First Year Experience (FYE) Programme: Reflections from a Five-Year Implementation

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Abstract

First year experience (FYE) programmes introduces first year students to university so they could better adjust to the university community both academically and socially. This paper explores results of a continuous five-year study evaluating the FYE programme implementation in a Malaysian higher education institution. It aims to provide an overall view of FYE implementation and the crucial aims in comprehensive undergraduate development. The results reflect the demography of commencing students and are useful to make sense of students' background, involvement in the university and the effect of a diverse campus population in students' academic and social experiences.

Keywords: Commencing students, first year experience, university experience

1. Introduction

Widespread institutional recognition of, and response to, the importance of first year experience (FYE) programmes is a late twentieth century phenomenon. Higher education institutions acknowledge the importance of engagement and retention initiatives in addressing challenges faced by commencing students in their university experience (McInnis, 2001). As such, FYE programmes are organised to introduce the first year students to university. This enables students to better adjust to the university community both academically and socially, hence avoiding disengagement and poor performance at an early stage of university life (Yang and Wai, 2011).

This paper reports on a Malaysian study evaluating the FYE programme implementation in Universiti Teknologi Malaysia (UTM). It aims to examine and understand the FYE implementation towards the first year students' attitude and behaviour in managing their roles as university students. FYE programme implementation varies across institutions; as such, each analysis is distinctive of a particular institution, student body and types of programmes implemented (Jamelske, 2009). A key focus underlying this study is to gather empirical evidence that would support and enhance the quality of support for students during their key transitional period.

The study is reflective on the institution's broader focus in comprehensive student development. The university is committed in producing graduates that are competent, creative and versatile who can function effectively in a wide range of social and professional contexts. This follows the university's student development multidimensional transformation model, which aims at producing holistic individuals with generic skills highly valued by employers, such as communication skills, team working skills, self confidence and interpersonal skills (Mohd Zaki Kamsah, 2009). FYE is the initial step in a continuous student development module, integrating an assorted mode of initiatives in students' campus learning environment.

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2. Background and context

The Malaysian education system provides 11-year basic education to all children i.e. 6 years of primary education, 3 years of lower secondary education and 2 years of upper secondary education. Students may follow one of the two routes for admission into Malaysian public universities: a one-year matriculation programme or one and a half years of sixth form (Grade 13) for Malaysian Higher School Certificate Examination (*Sijil Tinggi Pelajaran Malaysia*) or Malaysian Higher Religious Certificate (*Sijil Tinggi Agama Malaysia*). Alternatively, students can also opt for other pre-university entrance examinations such as A-levels and foundation programmes leading to degree-level courses offered by private higher education institutions. The variety of options to post-secondary education increases access to tertiary education to the 18-22 year-old cohort; as of 2009, a total of 921,797 students were enrolled in both public and private higher education institutions, as shown in the table below:

Table.1: Total enrolment of students in public and private higher education institutions, 2002-2009

YEAR	PUBLIC HEIS	PRIVATE HEIS	TOTAL
2002	281,839 (48.9%)	294,600 (51.1%)	576,439
2003	294,359 (48.4%)	314,344 (51.6%)	608,703
2004	293,978 (47.7%)	322,891 (52.3%)	616,869
2005	307,121 (54.3%)	258,825 (45.7%)	565,946
2006	331,025 (50.6%)	323,787 (49.4%)	654,812
2007	382,997 (51.1%)	365,800 (48.9%)	748,797
2008	419,334 (51.2%)	399,897 (48.8%)	819,231
2009	437,420 (47.5%)	484,377 (52.5%)	921,797

Source: Ministry of Higher Education Malaysia

The introduction of Private Higher Education Institutions Act 1996 encouraged foreign institutions to collaborate with local alliance partners in obtaining licensing rights for branch campus opening in Malaysia (Mazzarol, Soutar and Sim, 2003). By 2010, there are 20 public higher education institutions and more than 400 private higher education institutions, consisting of 21 private universities, 24 university colleges, 5 foreign university branch campuses and 390 colleges (Tham SY, 2010). The changing national higher education context widens the access to higher education, enabling more post-secondary cohorts to pursue tertiary education and prompting local higher education institutions to ensure quality delivery of post-secondary education and services to its students, also enabling more international students to pursue their tertiary education in the country.

UTM is a technical-focused, public-funded research university focusing on science, technology and engineering with two campus locations in Kuala Lumpur and Johor Bahru. As of July 2010, the university has a total of 21,474 students, of which 15,232 are local undergraduate students and 699 international undergraduate students, and the remaining 5,553 students bing the university's postgraduate population. UTM is made out of 11 science and engineering (S&T) based faculties and 5 non-S&T-based faculties. Students enrolled in degree courses through one of the three post-secondary routes: matriculation, Malaysian Higher Education Certification Examination or diploma courses, with an annual enrolment of approximately 3,000 new undergraduate students at the start of academic calendar.

UTM has developed a Student Development Transformation Plan, aspiring to provide comprehensive education to its undergraduate student community. Under this plan, students undergo various methods of learning, inside and outside of the classroom, with active collaboration from units, departments and faculties of the institution. FYE is the first stage of student development track for undergraduates throughout their university tenure. The undergraduates will consecutively proceed with other developmental activities organised institution-wide, such as co-curricular activities, English assessment practices, international mobility programmes and career preparation initiatives in their final year of study. Ultimately, UTM graduates should possess seven major attributes at the end of

their undergraduate studies, i.e. Communication skills, critical thinking and problem solving skills, team working skills,lifelong learning and information management skills, entrepreneurship skills, leadership skills and ethics and integrity.

In the 2003/2004 academic year, the Faculty of Chemical Engineering and Natural Resources initiated an introductory course for first year engineering students called "Introduction to Engineering" along with workshops and camps to its first year students (Mohd Zaki Kamsah, 2009), forming a series of activities for the faculty's FYE programme. The FYE model was eventually adapted university-wide in the 2006/2007 academic year. There are six strategies underlying FYE implementation in the university: living-learning communities, focused first-year advising, orientation, peer mentoring, supplemental instruction and tutoring as well as enhanced first-year classroom experience. The strategies involve active interaction among the students and key stakeholders in their environment, mainly their parents, siblings and friends, friends sharing common accommodation spaces, lecturers and university staff. Due to the nature and focus of faculties, each of them is given autonomy to design and implement FYE activities, with an allocation of 40MYR per first year student.

The study was thus undertaken within the context mentioned above, encompassing changes in educational policy at the national level and the response of the university in meeting the changes at the institutional level.

3. Literature review

This section highlights three key issues in FYE implementation: first year students' transition, their success and FYE implementation in universities.

3.1. First year students' transition

Students' transition to university is a stressor (Robotham, 2008) as students enter a new culture with "a foreign set of norms, tradition and rituals, and a new language and environment" (Hunter, 2006), leaving parents, family members and friends behind. The biggest transition for these students are a conflict of values, identities, beliefs about knowledge and conceptions and familiar ways of learning and doing things (Brownlee et al, 2009). Students surviving their first year would recall two valuable lessons that would prove valuable throughout the tenure of university experience: they cannot "coast through" their studies and they are responsible for their own education in university (Kidwell, 2005).

According to Tinto (1993; as cited by Yang and Wai, 2011), a university consists of intellectual or academic communities, such as departments and faculties, as well as social communities, consisting of halls of residents, and various student societies, clubs and associations. Terenzini et al (1994; as cited by Schrader and Brown, 2008) identified six variables that affect students' transition into university: academic and social involvement, family background, peer group, socioeconomic status and academic preparation. In both classification, students' sense of belonging at both communities played major role in their survival. Their role is to understand and integrate into each community's specific sub-culture, which includes normative attitudes, values, accepted style of communication and behaviour, and worldview. Wilcox et al (2005) conducted a qualitative study on a sample of 34 students in a university in UK, of which 22 completed their first year studies successfully while the remaining 12 withdrew from their programmes. It was found that students' peer group is the most potent source of support. as serves as a buffering effect against the stressful experience of being "alone" in university, and a platform for students to seek help in times of need (Wilcox et al, 2005); also encouraging the students to be more involved in activities organised within the social communities (Yang and Wai, 2011).

Of equal importance is students' academic involvement as this contributes to their retention in university in consequent years (Jamelske, 2009; Nelson et al, 2011). Students need to interact with different academic components of a university, such as making sense of the syllabi, completing assignments on time, communication with faculty members and peers or sitting for consecutive examinations with increasing levels of difficulty for

different courses. The students' performance would reflect on their persistence in facing the challenges; Kidwell (2005) concluded that problems faced by first year students are neither intelligence nor aptitude in nature but in the academic workload as it measures the students' adaptability in what and how they learn in university. Stone (2005) noted that remedial programmes to aid successful transition into academic study are important in enhancing students' confidence and providing them with strategies to better adapt to learning networks within the university system.

3.2. First year students' success

A major body of literature recommended universities to build on students' academic success, rather than retention as the latter is the immediate impact of the former's implementation (Hunter, 2006; Hunter and Murray, 2007; Yorke and Longden, 2008; Jamelske, 2009) However, student success is also measured by various markers, such as the students' critical thinking (Kidwell, 2005), their active engagement with the academic (Nelson et al, 2011) and social communities (McInnis, 2001), the readiness in changing preconceived ideas on knowledge and learning, (Brownlee et al, 2009) aptitudes for learning and acknowledgement towards structural and hierarchical functions in an organisation (Mina and Gerdes, 2006).

Upcraft, Barefoot, and Gardner (2005; as cited in Hunter, 2006) defined first year students' success as progress toward developing academic and intellectual competence, establishing and maintaining interpersonal relationships, exploring identity development, deciding on a career and lifestyle, maintaining personal health and wellness, developing civic responsibility, considering the spiritual dimensions of life, and dealing with diversity. The students' success, following the above definition, is dependent on the collaboration of staff from across the university in providing the relevant assistance to the students (Pitkethly and Prosser, 2001) and active engagement with the students to understand their concerns and issues.

The first year students' success may also depend on their demography. Today's students may be different to those of earlier generations, in terms of their socioeconomic, cultural and academic background, and they may require different approaches to help them succeed in university. McInnis (2001) noted that the emerging diversity within the Australian university system, institutional size and the background characteristics of students – educational, social and economic – may affect student experience and the learning community of the campus at large. The core of FYE implementation, according to Nelson et al (2011), is to identify "at risk" students among the diversified student population, and "putting in place conditions which may support and inspire student success".

3.3. FYE implementation in universities

FYE is a comprehensive and intentional approach in introducing first year students to university. It comprises both curricular and co-curricular initiatives (Hunter, 2006), "to support and advance efforts to improve student learning and transitions into and through higher education" (Hunter and Murray, 2007). Barefoot (2000) summarised six general outcomes of FYE implementation: increasing student-to-student interaction; increasing faculty-to-student interaction, especially out of class interaction; increasing student involvement and time on campus; linking the curriculum and the co-curriculum; increasing academic expectations and levels of academic engagement; and assisting students who have insufficient academic preparation for college.

General modes of FYE implementation are first-year seminars (Allen, 2004), service learning (Smith et al, 2011) or credit-bearing introductory courses as part of first year curriculum. According to Cutright (2002), research universities' FYE programmes are designed based on six common themes: general programmes addressing commonality of the students' classes and co-curricular activities; initiatives tied to a specific discipline; integration of multi-strategies in learning centres; learning communities; reexamination of classroom structure, student-to-faculty ratio and supplementary out-of-classroom support for first year students; as well as an enhanced role of the university's student affairs department. He remarked that the impetus of these universities in their first-year

strategies should not fall short at programme delivery stage; instead, full-cycle assessment efforts and evaluation should be conducted to view the strategies through multiple perspectives. Allen (2004)'s study of creating a cross-disciplinary first-year seminar for students suggests that the goals of the seminar should be broad enough in allowing faculty members to incorporate the goals into their teaching strengths. She also suggests involvement of different stakeholders e.g. seniors and alumni to encourage the first year students' connection with the university in the future.

4. Research on FYE implementation

UTM has embarked on a continuous study to identify its commencing students' demography and the impact of FYE programmes on its students. There are two surveys administered annually: the first survey being a data collection exercise to collect information about students' background and readiness at UTM, conducted in the first semester of their studies; the second survey developed to collect information about students' FYE experience in their 1st year of studies, with a target sample of second year students. This study hence explores results of both surveys in understanding the FYE implementation in the context of UTM first year enrolments, and the aims of the university in comprehensive undergraduate development.

5. Summary of findings

5.1. First survey

5.1.1. Students' economic background
A large number of students come from middle- to low- income families. In the 2006/2007 academic year, 41% of students recorded a family monthly income of less than RM 1,000, as compared to 39.9% in the 2009/2010 academic year. Over 76.6% of students in the 2006/2007 academic session and 67.4% in 2009/2010 rely on student loans as their main source of financial support. More students in the 2009/2010 session are scholarship holders, as the amount of respondents on scholarships stood at 19.9%, as compared to 6.5% in 2006/2007.

5.1.2. Students' education background
The students come from a wide stream of secondary education. In the 2009/2010 academic year, about first year students came from public day schools, as compared to 55.9% in the 2006/2007 academic year. Meanwhile, 33.7% of students came from boarding schools for the 2009/2010 enrolment, as compared to the 2006/2007 enrolment.

5.1.3. Students' acceptance towards the institution and academic programme
As students are admitted via a merit-based public admission system, it is important to identify students' selection of the university relative to other universities in their application. Over 76.2% of students in the 2006/2007 academic year reported that UTM is in one of the Top 3 universities selected and 71.5% of students have indicated that the choice of programme offered is within the Top 3 selected during application. The values stood at 78.2% for university selection and 72.4% for programme selection in the academic year of 2009/2010.

5.2. Second survey

A comparison of results is made between three academic sessions i.e. 2004/2005, 2005/2006 and 2009/2010 academic sessions. The results were analysed based on five domains i.e. perception towards the university, perception towards academic programme, university facilities, time spent on facilities and students' perceived personal development.

5.2.1. Perception towards the university

In general, students have positive perception towards the university. The following table summarises the responses under this domain:

Table.2: Students' perception towards the university (%)

	04/05	**05/06**	**09/10**
Very positive	15.87	17.84	19.3
Positive	77.64	78.37	76.2
Negative	3.34	2.85	3.4
Very negative	0.27	0.38	0.4

5.2.2. Perception towards academic programme

Respondents were asked to rate, on a five-point Likert scale, their perception towards their academic programme in five aspects. The rating scale varied from "1" (strongly disagree) to "5" (strongly agree). The table below shows a summary of the responses for three academic years:

Table.3: Summary of responses (Student perception towards academic programme)

Statement	**Average rating per academic year**		
	2004/2005	**2005/2006**	**2009/2010**
The subjects are challenging	4 (54.01%)	4 (56.17%)	4 (48.7%)
Understanding correlation between subjects	4 (58.16%)	4 (58.44%)	4 (53.4%)
All first year students work hard for their studies	3 (42.11%)	4 (38.33%)	3 (42.2%)
The programme specification given enables me to understand and gain interest in the programme	3 (45.63%)	3 (50.47%)	3 (48.5%)
I encounter challenges with the large number of students per lecture	3 (36.07%)	3 (31.12%)	3 (37.50%)

On average, respondents from each academic year gave similar responses for almost all aspects measured under this item. The respondents agree that the subjects in the first year are challenging and they understand the correlation between subjects offered. However, most respondents stood on neutral grounds with regard to their peer's effort in their studies, the function of programme specification and the number of students per lecture session. Respondents are also asked on their satisfaction level on academic experience in seven aspects. The rating scale also varied from "1" (strongly disagree) to "5" (strongly agree). The responses are summarised in the table below:

Table.4: Summary of responses (Student satisfaction with their academic experience)

Statement	**Average rating per academic year**		
	2004/2005	**2005/2006**	**2009/2010**
Quality of lectures	3 (43.55%)	4 (51.61%)	4 (43.3%)
Opportunity to use computers	4 (43.1%)	4 (50.66%)	4 (36.2%)
Feedback obtained from academic staff on students' performance	3 (45.54%)	4 (49.34%)	4 (43.9%)
Relationship with academic advisor	3 (41.84%)	4 (43.83%)	3 (42.5%)
Academic staff's concern over my studies	3 (44.09%)	4 (46.49%)	4 (41.8%)
Effort by friends on learning	4 (51.13%)	4 (57.31%)	4 (48.6%)
Opportunity to learn from friends	4 (54.91%)	4 (61.29%)	4 (53.3%)

The responses are more varied for this item, with respondents split between "neutral" and "agree" for all aspects. Statistical data analysed using Statistical Package for Social Sciences (SPSS) showed that the responses are positively skewed; it can be inferred that the respondents are positively satisfied with their academic experiences in the campus.

5.2.3. *Time spent on campus*

The respondents are also asked of the amount of time spent in 8 types of activities in a week. The rating scale also varied from "1" (not available), "2" (1-5 hours), "3" (6-10 hours) to "6" (more than 20 hours). Their responses are summarised as follows.

Table.5: Summary of responses (Amount of time spent)

Activity	Average rating per academic year		
	2004/2005	2005/2006	2009/2010
Studying / revision	2 (36.97%)	2 (40.8%)	2 (48.9%)
Socialising with friends	2 (29.31%)	2 (33.59%)	2 (36%)
Conversations with lecturers outside of class	2 (58.7%)	2 (57.12%)	2 (54.5%)
Sports activities	2 (55.46%)	2 (60.53%)	2 (56.9%)
Volunteering	1 (43.01%)	1 (50.09%)	1 (44.9%)
Society / organisations	2 (47.97%)	2 (52.56%)	2 (43.9%)
Watching TV	2 (48.24%)	2 (51.24%)	2 (39.5%)
Reading	2 (52.93%)	2 (52.26%)	2 (50%)

On average, all respondents across academic sessions spent 1-5 hours in the activities prompted. It can be observed, however, that students are not spending time on volunteering activities in and outside of campus. While this only serves as estimation on the respondents' activities outside lecture halls, it should serve as a baseline data on how students manage their time in campus, and the opportunity for faculty members to educate first year students on productive and efficient time management.

5.2.4. *Facilities*

Students are exposed to facilities offered on campus during their orientation week. The survey prompted respondents' usage of eight major facilities i.e. library, computer centre, health centre, bursary, counseling and career centre, students' affair office, sports centre and the student union building. The following summarises students' usage of university facilities, in a 4-point Likert scale ranging from "1" (Did not know), "2" (Know but never used), "3" (Used but not satisfied) and "4" (Used and satisfied).

Table.6: Summary of responses (Facilities used)

Facility	Average rating per academic year		
	2004/2005	2005/2006	2009/2010
Library	4 (59.78%)	4 (59.96%)	4 (38.9%)
Centre for Information and Communication Technology	4 (49.86%)	4 (50.09%)	4 (50.3%)
Counselling and career centre	2 (58.61%)	2 (60.34%)	2 (62%)
Bursar office	4 (37.06%)	2 (41.18%)	2 (39.4%)
Students' affairs office	4 (57.06%)	2 (41.18%)	2 (44.1%)
Sports unit	2 (48.87%)	2 (48.39%)	4 (54.3%)
University clinic	4 (56.45%)	4 (55.41%)	4 (34.4%)

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| Student union building | 2 (42.2%) | 2 (42.88%) | - |

Respondents across all academic sessions are generally well aware of the facilities and utilised the library, computer centre, sports centre and health centre the most throughout their transitional period in university. It is interesting to note that the counseling and career centre, as well as the student union building are the least used facilities by the students, with more than 50% of students in every academic session stating that they are aware of these facilities but do not utilise them. The respondents' feedback on the usage may reflect on the type of activities and engagement students have for each facility, and should be an indication on the variety, attractiveness and functionality that each facility should portray to encourage more first year students to utilise such facilities.

5.2.5. *Students' perceived personal development*
Respondents were asked to rate, on a 3-point Likert scale, their perception towards 14 different skills. Their responses are as summarised in the table below.

Table 7: Skills measured

Skills	
Written English	Critical thinking
Spoken English	Adaptation to surrounding
Reading	Lifelong learning
Listening	Self confidence
Problem solving	Accountability and honesty
Analysis and idea evaluation	Career preparation
Team working	Intellectual development
Creative thinking	Personality development

All respondents across academic sessions rated "2" or "satisfied" with their skills, with an average percentage for the response of more than 60%. It can be drawn from the responses that students have positive perception in the skills necessary for their academic pursuits, and are generally confident in facing the challenges in their studies.

6. Discussion and recommendation

A challenge identified in annual reviews of the FYE implementation is the lack of support from academic staff. While FYE may concern with a handful of academic advisors and staff involved with teaching first year students, it is important for all levels of the faculty to collaborate and be involved in the implementation. This is to enable programmes conducted to be more relevant and appealing for first year students, assisting the students to assimilate into various systems within the university.

The survey reflects the demography of students commencing their tertiary education in the institution. For example, based on the students' economic background, it can be deduced that the university would need to provide, or advice students on the available funding options so as to enable students to pursue their tertiary education in the university. The numbers also show increasing access of higher education to a greater group of post-secondary population, hence increasing the output of degree-holders for the country's skilled labour market.

The survey conducted in each academic session is a feedback of students' first year experience, and is useful to make sense of students' background and involvement in academic and social communities of the university. The survey also provides markers on students' university experience. However, the survey only shows general feedback

of the students and further studies need to be done to obtain specific feedback, such as students' adaptation to academic load, students' stress levels and other relevant items. On the other hand, the sample consists of 20 – 30% of total first year population of the university. With an established instrument validated through years of testing and modification, it is time to tailor the method in which the survey is conducted so as to enable greater response from the students. A method for consideration would be online surveys, as a large number of students are able to access the Internet through computer labs in faculties and residential colleges, not to mention the availability of wireless connection around the campus.

Of recent years, the university is faced with diversified student demography. For example, there is an increase in international student population in the university. The international student population adds on the diversity of the student body, and it is apt to enquire first year students on their perception and interaction with international students. On the other hand, the enrolment of undergraduates into the university has involved cohorts born post-1980, known as the "Generation Y" (for those born in the 1980s) and "Generation Z" (for those born in the 1990s) in the media. They have distinctive characteristics, such as technology-savvy, highly connected to the Internet, and may have different expectations as compared to those from earlier generations. While the survey is a general indicator of first year students' experience in campus, it might need some alterations to fit the growing generation in the campus.

The diversity in student demography is also an opportunity for further correlation studies to be conducted within the similar context of FYE. For example, a potential study to be explored is the relationship between pre-university stream admission and students' performance. With the Malaysian system of multiple pre-university options available, it may be beneficial to identify the differences stem from the options that might affect first year students' adaptation in university, pinpointing specific remedial programmes that would assist students along their course of studies. Recent developments in the university should also be considered i.e. the increase of international students in the campus, as this will, to a certain extent, affect the diversity of student population.

The study has demonstrated the variety of experiences students faced in their commencement and the importance of FYE as an intervention programme in enhancing their university experience. The empirical data obtained from the survey is a foundation for policy makers and administrators to better engage their staff in all intervention programmes, and to elicit clearer information and more personalized support for students, as there is no "one size fits all" for first-year intervention programmes, It is also important for faculties to thoroughly assess and evaluate their FYE implementation so as to provide greater enhancements on current practices of FYE in the university.

Acknowledgements

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