

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 EDUCATIONAL DEVELOPMENT IN MALAYSIA**

Since 1995, the Government of Malaysia has passed six legislation to position Malaysia as a regional education hub. The enactment of Education Act 1996, the National Council on Higher Education Institutions Act 1996, the Private Higher Education Institutions Act 1996, the National Accreditation Board Act 1996, the Universities and University Colleges (Amendment) Act 1996 and the National Higher Education Fund Board Act 1997 has facilitated a more comprehensive and market-driven education system. The Education Act 1996 was aimed at expanding education in the country. The Private Higher Education Institutions Act 1996 made provision for the establishment of private universities, university colleges and branch campuses of foreign universities. Under the National Council on Higher Education Institutions Act 1996, a national body was set up to determine the policy and coordinate the development of tertiary education in the country. The National Accreditation Board Act 1996 was enacted to ensure the maintenance of academic standards, quality and controls. The Universities and University Colleges (Amendment) Act 1996 was enacted to corporatize the management and administration of public universities. The National Higher Education Fund Board Act 1997 provides educational loan and financial assistance to students studying in higher education institutions in Malaysia. With these educational and legal frameworks in place, the new education system will

enable institutions of higher learning to offer a wider range of courses, a better management system and a higher standard of education.

The cost of education and training in Malaysia are largely borne by the Federal Government. Under the Sixth Malaysia Plan, the expenditure for education and training was RM 7.56 billion, and the amount allocated for Seventh Malaysia Plan was RM 10.1 billion (Malaysia, 1996, pp. 339). Malaysia provides 11 years of free schooling, which includes 6 years of primary education, 3 to 4 years of lower secondary education and 2 years of upper secondary education. Upon completion of the upper secondary education, students sat for the 'Sijil Pelajaran Malaysia' Examination (SPM), the equivalence of British 'O' Level Examination.

Over 99% of all six-year-olds are enrolled in schools. In 1980, 72% of the population aged 10 years and above had attended school. This had increased to 85% in 1991 and 91% in 1995. The enrolment in primary schools had increased from 2,445,600 students in 1990 to 2,766,870 in 1995, and it is estimated to reach 2,922,860 in 2000. In 1990, the enrolment in the upper secondary schools was estimated at 371,760, increasing to 514,970 in 1995 and 693,880 in 2000. With the rapid increase in the enrolments in both primary and secondary schools and the limited places available in the public universities, the demand for tertiary education has increased rapidly. There are a number of private schools, which take students through both the Malaysian and selected overseas curriculum. These are growing in popularity as they give students a greater choice of studies. A two-year Sixth Form programme and a one-year matriculation programme in

the post secondary education prepare students for entry into the local and foreign universities. Total enrolment in these two programmes increased from 73,980 in 1990 to 80,080 in 1995 and 95,530 in 2000. Comparing to the statistics of the enrolment in upper secondary schools, post secondary and tertiary level. Table 1.1 shows a severe shortfall in the progression from secondary to tertiary education. Malaysia's institutions for tertiary education are part of our education system aimed at providing affordable learning opportunities. The demand for university places, particularly in professional courses, has outstripped the availability of places within the national university system. This has further propelled the growth of the private educational industry in Malaysia. A number of privately funded universities and colleges have been set up in recent years. Several leading universities from overseas have set up either branch campuses or twinning programmes with Malaysian counterparts. In 2000, an estimated 251,080 students and 95,530 students who had completed their upper secondary education were enrolled either in the public universities and post secondary education respectively (Malaysia, 1996, pp. 306). These figures are considerably lower than the number of students who have enrolled in the upper secondary schools in 1995.

**Table 1.1: Enrolment of students in Malaysia, 1990, 1995 and 2000**

Level	1990	1995	2000
Primary	2,445,600	2,766,870	2,922,860
Lower Secondary	943,920	1,124,910	1,279,020
Upper Secondary	371,760	514,970	693,880
Post Secondary	73,980	80,080	95,530
Tertiary:			
Certificate	10,130	17,080	21,280
Diploma	32,020	46,930	61,900
Degree #	58,440	89,600	167,900

*Source: Malaysia, 1996, pp 306*

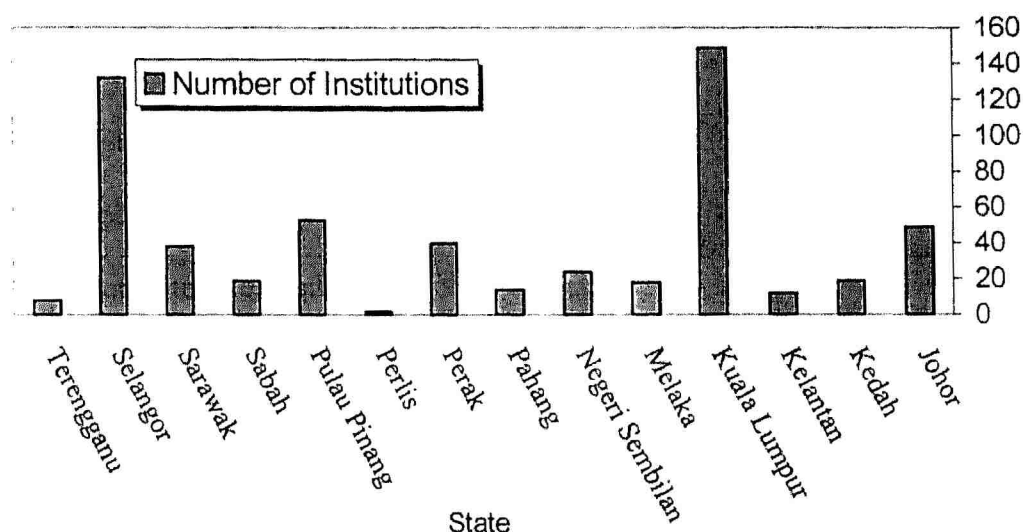
*Enrolment refers to total student population in that particular year at the particular level of education*

*# Includes enrolment in post-graduate courses in institutions of higher learning and enrolment in advanced diploma courses at the Institut Teknologi Mara (ITM), Kolej Tunku Abdul Rahman and off campus courses at the Universiti Sains Malaysia and the ITM.*

## **1.2 PRIVATE EDUCATION INSTITUTIONS**

There are currently 599 private higher educational institutions and their branches throughout the country. The majority of these are small-scale institutions. Most of them are located in the Klang Valley. There are 149 private institutions in Kuala Lumpur and 132 in the State of Selangor. The distribution of private institutions of higher learning is shown in Figure 1.1.

Figure 1.1 : Distribution of private institutions by States in Malaysia, 1999



Source: Challenger Concepts (M) Sdn Bhd 2000

In 1995, about 50,600 students (Malaysia, 1996, pp 313) and 6,100 students (Malaysia, 2000, pp 1) were enrolled in the degree courses overseas and in the local private institutions respectively. The recent development of institutions of higher learning is summarized in Table 1.2. The number of students (mostly enrolled in pre-university programmes) in the private colleges increased sharply from 127,596 in 1995 to 195,391 in 1999. The courses offered by these Colleges range from the pre-university courses to twinning programmes that offer degrees and professional and semi-professional qualifications. These courses provide an affordable alternative to studying overseas for those who could not gain entry to the local public universities. These private institutions have also enrolled students from some 57 countries around the world (Malaysia, 2000, pp 1). The

growing number of private institutions of higher learning in recent years is reflective of the rapid socio-economic development in Malaysia. A large number of corporate bodies have invested in the education industry. This growth has provided more opportunities for Malaysians to pursue their higher education in Malaysia. The proliferation of private colleges has also reduced the outflow of foreign exchange with the diversion of oversea-bound students to the local institutions. However, the private institutions of higher learning need to be continually upgraded in terms of both teaching standards and environment to maintain the quality of education in the country. Since the private institutions of higher learning are playing a vital role in the new education system, there is a need to conduct in-depth studies of the various aspects of these colleges. The main objective of this research is to investigate factors affecting the choice of college and courses, to provide some guidance to those who run the education industry and students who wish to enroll in a private college.

**Table 1.2 : Total number of private institutions and student enrolment,  
1995-1999**

Year	No. of Institutions	No. of Students
1995	196	127,596
1996	233	133,199
1997	320	143,603
1998	365	168,489
1999	599	195,391

*Source : Malaysia, 2000, pp 1*

### 1.3 TRENDS IN EDUCATION 1991 - 2000

The move towards greater automation, capital-intensive and knowledge-based industries has brought about new challenges, specifically the shortage in skilled manpower. Accelerated skill training and increased higher education are required to meet the increasing demands for professional and skilled manpower in the future. In 1995, the recorded employment for engineers was 55,254 persons and estimated to reach 83,590 in 2000, an increase of 51.3%. The demand – supply gap in 2000 and 1995 indicated a shortage of 7,291 persons and 23,258 persons respectively. Table 1.3 shows employment by selected occupation and the demand-supply gap.

**Table 1.3 : Employment by selected occupation and demand-supply gap  
1995, 2000**

Occupation	1995	2000	Demand –supply Gap 1995	Demand –supply Gap 2000
Engineers	55,254	83,590	-23,258	-7,291
Engineering Assistants	92,082	151,844	-22,225	-31,676
Medical & Health Professionals	14,903	21,328	-1,316	-2,470
Allied health Professionals	51,588	75,016	-1,510	-8,414

*Source : Malaysia, 1996, pp 114*

The shortages in the above professions have necessitated the education sector to create more opportunities for students to enroll in the Science stream. Table 1.4 shows the output and demand of IT manpower for the period 1991- 1995. The shortfall of 7,008 persons or 34.8% would have a great impact in developing Malaysia into an IT hub with international IT companies operating in Malaysia.

**Table 1.4 : Output – supply and demand of IT manpower 1991 to 1995**

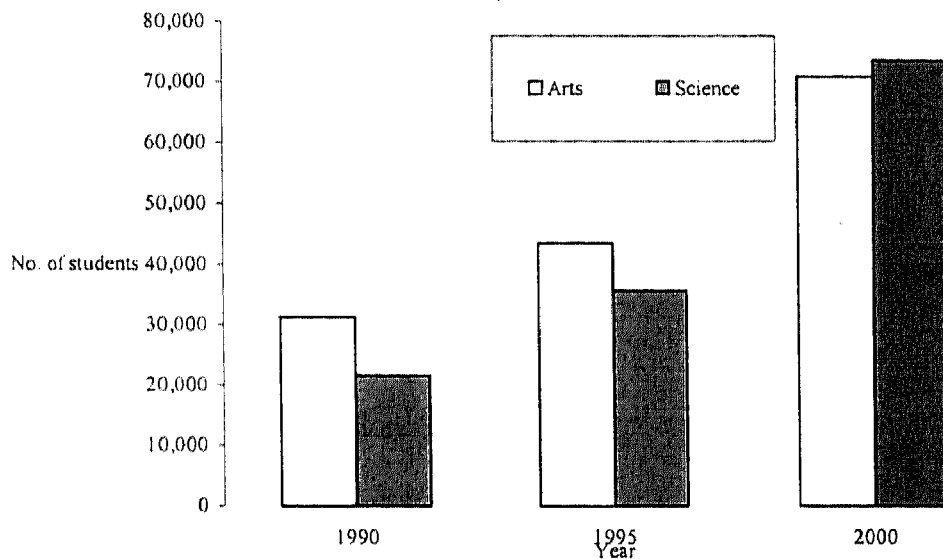
	Output	Demand
Private Sector	10,000	24,132
Public Sector	10,166	3,042
Universities & Colleges	6,520	
Polytechnics	3,646	
Total	20,166 (-7,008)	27,174

*Source: Malaysia, 1996, pp 459*



The demand for an educated and skilled workforce has greatly influenced the educational trend in Malaysia. In view of the need to increase more Science and Technical manpower, various measures were taken by the Ministry of Education to increase the supply of students with strong foundation in Mathematics and Science and Technical related subjects to enable them to enroll in the Science and Technical courses at the tertiary level. In 1990, the enrolment for first degree in Science discipline was 14,460 students and this had increased to 22,290 in 1995 and 42,280 students by 2000. The number of students enrolled in the Technical and related courses increased sharply from 7,130 student in 1990 to 13,430 in 1995 and 31,450 in 2000. Figure 1.2 shows the enrolment for first degree courses from the local public educational institutions.

**Figure1.2 : Enrolment for first degree courses by discipline  
1990, 1995 and 2000**



*Source : Malaysia, 1996, pp. 313*

In 1990, 59% of the enrolment for the degree courses was in Arts stream, but this has dropped to 55% in 1995 and to 49% in 2000. The corresponding increase in the enrolment of Science and Technical courses reflected the successful measures taken by the government to promote these courses. On top of this, in 1995 an estimated of 50,600 students or 20% of students in tertiary education were enrolled in various institutions overseas. Among them, 59.8% were pursuing Science, Medicine, Engineering and Technical related courses.

#### **1.4 LITERATURE REVIEW**

Past studies in the field of education have dealt mainly with academic performance and demand for higher education. Some of these studies examined socioeconomic and demographic as well as institutional variables in the selection of colleges. Qualitative research using focus group discussions have also been conducted to examine factors affecting the demand for college education.

The general conclusion cited in the literature was that school enrolment is inelastic to the cost of education. Ghali et al. (1977) found that demand for college education was quite inelastic with respect to both tuition and total cost of education. This finding was supported by Fuller et al. (1982) and Dickey et al. (1989). Bezmen and Depten (1998) found that demand for education was positively related to out-of-state tuition but inversely related to in-state tuition. They also found that enrolment in private schools was cost elastic but less income elastic as compared to enrolment in public schools. Using a regression model on student enrolment demand that controls for a number of financial,

academic and qualitative variables, Wetzel et al. (1998) concluded that enrolment yields were inelastic to net cost but the cost elasticity on enrolment for Blacks was roughly two third higher than for Whites. This finding indicates that ethnicity is an important determinant of college enrolment. The significant effect of tuition fees on enrolment demand should not be considered as contradictory to Spencer's hypothesis (Wetzel et al. 1998) that states the students viewed higher tuition fee as a representation of higher quality of education.

The effects of gender differences, family background and future earnings or wage premium on college attendance were part of the studies in the recent literature. Averett and Burton (1996) found a striking difference between male and female behaviour in the role of college attendance decision. The effect of wage premium was positive and statistically significant for men but not for women. Their finding also revealed that those who attended college have better educated parents and with parents who held professional jobs. Weiler (1996) had proposed a nested multinomial model on matriculation choices of high ability students based on the non-monetary institutional characteristics and the net cost of attendance. He found that attendance cost and non-monetary characteristics were both significant determinants of institutional choice. However, the results were only applicable to a subset of population only.

It has been widely reported that financial aids have played an important role in school choice. Fuller et al. (1982) confirmed that financial aid could be an important determinant of post secondary school attendance. Moore et al. (1991) found that tuition and scholarship affect the probability of enrolment for

financial aid applicants, but the loans and work-study assistance had no significant statistical effect. Wetzel et al. (1998) also found a decrease in the net cost due to increases in grants received by Black students, and this had a relatively large impact on enrolment yields.

Eide and Waehrer (1998) had analyzed the choice of college majors. They discovered that the decision by men to attend graduate school was strongly influenced by test scores in Mathematics and vocabulary. After controlling for test scores, non-White males were found to be significantly more likely to attend graduate school. They also extended their research into the effect of option value of college attendance that was represented by the probability of and rewards from graduate school attendance. The results indicate that option value was positive and significant in the choice of Liberal Arts and Science majors.

Fuller et al. (1982) confirmed Kohn, Manski and Mundel's (1976) conjecture on the effect of increases in school performance standards on the attractiveness of a school. They found that school performance increases directly the attractiveness of schooling until an optimum level. Further increase in the attractiveness will have negative effect on the school performance.

In the literature on school choice, little attention was given to examining the dynamic process of decision making. The embedded consultations, compromises, arguments and at times, conflicts that lie in the centre of the process of school choice need further analysis. West et al. (1998) had shown that choices about schools were made at different times and in different ways by parents. They discovered that the process of choosing schools began earlier in private than in

public schools. Quality of education was cited as one of the three main factors considered by parents in choosing a private school. The other factors quoted by them are happiness of students while in school and child's needs. Ball et al. (1996) concluded that choice is directly and strongly related to social class differences and it emerges as a major new factor in maintaining social class divisions and inequalities. Furthermore, the exercise of choice was recognized as a process of maintaining social distinctions and educational differentiation. Reay (1998) found that the interactions of gender, race or ethnicity and social class were key to understanding student's choice of education. Analyzing the interviews with 10 students from various social classes, she discovered that the influence of class was somewhat complicated but family influence was quite significant. Her study also revealed institutional habitues has a significant impact on decision making. In a study on parental choice of secondary education by Reay and others (1998), Bernstein's proposition of positional and person-orientated family type was deployed to further analyze the influence of social class differences in decision making. They found that children had greater power to influence choice in working class families. They also discovered that the democratic decision making in a number of middle class families masked tight parental control. They argued that most middle class children are given the impression that they share power within the family. However, processes of negotiation and discussion mask parental control.

## **1.5 OBJECTIVES OF THE STUDY**

A number of recent empirical studies have dealt with the estimation of the demand elasticity for higher education as a whole. However, little has been done about the elasticity of the demand of an individual institution and the decision making on the school choices. There is also a dearth of research on decision making on the choice of courses. Wetzel et al. (1998) noted that there were few studies on individual institutions. This was due to the easily availability of the national data whereas data on individual institutions is relatively difficult to obtain.

The objectives of this research on a private college are:

- a) To examine the characteristics of the students who have enrolled in this college and the course of study.
- b) To identify the factors affecting the choice of course of study from the perspectives of students who have enrolled in the college.
- c) To determine the factors influencing the decision making in the choice of college and course of study.
- d) To discuss the implications of the findings in relation to college enrolment and programme development.

## **1.6 THE PRIVATE INSTITUTION UNDER STUDY**

The private college in this study was located in the commercial centre in the Klang Valley, the nation's administrative, commercial and industrial hub. It is one of the oldest and reputable private institutions of higher learning in

Malaysia. The college had prepared over 30,000 successful graduates for higher education through a comprehensive range of internationally recognized courses. The college offers a wide range of courses from pre-university to tertiary levels. The pre-university courses include the Cambridge 'A' Level Programme (CAL), Canadian Pre-University Programme (CPU), South Australian Matriculation Programme (SAM) and the College Foundation Programme (TUBF). CAL programme accepts students with SPM or 'O' Level qualifications. Upon completion of the eighteen-month course, students are required to sit for an external examination set by the UK counterpart. The assessment grades for the students are determined by this external examination. The quality and standard of the examination are maintained by the external counterparts in United Kingdom. This programme generally prepares students for entry into any foreign universities, particularly the British Universities. SAM programme prepares students who wish to further their studies in Australian and New Zealand. The duration of the SAM programme is one year. Students join the programme after completing their upper secondary education while waiting for their SPM or 'O' level Examination results. The assessment consists of two main components, namely the summative assessment and formative assessment. In the summative assessment, students are continuously assessed based on their assignments, projects and time independent tasks. The formative assessment is based on the final year end examination. This system of assessment follows closely that of South Australia. Students who are enrolled in the one-year CPU programme would normally proceed to higher education in Canada, Australia or the States.

The assessment criterion used by this programme is very different from the CAL and SAM programmes. The assessment grades are obtained solely based on whatever tasks given during the duration of the course. The Ontario Education Board in Canada assures the quality and the standard of the CPU programme. The duration of the course is one year or one and half year depending on the student's capability. Similarly, the College Foundation Programme is a one-year course monitored by the partner universities. The course is suitable for students who have completed Form 5 and wish to pursue a business degree. The assessment used is very much on course work and internal examinations.

In recent years, the college has ventured into the twinning programmes. With the twinning concept, the college runs several degree courses offered by the Partner University or Universities. The degree programme can either be completed fully or partially in the college with the certificate awarded by the Partner University. The two programmes offered by this college are the Australian and American twinning programmes in which the students have an option to complete their tertiary education in Malaysia or overseas. These programmes accept students who have completed the pre-university courses. The Australian Twinning Programme (UTS) offers tertiary courses by the Australian University to the students. The other course offered by the College is the American Degree Programme (ADP). The duration for the ADP is four years. Students are given the option to complete the first two or three years at the College and the remaining in the States. This course is popular among students who wish to obtain a degree from the States.



## **1.7 OUTLINE OF REPORT**

This report consists of six chapters. Chapter One gave an introduction to the education system, specifically the private education in Malaysia. This was followed by the literatures on the choice of college and course of study in the schools and college.

Chapter Two discusses the research methodology, including the conduct of the survey and focus group discussions. The sampling design and methods of data collection will be discussed. The socio-demographic profiles and academic background will be taken up in Chapter Three.

In the Chapter Four, the correlates and determinants of choice of programme and college are investigated. Polytomous logistic models were constructed for the choice of college and the choice of course of study. Some important factors that affect the choice are discussed.

Chapter Five focuses on decision making process on choice of college and course of study. Polytomous logistic regression models will be used to analyze the decision making in the choice of college and courses.

Chapter Six summarizes the salient findings and highlights issues related to the implications of the findings and the shortcomings. Some suggestions for future study will also be put forth.