small, no real conclusions can be drawn. Seventeen students continued studying because of family influence though they did not all report considering leaving.

Discussion

Transitions appear to generate critical periods, whether the transition is from school to further study or work, between educational institutions, or even from level to level within an institution, so it was somewhat surprising to find that the dropout rates from the three foundation programmes, were very low (6%) compared with findings from previous research, and if the students who left within the first two weeks (including orientation) were excluded then they would have been even lower (2%). Indeed many other institutions do not record dropout data from

the first day of attendance, but commence the count from the time that corresponds to their last day for fees refund. Bahrain Polytechnic does not currently have a formal refund policy (though by custom and practice it is within a two week period) and this should be developed. As well, it is worth considering that for most students who left during the first two weeks, the Polytechnic was their second choice right from the beginning, or was there something about the orientation program, or their early experiences at the Polytechnic, which put them off for continuing?

The small size, coupled with quality of student support, particularly the mentoring program, was thought to be a factor in the excellent retention rate. The stringent selection procedures applied may also have contributed to the low dropout numbers: only those students with the best chance of success were selected, and failing students had a special program developed to better cater for their needs, rather than dropping out for academic reasons.

The numbers of leavers was so low it is difficult to draw any significant conclusions: there was no gender pattern to dropout (contrary to findings overseas) but leavers appeared more likely to have been enrolled in lower level programmes, though the differences in rates were so small, there is little to be gained by analyzing these data further.

There are a number of reasons that may account for the low dropout rate. Since the number of students enrolled in the establishment phase was relatively small, the atmosphere at the Polytechnic was like a small family, where students and staff had excellent relationships, brokered to a large extent through an effective mentoring system and friendly, approachable Student Services staff: Students felt comfortable saying what they liked and what they did

not. As a result, Student Services staff felt that the reasons that students gave on leaving were not the real, nor the only reasons for leaving, a finding congruent with Coutts' previous findings (2007, p.257). Student Services staff indicated that the lack of student choice over their program or class group was a major factor, as these had effects on friendship/support groups, as well as transport. Another issue raised by students was the length of study program, Bahrain Polytechnic having a four year degree program which, when the foundation year was added, meant a five-year commitment to tertiary study (and another six months for those in the Academic Bridging program). Already the Polytechnic has addressed some of these concerns for future students, by allowing direct entry to degree level study on the basis of entry testing results, and also through recognition of prior learning. However, offering evening classes and allowing students greater choice and flexibility remains a major challenge for the Polytechnic in the establishment phase.

Bahrain Polytechnic's technical and applied professional qualifications aim to develop students' employability skills so they become work-ready graduates. Perhaps the founding students, the ones willing to join a new institution yet to establish credibility as a quality provider, were greater risk-takers, and these special characteristics may have facilitated their staying on in the face of what must have been, at times, daunting problems as the Polytechnic set-up its systems and procedures, and bought on a mix of new staff from all over the world. The Polytechnic's multi-layered Quality Assurance System may have played a substantive part in the retention rate, as there were both formal and informal mechanisms for gaining feedback, and making improvements.

Conclusion

In countries like Australia, New Zealand and the United Kingdom, about a third of students withdraw in their first year of tertiary study. Previous research indicated that students' persistence and performance are related to their academic and social background and their goal commitment, as well as to institutional factors (size, selection policies, program and support structures) that affect their experiences after entry. These findings from the first year of Bahrain Polytechnic's operation indicate a higher than expected retention rate, attributable in part to the small size of the first cohort, and to the unique characteristics of those students who took the risk of joining a new institute. However, there is also the suggestion that the innovative Quality Assurance Model, which facilitates feedback towards continuous improvement, and the holistic approach to student services, especially the mentoring and academic support systems, were significant in reducing the likelihood of withdrawal. If the lower than expected dropout rates translate into higher rates of completions, the strategies employed by Bahrain Polytechnic may provide the basis for useful policy options for governments wanting to achieve improved outcomes for their higher education investment.

Recommendations for further research

Previous research indicated a number of factors in influencing retention that this study does not give us an insight into, because of the small number of students involved, and the lack of observable trends as a consequence. It is recommended that these initial findings form part of a comprehensive longitudinal study tracking successive cohorts till completion at degree level - it will be interesting to compare students' experiences at foundation and

degree level study. In particular, research into the effectiveness of the evolving mentoring program is recommended, and some investigation into the early leaving group, including aspects related to the orientation program and initial experiences of students warrants attention.

References

- Bronfenbrenner, U. (2005). The developing ecology of human development: Paradigm lost or paradigm regained. In U. Bronfenbrenner (Ed.), *Making human beings human: Bioecological perspectives on human development* (pp. 94-105). Thousand Oaks, CA.
- Coleman, J. C., & Hendry, L. B. (1990). *The Nature of Adolescence* (2nd ed.). London: Routledge.
- Coutts, C. E. (2007). *Drop Out from State Secondary Girls' Schools in New Zealand: An Ecological Perspective*. Unpublished doctoral thesis, Massey University, Palmerston North, New Zealand.
- Donnelly, M. (1987). *At-Risk Students*. Retrieved January 31, 2006, from ERICDigests.org: <http://www.ericdigests.org/pre-928/risk.htm>
- Evans, M. (2000). Planning for the Transition to Tertiary Study: A Literature Review. *Journal of Institutional Research*, 9 (1), 1-13.
- Jasinski, J. L. (2000). Beyond high School: An examination of Hispanic education attainment. *Social Science Quarterly*, 81 (1), pp. 276-291.
- Kotelnikov, V. (n.d.). *New Economy: Key Features of the New Rapidly Globalizing and Changing Knowledge Economy*. Retrieved December 2, 2009, from Ten3 Business e Coach: http://www.1000ventures.com/business_guide/crosscuttings/

new_economy_transition.html

Polytechnics International New Zealand. (2007). Polytechnic Inception Report (March 8th, 2007). Wellington, New Zealand: PINZ.

Scott, D. (2005). Retention, Completion & Progression in Tertiary Education in New Zealand. Tertiary Sector Performance Analysis & Reporting . Wellington, New Zealand. Retrieved November 3, 2009, from New Zealand Ministry of Education: <http://www.minedu.govt.nz/goto/tertiaryanalysis>

Wells, S. (1990). At-risk youth: Identification, programs, and recommendations. Englewood,CO: Teacher Ideas Press.

Wylie, C., Hodgen, E., & Farral, H. (2006). Completely different or a bigger version? Experiences and effects of the transition to secondary school. Ministry of Education. Wellington: New Zealand Council for Educational Research.

Zepke, N., & Leach, L. (2006). Improving retention and student outcomes? Some questions about the retention discourse. 6th Conference of the New Zealand Association of Bridging Educators, 5th - 6th October 2006. (pp. 106-122). Auckland, New Zealand: Unitec.