

2013

# An investigation of factors affecting high school student's choice of university in Thailand

Kamol Kitsawad

*University of Wollongong*

## **UNIVERSITY OF WOLLONGONG**

### **COPYRIGHT WARNING**

You may print or download ONE copy of this document for the purpose of your own research or study. The University does not authorise you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site. You are reminded of the following:

Copyright owners are entitled to take legal action against persons who infringe their copyright. A reproduction of material that is protected by copyright may be a copyright infringement. A court may impose penalties and award damages in relation to offences and infringements relating to copyright material. Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

**AN INVESTIGATION OF FACTORS AFFECTING  
HIGH SCHOOL STUDENT'S CHOICE OF  
UNIVERSITY IN THAILAND**

By

**Kamol Kitsawad**

B.Ed., Chulalongkorn University, Thailand

M.Ed., Chulalongkorn University, Thailand

Submitted to the University of Wollongong  
in partial fulfillment of the requirements  
for the award of the degree

**Doctor of Philosophy  
in Education**

April 2013

# **Certification**

I, Kamol Kitsawad, declare that this thesis submitted in partial fulfillment of the requirements for the award of Doctor of Philosophy in Education, University of Wollongong, is wholly my own work, unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other institutions.

Kamol Kitsawad

April 23, 2013

## **Acknowledgement**

This thesis would not have been possible without the guidance and the help of several individuals who in one way or another contributed and extended their valuable involvement in the preparation and completion of this research.

First and foremost, I owe a most grateful tribute to my research supervisors at the Faculty of Education, University of Wollongong, Associate Professor Ian Brown, Professor John Patterson, and Associate Professor Linchong Chorrojprasert for their untiring guidance, caring, patience and inspiration throughout the most demanding part of my academic profession. I would also like to thank Dr. Preecha Methavasarakh, as a good friend, for his statistical expertise and enlightenment.

I am also grateful for the opportunity and the funding by Assumption University of Thailand and the University of Wollongong that made it possible for me to pursue my studies and conduct this research. In addition, I would also like to express my gratitude to Rev. Brother Bancha Saenghiran, President of Assumption University of Thailand; Rev. Brother Prathip M. Komolmas and Professor Gerard Sutton, the then Vice-Chancellor of the University of Wollongong for their unfailing support in my academic pursuits. I sincerely appreciate Mr. David Rome for his steadfast encouragement since the commencement and throughout the path of my academic endeavour, accepting my inclination for procrastination and guiding me constantly back to task.

My sincere appreciation to the principals and the high school students of the 17 schools in Thailand who participated in my study; without their kind assistance this research would not be possible.

I am also thankful to my colleagues and the librarians both at Assumption University of Thailand and the University of Wollongong for their constant support and assistance. Last, but never the least, my wholehearted thanks to my wife, Naiyana Kitsawad, and my daughter, Kamolnate Kitsawad for their silent support from the very beginning until the very present day. They have been ready to forgo leisure or undergo difficult moments thus far to see me realize my goal.

## **Abstract**

The purpose of the study was to investigate into the factors influencing high school student's choice of university in Thailand with the aims to ascertain and explore as to how Thai high school students who aspire to embark on higher studies make their choice of university and why they choose one university over the others.

To address the purpose of the study, the following research questions were posed:

- What factors influence students' choice of university in Thailand?
- Which attributes or characteristics of the university influence students' opinions and perceptions on university choice?
- Which persons influence students' decision making on choice of university?
- What source of information do students use for decision making on choice of university?

A mixed mode methodology was employed in this study, with both quantitative and qualitative methods serving different purposes in sequential phases. A focus group was conducted to guide the development of the data collection instrument used in the actual study. A pilot test was carried out to ensure the validity and reliability of the data gathering instrument – the questionnaire. In the final stage of data collection, semi-structured interviews were conducted to confirm the findings and further explore potentials for future study. Purposive sampling design was chosen as the most appropriate approach in recruiting the sample size from Thai high school students. Both descriptive and inferential data analysis were conducted for data interpretation and content-based analysis was employed for the qualitative data.

Though the summary of the descriptive statistics shows that the majority of the respondents in this study paid higher interest in the public universities, they perceived the university atmosphere as the dominant influencing factor on their choice of university. They were most likely to agree that the university atmosphere was the most important among the influencing factors when they considered their university choice. It appeared that they thought the university providing the environments and atmosphere conducive to learning as one of the most important factors when they chose a university, followed by the reputation factor especially for the university with the reputation for

high technology in all its infrastructure and teaching /learning facilities. University services were rated as another top important influencing factor particularly on the issue of university services on the adequacy and quality of library resources and services. When asked about location of the university, the respondents would consider the university in a convenient location as their priority in their choice. Another important influencing factor was the availability of financial aid provided by the institution. They would give more favorable choice to a university with a possibility for a scholarship.

Other factors were considered by the students in the survey, as rather neutral or not important for their choice of university. Finally, though they overwhelmingly stated that they would make their final decision on their choice of university by themselves, they also did consult with their parents and listen to their friends before making the decision.

# Table of Contents

	<b>Page</b>
<b>Certification</b>	ii
<b>Acknowledgement</b>	iii
<b>Abstract</b>	iv
<b>Table of Contents</b>	vi
<b>List of Figures</b>	viii
<b>List of Tables</b>	ix
<b>Abbreviations</b>	xiii
<b><i>Chapter One: Introduction</i></b>	
Background of the study	1
Purpose of the study	2
Research questions	3
Theoretical framework	4
Operational terms	5
Education in Thailand	5
Thai Higher Education	7
Higher Education Institutions	8
Access to Higher Education	10
University admissions system	11
Overview of the thesis	15
<b><i>Chapter Two: Review of literature</i></b>	
Overview of the chapter	17
Benefits of university education	18
Choice Theory	19
Study undertaken in Thai contexts	42
Summary	43
<b><i>Chapter Three: Methodology</i></b>	
Overview of the chapter	45
Research paradigms	46
Research design	48
Data gathering procedures	56
Sampling design	56
Phase 1: Qualitative Data Collection-Focus Group	58
Phase 2: Quantitative Data Collection-Survey	60
Phase 3: Qualitative Data Collection-Interview	65
Mixed methods data analysis	68
Data presentation	71



	<b>Page</b>
Study limitations	74
<b><i>Chapter Four: Findings of the study</i></b>	
Overview of the Chapter	76
Participants' profile	78
Findings : Qualitative & Quantitative	87
Gender	87
Region of residence	97
Type of school	119
Major of study	127
Grade Point Average	135
Household income	144
Parental education	154
<b><i>Chapter Five: Discussion, implications and recommendations</i></b>	
Overview of the Chapter	165
Factors influencing Thai students' choice of university in Thailand	167
University attributes and characteristics	172
Persons influence students' decision making on choice of university	174
Sources of information used for decision making	175
Implications	175
Recommendations	177
Conclusions	179
<b><i>References</i></b>	180
<b><i>Appendices</i></b>	202
Appendix A: The National Education Act of 1999	202
Appendix B: Ethics Documents	232
- Request for permission in data gathering from high school students	233
- Information Sheet for student (Focus group discussion)	235
- Information Sheet for student (Survey questionnaire)	237
- Consent form for student	239
Appendix C: Pilot Study and Survey Questionnaires (English & Thai)	241
Appendix D: Number of Grade12 students in Thailand by region	266

## List of Figures

Figure		Page
3.1	Mixed method design matrix	53
3.2	Decision choices for determining a mixed methods strategy of inquiry	55
3.3	Sequential Explanatory Design	56

## List of Tables

Table	Page
1.1 Number of institutions by Office of the Higher education Commission	9
1.2 Number of students in institution by level of education	11
1.3 Elements Determining University Admission in 2006 System	13
1.4 Elements Determining University Admission in 2010 System	14
3.1 Summary of the contrasts between the two paradigms based on Assumptions	47
3.2 Summary of characteristics of quantitative and qualitative research methods	50
3.3 Strengths and weaknesses of mixed research	52
3.4 Cronbach alpha of responses to factors on opinions and perception on choice of university factors	64
3.5 The continuum of interviewing methods	66
3.6 Stages of mixed methods data analysis process	69
3.7 Stages of integration of quantitative and qualitative approaches	72
3.8 Survey questions according to the opinions and perceptions	72
4.1 Distribution of survey questionnaires by regions	79
4.2 Distribution of survey questionnaire by regions and schools	79
4.3 Participants by gender	80
4.4 Participants by age	81
4.5 Number of students by type of school	81
4.6 Number of respondents by educational majors	82
4.7 The distribution of participants by grade point average (G.P.A.)	82
4.8 Type of activity and number of students participating in each activity	83
4.9 Respondents' living arrangement	83
4.10 Father's occupation	84
4.11 Mother's occupation	85
4.12 Students' household income per month	85
4.13 Level of father's education	86
4.14 Level of mother's education	87
4.15 Students' parents' marital status	87
4.16 Opinions and perceptions on the type of university by gender	88
4.17 Opinions and perceptions on the medium of instruction by gender	89
4.18 Opinions and perceptions on the university curriculum by gender	89
4.19 Opinions and perceptions on the university atmosphere by gender	91

	<b>Page</b>
4.20 Opinions and perceptions on the university admission standard by gender	92
4.21 Opinions and perceptions on the university reputation by gender	92
4.22 Opinions and perceptions on the university services by gender	93
4.23 Opinions and perceptions on the university location by gender	94
4.24 Opinions and perceptions on the living expense by gender	95
4.25 Opinions and perceptions on the Tuition fees by gender	95
4.26 Opinions and perceptions on the financial aid by gender	96
4.27 Opinions and perceptions on the type of university by region of residence	98
4.28 Opinions and perceptions on the medium of instruction by region of residence	100
4.29 Opinions and perceptions on the university curriculum by region of residence	102
4.30 Opinions and perceptions on the university atmosphere by region of residence	104
4.31 Opinions and perceptions on the university admission standard by region of residence	106
4.32 Opinions and perceptions on the university reputation by region of residence	108
4.33 Opinions and perceptions on the university services by region of residence	110
4.34 Opinions and perceptions on the university location by region of residence	112
4.35 Opinions and perceptions on the living expense by region of residence	114
4.36 Opinions and perceptions on the Tuition fees by region of residence	116
4.37 Opinions and perceptions on the financial aid by region of residence	118
4.38 Opinions and perceptions on the type of university by type of high school	119
4.39 Opinions and perceptions on the medium of instruction by type of high school	120
4.40 Opinions and perceptions on the university curriculum by type of high school	121
4.41 Opinions and perceptions on the university atmosphere by type of high school	121
4.42 Opinions and perceptions on the university admission standard by type of high school	122
4.43 Opinions and perceptions on the university reputation by type of high school	123
4.44 Opinions and perceptions on the university services by type of high school	124
4.45 Opinions and perceptions on the university location by type of high school	125
4.46 Opinions and perceptions on the living expense by type of high school	125

	<b>Page</b>
4.47 Opinions and perceptions on the Tuition fees by type of high school	126
4.48 Opinions and perceptions on the financial aid by type of high school	127
4.49 Opinions and perceptions on the type of university by major of study	127
4.50 Opinions and perceptions on the medium of instruction by major of study	128
4.51 Opinions and perceptions on the university curriculum by major of study	129
4.52 Opinions and perceptions on the university atmosphere by major of study	129
4.53 Opinions and perceptions on the university admission standard by major of study.	130
4.54 Opinions and perceptions on the university reputation by major of study	131
4.55 Opinions and perceptions on the university services by major of study	132
4.56 Opinions and perceptions on the university location by major of study	133
4.57 Opinions and perceptions on the living expense by major of study	133
4.58 Opinions and perceptions on the Tuition fees by major of study	134
4.59 Opinions and perceptions on the financial aid by major of study	134
4.60 Opinions and perceptions on the type of university by grade point average	135
4.61 Opinions and perceptions on the medium of instruction by grade point average	136
4.62 Opinions and perceptions on the university curriculum by grade point average	137
4.63 Opinions and perceptions on the university atmosphere by grade point average	138
4.64 Opinions and perceptions on the university admission standard by grade point average	139
4.65 Opinions and perceptions on the university reputation by grade point average	140
4.66 Opinions and perceptions on the university services by grade point average	141
4.67 Opinions and perceptions on the university location by grade point average	142
4.68 Opinions and perceptions on the living expense by grade point average	142
4.69 Opinions and perceptions on the Tuition fees by grade point average	143
4.70 Opinions and perceptions on the financial aid by grade point average	144
4.71 Opinions and perceptions on the type of university by household income	145
4.72 Opinions and perceptions on the medium of instruction by household income	146
4.73 Opinions and perceptions on the university curriculum by household income	146
4.74 Opinions and perceptions on the university atmosphere by household income	147

	<b>Page</b>
4.75 Opinions and perceptions on the university admission standard by household income	148
4.76 Opinions and perceptions on the university reputation by household income	149
4.77 Opinions and perceptions on the university services by household income	150
4.78 Opinions and perceptions on the university location by household income	151
4.79 Opinions and perceptions on the living expense by household income	152
4.80 Opinions and perceptions on the tuition fees by household income	152
4.81 Opinions and perceptions on the financial aid by household income	153
4.82 Opinions and perceptions on the type of university by parental education	154
4.83 Opinions and perceptions on the medium of instruction by parental education	155
4.84 Opinions and perceptions on the university curriculum by parental education	156
4.85 Opinions and perceptions on the university atmosphere by parental education	157
4.86 Opinions and perceptions on the university admission standard by parental education	158
4.87 Opinions and perceptions on the university reputation by parental education	159
4.88 Opinions and perceptions on the university services by parental education	160
4.89 Opinions and perceptions on the university location by parental education	161
4.90 Opinions and perceptions on the living expense by parental education	161
4.91 Opinions and perceptions on the tuition fees by parental education	162
4.92 Opinions and perceptions on the financial aid by parental education	163

## Abbreviations

AIT	Asian Institute of Technology
A-NET	Advanced National Education Test
ASEAN	Association of South East Asian Nations
BAfoeG	Financial Assistance for students of higher education
CUAS	Central University Admission System
GAT	General Aptitude Test
GDP	Gross Domestic Product
GPA	Grade Point Average
GPAX	Cumulative grade point average
ICT	Information and Communication Technology
MOE	Ministry of Education
MUA	Ministry of University Affairs
NSW	New South Wales
OHEC	Office of the Higher Education Commission
O-NET	Ordinary National Education Test
PAT	Professional Aptitude Test
SES	Socioeconomic Status
SPSS	Statistical Package for the Social Sciences
UCLA	University of California, Los Angeles
UNESCO	United Nations Educational, Scientific and Cultural Organization
UOW	University of Wollongong

## **Chapter One**

### **Introduction**

#### **Background of the Study**

Statisticians predict that over the next few decades the demand for higher education places in Thailand will increase. This, according to Kirtikara (2001), is as a consequence of the introduction of the 1999 National Education Act which has resulted in the mandated 9-year compulsory education and 12-year free basic education for all students. An alternative view is proposed by the Office of the Higher Education Commission (2008a). The 15-year Long Range Plan on Higher Education (2008-2022) projects a slightly different scenario where changes in demographics, particularly for the university age group 18-22, may result in a decrease in higher education expansion. This latter prediction was confirmed by the report on the number of students in the elementary education, which shows that there was a substantial drop from 5.84 million in 2005 to 5.14 million in 2009. Consequently, the overall number of students in all levels of the educational system in the country began to drop continuously from 14.62 million in 2006 to about 14 million in 2009 (Ministry of Education, 2009a).

All countries require accurate information in regards to student choice in relation to tertiary enrolment and participation. Extensive research has been carried out in the United States of America, in a number of European countries as well as in Australia to attempt to identify the various factors that influence students' choice of tertiary education. Factors include areas such as fields of study, employment prospects, institutional teaching reputation, the scholarly reputation of faculty, cost, location, distance and others (James, Baldwin & McInnis, 1999; Ashworth & Evans, 2001; Soutar & Turner, 2002). However, it appears there is no clear and comprehensive understanding about the factors related to choice of university education among students in Thailand. In particular, very little is known about the student preferences and the possible influences of cultural factors on their decisions on choices for higher education.

While a significant body of literature exists on the factors surrounding choice in tertiary education, surprisingly little is known and very limited in its ability to provide a clear and comprehensive understanding about the factors related to choice of university



education among the Thai freshmen population. Universities in Thailand need accurate information relating to the factors which influence the choice of courses and preferences made by students on universities to make informed decisions.

Three main issues will inform the nature of this study. The first issue relates to whether there is sufficient information on student aspirations and factors influencing the choices of universities and courses to help guide in University planning and administration. The second issue is that while universities in Thailand offer a range of courses, there is little information accessed relating to why students aspire to undertake particular university studies, why students choose one university over another, and why students choose to study one course over others at an institution. The third issue concerns the number of places available in universities for students seeking placement.

### **Purpose of the study**

The purpose of this study is to ascertain and to explore as to how Thai secondary school students who aspire to undertake university studies make their choice, why they choose one university over another, and why they choose to study one program or a particular program at a university. A mixed mode design using both qualitative as well as quantitative methods has been used. A sequential exploratory strategy (Creswell, 2003) has been adopted to implement this design. The qualitative data collection was carried out in the first phase by using focus group techniques in order to gather the necessary factors or the reasons for choice of higher education in the Thai context, in addition to those found in the relevant literature. These factors were later used to construct a quantitative survey instrument. This instrument enabled data collection from a larger population in the later phase of the study, in order to examine the phenomenon and expand on the qualitative findings.

This study is particularly useful for higher education management, as increased knowledge will lead to better planning for the future. While information relating to preferences in tertiary education will be better understood in the context of Thai culture, it may also have relevance to other cultures in the Southeast Asian countries. Finally, the findings will significantly help guide higher education institutions in their planning and policy making.

### **Significance of the study**

The significance of the study is to provide insights into the phenomena of students' university choice in a Thai context and suggest, if possible, ways and means for those involved for the improvement of their policies and practices.

Politically, the Thai government, the Ministry of Education in particular, can use the insights gained from this study to understand the decision making process of the high school students concerning their educational plans, develop policy and better inform academic counseling systems.

The information obtained will provide a better understanding of the economics involved. Parents and students can learn more about the range of choices available, make better or informed choices, and ascertain whether their educational and financial investment is worthwhile. In addition, higher education institutions could also plan their recruitment and admission policies and systems to better address the needs of their potential clients.

With regards to the social aspects of this study, the public in general with a better understanding of the phenomena will have a clearer picture about the educational system for future generations.

The study will also assist the Thai higher education sector to strategically plan and position better for the future. Moreover, the study will make an important contribution to the literature of higher educational management. In summary, the study will be particularly significant because the information on preferences of higher education institutions and courses will be better understood in the context of Thai culture and may have relevance to other cultures in the Southeast Asian countries.

### **Research Questions**

To address the purpose of the study the following research questions are posed:

- What factors influence students' choice of university in Thailand?
- Which attributes or characteristics of the university influence students' opinions and perceptions on university choice?
- Which persons influence students' decision making on choice of university?

- What source of information do students use for decision making on choice of university?

### **Theoretical Framework**

Choice Theory as developed by Glasser (1998) forms the basis for the theory underpinning the study, as Glasser states, although people share similar needs, the behaviors through which individuals choose to satisfy their needs may vary greatly. Economics also impacts on the decision making process. As Crossman (2010) reminds us people are monetarily motivated, meaning that they tend to consider opportunities and appraise the possible costs and benefits of future engagement before making their decision on what to do.

### **Study Limitations**

The limitations of this study are as follows:

1. The respondents included in the sample were Thai secondary school students, aged 17-18 years old in their last year of school. The respondents undertook the survey on a voluntary basis. The design and distribution of the survey instrument were not designed for sample balance in terms of gender, location, study majors etc. Thus, the analyses and interpretations are limited only to the sample chosen.
2. The factors identified and included in the study are based on the main stream of Higher Education sector found in private and public universities in Thailand only. Therefore, the survey data collected may not represent the higher education sector as a whole.
3. In regard to the sample, the results and interpretations of the study may not necessarily suggest or prescribe how a particular college or university should recruit and retain students due to the discrepancies in the institution context and system.
4. The data collected should not be considered statistically precise for financial forecasting or investment related to recruitment and retention.
5. The literature review is limited to recently published research, textbooks, reports, or articles in periodicals regarding student choice only.

### **Operational terms**

*High school students* refers to students who have completed their secondary programs of study as specified by the Ministry of Education of Thailand and are eligible to apply and enroll in a higher education institution.

*Thai Universities or Higher Education Institutions* refers to both private and public colleges or universities which are accredited by the Ministry of Education of Thailand, offering degree programs in undergraduate and/or graduate and postgraduate levels.

*Student choice* refers to the decision on preference of tertiary education institutions for possible further education. This decision is assumed to be made in relation to need satisfaction (Glasser, 1998) and the consideration of opportunity and appraisal on the possible costs and benefits for their future life (Crossman, 2010).

For the reader to gain an understanding of the context of the study, it was important that the education system of Thailand is understood. The following section is a brief historical description, followed by a detailed and rich outline of education in Thailand.

### **Education in Thailand**

Up until 1949, Thailand was commonly known as Siam. On May 11, 1949, the country's name was officially changed to "Prathet Thai" or "Thailand", and it has remained that name ever since. The word "Thai" means "free", thus the name, "Thailand" means, "Land of the Free" (Office of Prime Minister, 2000).

Thailand is the world's 50<sup>th</sup> largest country in terms of total land area, the 21<sup>st</sup> most populous country and the fourth largest in Southeast Asia. Its population density at 118.4 persons per square kilometer is moderate, particularly for Asia (GeoHive, 2012). The country is located in the central part mainland of Southeast Asia, with an area of 513,115 square kilometers. It shares the borders with four neighboring countries, namely the Lao People's Democratic Republic and the Union of Myanmar to the North, Cambodia and the Gulf of Thailand to the East, the Union of Myanmar and the Indian Ocean to the West, and Malaysia to the South (UNESCO, 2008). Thailand has dimensions of about 2,500 kilometers North to South and 1,250 kilometers East to West, with a coastline of approximately 1,840 kilometers on the Gulf of Thailand and

865 kilometers along the Indian Ocean (Office of the National Economic and Social Development Board, 1996) . In 2010 the total population was 63.9 million. The number of females is slightly higher than that of males. Thailand is a youthful country. About 19.36% of the population are less than 14 years old, 70.6% are 15-64 years old and only 9.98% are 65 years and older. The median age of population is 33.3 years old (National Statistical Office, 2011).

The population in Thailand includes the descendants of ethnic Chinese, Malays, Khmer, Lao, Vietnamese, Indians and others (Office of Prime Minister, 2000). Thailand geographically consists of five natural regions: the North, the Central or the Chao Phraya river Basin, the Northeast, the East and the Southern Peninsular. In the North lies a mountainous region comprised of large natural forests. The Central, the principal river system, is a fertile land area sustaining Thailand's agricultural economy. The capital city or Bangkok is situated in this region. The Northeast region lies on a plateau, which has rolling low hills, and shallow lakes, which makes it susceptible to floods and drought. The Southern region is more hilly and mountainous (Ministry of Science, Technology and Environment, 2000). There are 77 provinces that comprise Thailand's regions political borders, and each is administered by an appointed governor except for the capital Bangkok, since it is a special administrative area and has its own elected governor (Office of Prime Minister, 2000). Politics in Thailand are framed within a constitutional monarchy, where the Prime Minister is the head of government and a hereditary monarch is the head of state (Central Intelligence Agency, 2012).

The official language of Thailand is Thai, and it is the principal language of education and government and used throughout the entire country. Thailand is also host to several other minority languages. A variety of tribal languages are also spoken in different areas in Thailand. While English is a mandatory school subject, it is rare to find fluent speakers of English, especially outside the city limits (Office of Prime Minister, 2000).

One of the core pillars for economic development in Thailand is education. According to the World Bank, the public spending on education total (% of GDP) in Thailand was reported more than 4% of GDP or USD 20.84 billion in 2007 and 4.12% in 2009. Public expenditure on education consists of current and capital public expenditure on education. These include government spending on both public and private educational

institutions, education administration as well as subsidies for private entities such as students/households and a variety of others (Trading Economics, 2011).

**The National Education Act B.E. 2542 (1999) (*see Appendix A*)**

The National Education Act of 1999 is basically seen as the antidote for the serious problems in the Thai educational system. It provides a solid foundation to initiate and mandate the education reform, which is indeed a landmark movement in the history of the educational system. In brief, the major provisions of the Act include the following:

1. Basic education for all
2. Reform of the education system
3. Learning reform
4. Reorganization of administrative system
5. A system of quality assurance
6. Professionalism and quality of teaching profession (Reform of teachers)
7. Mobilization of resources and investment for education, and
8. Information and communication technology (ICT) for education reform.

**Thai Higher Education**

The Office of the Higher Education Commission, Thailand (OHEC) is responsible for higher education in Thailand at both undergraduate and graduate levels. The OHEC is under the supervision of the Higher Education Commission. According to the Article 16 of the Ministry of Education Regulatory Act, the Higher Education Commission has the authority to formulate higher education development policies and plans corresponding to the National Economic and Social Development Plan and National Education Plan. It has to set standards, provide resources, and carry out follow-up activities, inspections and evaluations of higher education management based on degree-granting institutions' academic freedom and performance. Moreover, the Higher Education Commission has to consider issuing regulations, criteria and official orders as deemed necessary.

There exists a wide gap in and among Thai universities in almost all aspects: size, budget, maturity, quality of staff, students and reputation. The rapid economic development of the past few decades has led to overprovision of large numbers of higher education institutes including universities to produce required manpower. This has all transpired despite inadequate planning, lack of proper funding, cohesion and

direction among public agencies concerned and linkages with the real sectors employing graduates (Office of the Higher Education Commission, 2008a). According to UNESCO (2010), there has been an oversupply of graduates in the field of social sciences while there has still been a great demand for human resources in the field of science and technology. Lack of manpower in technical and vocational fields to serve the needs of the industry sector has resulted in an attempt to introduce the work integrated learning into the higher education system.

### **Higher Education Institutions**

Thai higher education has undergone dramatic changes in the past four decades reflecting three major global trends: massification, privatization, and internationalization (UNESCO, 2011b). Higher education in Thailand began in 1889 in response to contact with Western nations (Office of the Higher Education Commission, 2008b). The founding of Siriraj Hospital in 1889, the country's first medical school, marked the beginning of higher education in Thailand. Initially, institutions were mainly centered in Bangkok and were designed to primarily train government officers. In 1950s and early 1960s education was expanded nationwide, increasing the need to train more teachers and improve the quality of existing teachers. Teacher training colleges were established in rural areas and the concept of higher education spread beyond the capital Bangkok. During 1964 and 1967 three regional universities were established in the North, Northeast and in the South at Chiangmai, Khon Kaen and Songkla respectively. To meet the increasing demand for higher education, many private institutions, specialized colleges and open universities were established later. In 2009 there were 166 higher education institutions, 19 community colleges with approximately 2 million students. Around 35% of the relevant age group is now enrolled in higher education. There were 78 public higher education institutions. Besides, there were 69 private higher education institutions. Continued efforts have been made to allow traditional public universities to enjoy greater autonomy and academic freedom; the remaining traditional public universities will soon be transformed into public autonomous universities.

Table 1.1. Number of institutions by Office of the Higher Education Commission  
academic years 2005-2009

<i>Department of Institution</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Community college	17	18	18	19	19
Public institutions of higher education	78	78	78	78	78
Private institutions of higher education	61	63	67	68	69
<b>Total</b>	<b>156</b>	<b>159</b>	<b>163</b>	<b>165</b>	<b>166</b>

Source: Ministry of Education, 2009b.

According to SEAMEO (2005), the universities in Thailand offer a wide range of academic and professional disciplines. Not all universities offer the same range of degree programs. Institutions of higher education in Thailand are classified under four categories:

- state universities/institutions and private higher education institutions under the supervision of the Ministry of University Affairs (MUA),
- technical or vocational and agricultural colleges, teacher training colleges and other specialized colleges under the jurisdiction of the Ministry of Education (MOE),
- other specialized or professional training institutions under other ministries and government organizations, such as the Ministry of Health, the Ministry of Interior, the Police and Military academies have their own nursing colleges,
- international institute under its own charter granted by the Thai government: The Asian Institute of Technology (AIT), and
- open universities which account for nearly two thirds of higher education enrolments.

The language of instruction in Thai universities is Thai. However, there has also been an internationalization of Thai higher education. Thai higher education institutions have established international partnerships with universities globally. There are English language programs usually at graduate level in some universities. For example, at Assumption University and AIT all courses are taught in English (Runckel, 2009). Thailand also plays host to Secretariats of several regional university groupings, namely the ASEAN University Network.



### **Access to Higher Education**

The total number of students enrolled in formal education grew from 13.8 million in 1998 to 14.0 million in 2001. In 2002 the number of students having access to education rose to 14.2 million due to an effort to provide greater opportunities at basic education level. (The World Bank Group, 2008).

The enrolment rate at Higher education level continuously increased from 21.2 percent in 1998 to 23.7 percent in the year 2000 and 25.0 percent in 2001 (Kirtikara, 2001). In 2002 the 18-21 years old estimated 26.5 percent enrolled to study in higher education institutions, enrolment in higher education institutions, including that in open universities, continuously increased from 1,872,207 in 2001 to 2,430,551 in 2006 (Office of the Education Council, 2007). This indicates that increasing number of young people have access to higher education. As a result of the new policy on the 9-year compulsory education and the 12-year free basic education included in the 1999 National Education Act, there was a large increase in the number of high school graduates. Predicted figures are 0.7 million in 2000 to 1.8 millions in 2016, an increase of 150 % in 15 years time. According to Kirtikara (2001), the demand for higher education opportunities will likewise expand and put critical burden on higher education systems. In addition, it is pointed out that demand for higher education is likely to increase due to the rising demand for highly skilled manpower for current economic expansion.

However, according to Office of the Higher Education Commission (2008a) the 15-year Long Range Plan on Higher Education (2008-2022) projected changes in demographics which will result in a decrease in higher education expansion, particularly for the university age group 18-22. Thailand has begun experiencing the decrease of the number of students. The number of students in the elementary education in 2005 was 5.84 million and declined to 5.14 million in 2009. Consequently, the overall number of students of all levels of education in the country began to drop continuously from 14.62 million in 2006 to about 14 million in 2009.

Table 1.2. Number of students in institution by level of education: academic years 2005-2009

<i>Level of education</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Pre-Elementary education	1,806,282	1,771,998	1,758,573	1,770,386	1,780,074
Elementary education	5,843,512	5,696,472	5,564,624	5,370,546	5,138,475
Lower secondary education	2,761,216	2,782,081	2,782,834	2,794,218	2,792,286
Upper secondary education	1,767,546	1,868,999	1,945,929	1,974,980	2,003,534
Higher education	2,265,220	2,502,763	2,430,234	2,428,016	2,283,959
<b>Total</b>	<b>14,443,776</b>	<b>14,622,313</b>	<b>14,482,194</b>	<b>14,338,146</b>	<b>13,998,328</b>

Source: Ministry of Education, 2009a.

Access to higher education is basically qualified after obtaining the high school leaving certificate after 12 years of schooling and success in competitive entrance selection process for those who seek admission into tertiary institutions under the supervision of the Ministry of Education. Applicants need to pass the Central University Admission System (CUAS), which is the joint entrance selection process, serves the recruitment purposes of the state as well as the private universities and colleges. Students can choose to learn in the study programs according to their ability and interest. Applicants can list four preferences from one or more university programs that are suitable to their academic backgrounds, achievements, and professional interests. Those whose National Aptitude test scores are within the ranking indicated by the chosen university would be admitted. Since 2009 the test is supervised by the National Institute of Educational Testing Service. The test comprises the compulsory General Aptitude Test (GAT), which covers reading, writing, analytical thinking, problem solving and English communication and the voluntary Professional Aptitude Test (PAT), which includes a selection, list of seven subjects (The National Institute of Educational Testing Service, 2009).

### **University admissions system**

In Thailand University admissions dated back to 1961 when universities administered their own independent admission process as well as joint entrance examination. In 1967 the National Education Council consolidated the National Entrance Examination as one

system for the whole nation. As a result, due to wide range of universities and courses to be selected, applicants were allowed to list 6 favorite choices in order of their preference of disciplines and universities when they applied for the entrance examination (Association of University Presidents of Thailand, 2010).

After using this joint entrance selection process for 40 years, it was determined that the system produced many disagreeable consequences. The university entrance examination, which emphasized memorization, was one of the major causes for rote learning and students' low achievement in thinking ability and performance. In order to produce successful results on the entrance examination, students paid more efforts only in specific area of subjects rather than learn for knowledge and skills. In addition, many of the students who got the seats by passing the entrance examination dropped out because it was not their priority choice (Sangnapaboworn, 2003).

Following the promulgation of the National Education Act, several efforts have been made to materialize the education reform in higher education. It was evident that the authorities involved in university admissions, such as Commission on Higher Education, Council of University Presidents of Thailand and education institutions, were concerned with the ineffectiveness of the old system. A new admission system was proposed in the hope that this new system would eradicate rote learning and place more importance to critical thinking, creativity, and authentic academic ability which would enable students to have a well rounded education at the secondary education level and prepare students for further education and future careers. This admissions system would conform to the principle and the education reform to permit each individual student to study in the program of one's liking and inclination. It was believed, consequently, to motivate students to develop a desire for learning and gain the skills that would enable students to pursue life-long learning. The government decided to replace the national entrance examination with a Central University Admissions System (CUAS).

The new central university admissions system was implemented in academic year 2006 (Commission of Higher Education, 2006 as cited in Pikma, 2007). The system was designed to integrate many factors of student's achievements and performances according to the following principles:

1. Integrate student's cumulative grade point average (GPAX) of high school (grade 10 to 12) academic achievement into university admission assessment.
2. Grade point average (GPA) of students was integrated into admission procedure. GPA illustrates students' talents and aptitude. Scores of three to five of eight subject groups in the core curriculum required by high school education were the elements for university admissions assessment.
3. The result of the Ordinary National Educational Test (O-NET) which was assessed while in grade 12 in 5 main groups of subjects as follows: Thai language; mathematics; sciences; social studies; and English language,
4. The result of the Advanced National Educational Test (A-NET), a nationwide test, which evaluated student's knowledge and analytical skills. This test included Thai language, mathematics, sciences, social studies, and English language which was administered twice a year and students can choose to take more than one test and can use the better score to apply for university admissions. Tests were conducted in 3 groups of subjects depending on disciplines they chose to study at higher education level. The test assessed students' aptitude in specific academic and professional disciplines such as engineering, teacher education, medicine, architecture, foreign languages, fine arts, music, etc

Table 1.3. Elements Determining University Admission in 2006 System

<i>Elements</i>	<i>Weight</i>
1. GPAX of upper secondary education	10%
2. GPA of 3-5 groups of core curriculum at upper secondary education	20%
3. Result of O-NET test	35 - 70%
4. Result of A-NET test of not more than 3 groups of subjects	up to 35%

Source: Commission of Higher Education, 2006 as cited in Pikma, 2007

The Commission on Higher Education oversaw the Central University Admissions System. Students had to submit their application forms together with the results of the four elements in the table above to the Commission on Higher Education. CUAS is administered in April each year. Students can choose up to 4 choices of disciplines and institutions according to their preference, which they would like to be admitted.

### **Present University Admissions System**

Although the 2006 Central University Admissions System (CUAS) served its purpose to a great extent, it also created a lot of dissatisfaction and was widely criticized by students and educators (Pinyoanantapong, 2007; Saengpassa, 2010). The Council of University Presidents of Thailand deemed it that a new university admissions system be set up. The present Central University Admissions System (CUAS) system was implemented in 2010. This Central University Admission System assessed the university applicants in the following areas:

1. Students' academic performances based on their cumulative grade point average (GPAX) of high school (grade 10 to 12) which is similar to the requirement in the former system.
2. Scores from the Ordinary National Educational Test (ONET).
3. The General Aptitude Test (GAT), which primarily tests the reasoning ability and English proficiency of the candidates.
4. The Professional and Academic Aptitude Test (PAT). This test is optional. Students may choose to take the tests that are required by the program they are applying to. Engineering Aptitude. It tests candidates' ability in Physics and Chemistry as well as their ability to apply their knowledge. It is an objective test, consisting of multiple choices and student-produced response.

Table 1.4. Elements Determining University Admission in 2010 System

<i>Elements</i>	<i>Weight</i>
1. GPAX of upper secondary education	20%
2. Result of O-NET test	30%
3. GAT (General Aptitude Test)	10 - 50%
4. PAT (Professional Aptitude Test)	0 - 40%

Source: Association of University Presidents of Thailand, 2010.

Students are required to submit all test scores to the central admission system. They are responsible to choose a program or faculty that they want to study. A mathematical formula is used to weigh students' scores for that program. For instance, Pharmacology requires high scores on Sciences, while Economics requires high score in Mathematics. After the score is weighed, students are offered decision only according to their scores.

Some exception might occur in program, such as fine and applied arts where students are required to submit portfolio for consideration (MedLibrary.org, 2010).

The only exception to the centralized admission system and direct admission system is Medicine and Dentistry, which have their own admission system. To be eligible for consideration students need to take additional tests in certain group of subjects.

### **Alternative admissions systems**

There have been criticisms in regards to the Central University Admissions System. According to Kanjanawasee (2010) the system does not have efficient test to place students in proper disciplines and institutions because it failed to determine the depth of students' academic knowledge and aptitude. The test scores recognized under the CUAS have not always guaranteed what they have desired.

To overcome these concerns, universities continued to reduce the number of students through the CUAS in favor of direct admission. Therefore, apart from taking part in the Joint Entrance Selection Process, the state universities especially and most of the private universities also run their own Entrance Examination or Selection process. Several universities have offered priority admissions to local students on quota basis. Special quota to students who demonstrated great achievement in academic abilities, sports, or other special talents also have been provided by many universities in the central as well as the regional. Usually the state universities in the regional area have quota system of about 50 percent of the places available, which are specially allocated for high school students in each region, or university special programs as well as for students with special ability. Currently, some state-run universities directly accept 70% of their students, and the remaining 30% come from the Central University Admissions System (CUAS) (The National Institute of Educational Testing Service, 2009).

### **The overview of the thesis**

Chapter One, explains the rationale and background context of the study. The significance of the study and research questions are discussed together with the operation term definition included are the brief analysis of the Thai educational system, related history and current policies and practices. The Thai educational reform movements and their impact on university student admissions programs and practices

are discussed in relation to the issues of student choice and factors affecting their decision-making process.

In Chapter Two, literature relating to the brief history and relevant development stages of Thai education system will be presented to put in perspective how the theories and practices were used to inform the research in the development of the research instruments and in laying out the scope of the inquiry. An extensive chronological survey of studies relating to higher education choice is provided for the reader.

The methodology that follows in Chapter Three gives the blueprint of the research process and justification of the research design employed for the study. Details on the development of the data collection instruments are included plus the techniques and methods used in the data analysis of both qualitative and quantitative data collected in various stages.

Findings of the study are discussed in Chapter Four with regard to the research questions posted in the introduction of the thesis. The qualitative and quantitative data findings from both the survey and interview sessions are combined as it confirms the proposed explanations from other studies, displays different aspects and adds more depth into the exploration of the issues under study.

In the last chapter, the research attempts to provide a holistic overview of the new knowledge as it emerged from the study and offers suggestions for further study and recommendations for some of the practitioners and policy makers in student admission programs.

## **Chapter Two**

### **Review of Literature**

#### **Overview of the chapter**

Chapter Two focuses on prior research conducted with the aim to explore and determine factors influencing student selection of higher education institutions. A comprehensive review of the relevant literature available revealed a variety of insightful and poignant results. It was decided to undertake a thorough review of international research in the area and present it chronologically, so that the reader will gain an insight into how the factors have either remained constant or changed over time. Interestingly, the majority of research in the area had been undertaken in the United States. Some of the highly regarded research studies presented were able to inform the design of the study and the construction of the data collection instruments of the study.

#### **Introduction**

University choice is a complicated process and involves a wide range of individuals including high school students, family members, university administrators and public policy-makers. Understanding why and how potential candidates seek university education and determining which factors affect their choices is an important area of study. Exploring what students regard as important to them or what influences them when they choose institutions is information coveted by college and university administrators. Attributes and characteristics of particular colleges and universities provide some insight into which dimensions of higher education institutions affect student choice. Attributes disclose that factors such as cost, quality, location, and image are deemed important, but they do not reveal how specific characteristics such as expensive, small or rural for example might affect the attractiveness of an institution. Educational choice involves critical decision making for the future because it may reflect a student's expected outcomes and could have long-term implications. The institution or program attended may have effect on one's future profession, companionships, choice of life partner, location and future residence, and life fulfillment. Moreover, it may involve major personal or economic sacrifices (Kotler & Fox, 1995). When making choices for their higher studies, students decide for their future lives and professions and also make an immense impact on the university planning and direction (James, Baldwin, & McInnis, 1999).



It is important for students to have a voice and be provided with the opportunity to express their personal ideas, opinions and values in relation to life choices. Many researchers have outlined the importance of seeking opinions and gathering data from respondents at the high school age (Davie & Galloway, 1996; Fielding, 2004; Cook-Sather, 2006; Brooking, Gardiner & Calvert, 2009; Smyth, 2012). The importance of the student voice in understanding situations and decision-making cannot be underestimated and forms the basis for this study.

### **Benefits of university education**

In this modern world, parents as well as educational policy-makers, believe that everyone in today's world should have a certain level of higher education studies and preparation. There is a belief that a university degree appears to be a guarantee for personal accomplishment and economic achievement. Many studies in the past evidently indicated that higher levels of education pave the way to higher incomes, prolonged professional lives, extra career opportunities and increased life satisfaction (Bowen, 1977; Leslie & Brinkman, 1988; Pascarella & Terenzini, 1991). According to Leslie & Brinkman (1988) college graduates earned more than the average high school graduates. In addition, college graduates are more likely to be permanently employed throughout their working life, and are reported to be more happy and lead a self-fulfilled life (Bowen, 1977).

More importantly, economists asserted that individual states, and the country as a whole, gained more return from a better educated citizen (McGregor, 1994; Wellman, 1999). As the consequence, a nation will be able to move on beyond financial benefits. Nations become more economically competitive, have higher productivity, be enhanced with more government revenues and overall improve the quality of life. Bowen (1977) and Pascarella & Terenzini (1991) stated that college educated populations are more politically and socially active and responsible, they are technology oriented providing for their family and their society. They asserted that university educated citizens are more ready to assume civic responsibilities and are not likely to engage in unlawful behaviors. Acknowledging the importance of a higher education, the decisions or choice that young people make when choosing the institution at which to fulfill these needs is an important notion to understand.

## **Choice Theory**

Glasser (1998) who developed Choice Theory explained that though human beings in general share similar needs, the behaviors through which individuals choose to satisfy those needs may greatly vary. From the early stage of life or even at birth, each one has distinctive life encounters which could be either pleasant or distressing. Through these encounters, we begin to discover how to fulfill our needs. Due to their differences in experiences, we pick up different ideas and learn differently how to satisfy their needs. Memories of need-fulfilling behaviors vary as befitting their unique life experiences and these memories, particularly the positive and pleasurable ones, later make up the individual's quality world and may be registered as the most crucial part of their life. In most cases, the quality world they make up with personal memories is made up with images, depicting the imaginations of life enjoyment. These perceptions eventually develop into the norm for choice behavior and they are specific for each individual which lead to how we make different choices in fulfilling our needs as the quality worlds are different for each of us.

Several theories have been proposed to explain choice and behavior. According to Crossman (2010) economics plays an enormous role in human behavior. In the economic theories, we take into consideration how the production, allocation, and utilization of goods and services is financially systematized. It is believed that people in general are 'monetarily motivated', which means that they tend to consider the opportunity of profit making in which they appraise the possible costs and benefits of future engagement before making their decision on what to do. While economic theories emphasize the impact of money on the decision-making process, social exchange theories suggested that people make decisions by taking into account the 'costs' and 'rewards' of actions. West & Turner (2007) defined that costs are the components of relational life that have negative value to a person, such as the endeavor placed into a relationship, and the amount of time and/or money spent. On the other hand, rewards are the components of a relationship that have positive values, such as sense of acceptance, support and companionship. According to the social exchange theory, people continue with a relationship if the 'rewards' are greater than the 'costs'. However, if the 'rewards' are less than the 'costs', people may decide to terminate the relationship. The distinction between economic exchanges and social exchanges can be subtly identified. It can be clearly noted that social exchanges imply a relationship with

others with trust and not necessarily a legal obligation. It is subtle and may not involve explicit bargaining (Stafford, 2008).

Behavioral decision-making could also be explained by the prospect theory, which is the most well-respected descriptive theory that describes choice and preference behavior that systematically violates the principles of expected utility theory (Kahneman & Tversky, 1979; Tversky & Kahneman, 1981). In its most basic form, it describes decision making behavior whereby individuals out weigh outcomes that are certain relative to those that are probable and place a higher relative value on losses than they do on equivalent gains. What prospect theory implies is that we learn to depend more on the social relationship which helps us achieve a specific goal and in so doing we lose the control or power to influence the price we have to pay.

Further rational choice theorists suggest that the same basic principles can be used to comprehend human relationship where time, information, approval, and prestige are the resources being exchanged (Scott, 2000). This approach to theory is known as rational choice theory which was developed by Blau (1964); Coleman (1973); Cook (1977) during the 1960s and 1970s as a formal model of rational choice. This theory was initiated by sociologist George C. Homans, who proposed the essential outline for exchange theory, which he derived from behavioral psychology (Homans, 1961 as cited in Scott, 2000). This theory proposed that the factors, which motivate individuals, are their personal wants and goals and that we as individuals are mostly driven by personal desires. This theory proposes that it is not always possible for individuals to attain all of the various things that are wanted. Consequently, one must anticipate the outcome of the chosen alternatives and consider the most suitable choice. Eventually, rational individuals decide to choose the possible alternative most appropriate to their satisfaction (Heath 1976; Carling 1992; Coleman 1973).

### **Importance of college choice**

The consequence of shifts in public policy, emerging higher educational institutions, increasing academic programs, changing demographics in higher education, continuing growth in higher education attendance, implementation of different institutional practices, complex marketing techniques, and enrollment strategies subsequently have had enormous impact on students' decision for the right choice of their further studies.

Therefore, understanding how students make their choice of university and what direction it is likely to be in the future are the key issues for all higher education stakeholders. This study investigates into how the university decision-making process of the high school graduates has developed in the past and in what ways have these decisions continued to be the same to the present. Obviously, the students who made these decisions have changed over time, nevertheless how has society at large — as indicated in public policy, the enrollment strategies, marketing practices of higher education institutions, including family, affected the behavior and status of students in their choice of university. Besides, how would these courses of action have impact on the destinations for higher learning of college aspirants now and in the future?

### **Early research on choice of university**

There have been many studies and research on how students select a college or university. Researchers found that the process of selecting a university can be a large and often complicated decision, not only in financial aspects, but also it implicates a long term decision on students' life (Litten, 1980; Yost & Tucker, 1995). Researchers in the past have tried to analyze and present this through models that allowed the interaction of all these norms and criteria.

Over the period of time since the early 20<sup>th</sup> century, researchers in their numerous studies and examinations, specifically in the United States, discovered different influencing factors in diverse context and situation. A range of factors have been proposed which were or have been congruent to the variety of circumstances and the students themselves in the course of time in the past until the present.

Previous to and during 1930s students were recommended to take into consideration some factors essential for their college choice process. According to Comfort (1925); Ripperger (1933), these factors included curricular offerings, geographical location, coeducation, size (college, endowment), type of institution (college or university, public or private, urban or rural), campus climate and the religious atmosphere. Topics such as fellowships, scholarships and loan program were also commonly mentioned at that time (Comfort, 1925; Halle, 1928). Later Reinhardt (1938) discovered from his research on the 359 freshmen at Eastern Illinois State Teachers College that the influence of relatives was the most influential choice factor. Cost was found to be the second most

important factor. Other studies conducted during the 1930s included proximity from home as highly influential on choice of college (Corey, 1936; Reeves, 1932).

Supported by Corey (1936) who pointed out that family suggestions and distance from home were factors cited most often by researchers during that time.

During this period, the privilege of attaining college education was restricted to an elite group of people, which were mostly male, Caucasians, and from the middle and wealthy families (Bloomgarden, 1961; Rudolph, 1990). Moreover, during that time, the primary source of fund for higher education came from student tuition, which only the middle and upper class could afford. Much later there was financial aid available by both the government and the colleges of higher education became possible for the low-income students.

Before 1950 choice process was relatively simple due to limited number and type of institutions. Issues such as distance from home and family factors were cited most as the influencing factors for students. At that time only about 20% of high school graduates undertook higher education studies. Guidance and information was narrow range and with a little degree of accessibility. According to Holland (1959), students did not put much effort in acquiring information about their college or university of interest. Instead, they tended to make decisions based on vague information or ideas. They appeared to make decisions by unclear reputation, facilities, personal values, and perceptions.

It is interesting to observe at this stage that some of the factors including urban or rural location, size of endowment, coeducation, and fellowships were seldom or not at all referred to again in later literature. Some others remained prevalent factors in the subsequent research on choice of higher education and in the literature up to the present time.

The transition of 1950s to the end of 1960s, in the U.S. over 50% of the high school students were admitted into colleges and universities. Access to higher education became an important issue; consequently, there were changes in college choice process. This resulted in more attention paid to how students choose university. A more systematic admission process was introduced. More literature concerning higher

education institutions were available to high school students, consequently, emerged the role of high school counselors assisting students to make better decision.

During the 1970s, trying to make the best college selection was even more critical to many students and parents. Additional concerns were included in their thought when they considered choice of university. Some other factors emerged during this time and became dominant issues of university choice while other still remained notably unchanged until present. Institutional quality, reputation, and student factors appeared to emerge and were mentioned more often since this period.

Baird (1967) was among the early researchers who mentioned that qualified academic staff, good academic reputation and programs were the key factors for students. This was supported by Bowers & Pugh (1972), who identified that both parents and students considered the reputation of the university and the specific department in which the student intended to study, as the most important reasons for choice. Raley (1972) as cited in Kinzie, Palmer, Hayak, Hossler, Jacob & Cummings (2004) also found prestige and reputation as institutional factors among the four factors that influenced on student's choice decision making. Other factors included, external factors of the institution, such as location; external others, such as family, peers or school teachers; and student factors, such as their own inclinations or household financial resources.

A study at the University of Northern Michigan by Stordahl (1970) brought about additional factors such as gender difference and highlighted that academic achievement played an important role in students' university choice. This study also indicated that women tended to be more influenced by intellectual considerations in their university choice than did men. Students who graduated with good grade standings were profoundly influenced by academic concerns. Cost and location of the university greatly influenced first-year students. However, other factors, such as advice from friends and relatives, were not as influential in their decision-making process.

Holland & Richards (1965); Bowers & Pugh (1972), again found that proximity to home was a significant factor for their choice process. Bowers & Pugh (1972) also added that cost and the social life in the university as important. However, students and parents differed in how they place the importance of each factor. Parents considered

financial factors, closeness to home, and academic reputation as important. In contrast, students pay more attention to factors related to social, cultural, and informal advice.

Mundel (1974) described, similar to his predecessors, the main factors that influence students' college choice: the students' academic abilities, achievements, motivations and likings; cost of living and fees; and family concerns such as income and parental education. He added to what earlier stated by Raley (1972) as cited in Kinzie, et al. (2004) on family financial resources that lower-income students were rather sensitive to cost factor for attending college. Though studies showed that while household income played an influential role on choice of college (Zemsky & Oedel, 1983; Flint, 1992) cost of attending a college had lower impact on the decision made by high-SES students (Hearn, 1984; Zemsky & Oedel, 1983).

Later universities were faced by financial constraints and increased demand for accountability. Institutional ranking was, in addition, introduced and used as identification for the quality of universities and consequently impacted in the efforts of university to enroll students and in students' processes on choice of university. As a result of more complex admission and enrollment practices there were increased need to better understand these processes. Several researchers began to develop models of choice process during this period in order to have a more understanding on students when they consider their choice of universities.

Research completed since 1975 evolved one of the early models suggesting that higher education selection occurs in multiple phases. Lewis & Morrison (1975) in their attempt to investigate student's college choice process, made a longitudinal study on college selection which revealed how students access to the source of information, how they analyze and evaluate the institutions, and what approach students use to apply to colleges. They found that students while in high school began to look for information in the bulletin, consulted guidance counselors, visited campus, and talked to students already in college. They identified thirteen activities in college selection process: consult source, source provides name of new institution, source provides information about institution, source/information was evaluated, institution was added, attribute was added to criteria, school evaluated for application, institution was dropped, application to institution, accepted, rejected, decision to attend, and decision not to attend. Kotler

(1976), however, suggested seven stages of college choice, which included the decision to attend college, information search, making specific college inquiries, applications, admissions, making college choice, and registration.

Later Chapman (1981) discovered in his choice model the two key domains which influence students' choice of higher education institution. As illustrated in this model, a student's choice was impacted by two classes of factors namely student characteristics and external influences. The choice of college was influenced, first, by family and demographic and second, by a series of external influences. The components of the student characteristics and family consisted of their socioeconomic status, aptitude, high school performance and level of educational aspiration. The series of external influences included the influence of significant persons: friends, parents, and high school personnel; fixed college characteristics: cost as well as financial aid, location, and the availability of programs; college efforts to communicate with students: written information, campus visits and admissions/recruitment. He found that students were strongly persuaded by the comments and advice of their friends and family. Of all the significant persons, parents were the ones that had the greatest impact on the students' choice. The factors in these two domains integrated together precede the student's institutional choice and affected their matriculation.

Later Jackson (1982) proposed similar model to his predecessors however, he indicated the choice process in three different phases. Firstly, preference, in which family background, social context, and academic achievement shape aspirations. Secondly, exclusion, where the above factors as well as geography affect students' choice set; and lastly, evaluation, in which a rating scheme was formed and a choice was made.

According to Jackson (1982) who was later supported by Ekstrom (1985) that socioeconomic status (SES) appeared to have more influential effect on students' decision process than did racial-ethnic status. High SES students tended to be selective about their college as they had more access to the sources of information about their college through their college-educated parents (Litten, 1983; Tierney, 1980).



### **1975 – 2000: Emergence of new research**

Several studies in diverse contexts by several researchers revealed both similar and different factors that impacted students' choice of university. Some researchers had common factors; however the degree of importance did vary.

The importance of several common factors was not only seen within American students, but also African-American students. Draper (1976) found that financial aid was a significant factor for more than 45% of African-American students when they considered college. In addition to that, recommendations from family members, friends, teachers, and school staff were also crucial for them. With regard to parental educational level, they indicated that mother's educational level was more influential among African-American students than did father's educational level. This finding was supported later by Litten (1983), who also found that parental education has a great impact on college choice when compared to other factors such race and gender. Nonetheless, gender was perceived to be of importance on choice in some respects. Hanson & Litten (1982) found that college choice pattern varied with gender, race, ethnicity and socioeconomic status. Men and women showed differences in college choice patterns. Women were more influenced by parents, geographical location, finance, and college environment. Moreover, the study showed that women tended to apply for college and submit their applications earlier than did men.

Other contemporary researchers whose research was more oriented to cost of education reported that parents and students were interested in more expensive colleges which they were not able to pay for (Munday, 1976). Munday added that most students from different level of income attend low-cost institutions. He indicated that students generally based their choice on educational development and household income. The cost of attending a college was likely to have a significant impact on students whose family income level was either very high or very low (Munday, 1976).

When Lisack (1978) conducted focus group studies to examine the factors that highly impacted college choice among white and black students in Indiana, four main factors were found: proximity to home, cost, reputation, and size. Though the factors found were similar to his predecessors, he discovered that white students differed from black students in terms of receiving financial support from family.

*...Though some authors found that receiving financial aid has an influence on students' college choice, nevertheless, the effect of financial aid on college choice was not consistent across literatures (Jackson, 1978).*

Chapman (1979) proposed the admissions management and pricing policy process in higher education institutions, particularly for private institutions. He identified quality and price-associated issues as the two most influential factors on choice decision-making behavior. He explained that during the choice process, students preferred better reputed colleges but rather considered the possibilities for lower tuition fees which might mean financial aid. Whereas, Murphy (1981) soon after reported that the determinants of college choice most frequently mentioned by students were: academic reputation; cost; setting of campus (urban, rural); distance from home; size of campus; social life; physical look of campus; housing and living; and job placement.

Almost at the same time Maguire & Lay (1981) pointed out that financial aid along with the influence from peer, special program, size, location, athletic facilities and social activities of the institutions as the most important factors for choice of institution. They also highlighted that parental education had the greatest effect on the choice process. In contrast to Murphy's findings, they stated that fewer of the higher ability students considered costs, careers and campus appearance to be of importance.

Chapman (1981); Cibik (1982) reflected the same opinion on reputation and academic quality as prevalent factors on choice; however, they differed in other factors. Chapman (1981) identified in addition to academic reputation, size, public or private status, and location as institutional attributes of importance. While Cibik (1982) reported apart from the academic quality followed by cost, career availability, qualification criteria for financial aid, helpfulness, and instructors were in order of preference for choice.

Krampf & Heinlein (1981), on the other hand, attempted to classify the needs of the prospective students by carrying out interview sessions on applicants of a large mid-western university in the USA. The study revealed different factors which were found in other studies that attractiveness of the campus, informative campus visits, recommendation of family, quality programs, informative university catalogue,

closeness to home and the friendliness of the campus atmosphere influenced their preferences.

Hooley & Lynch (1981) employed “*conjoint analysis*” to determine the choice process of prospective students of the UK universities. The six important attributes discovered were course suitability, university location, academic reputation, distance from home, traditional or modern type of university, and advice from parents and teachers. Though the results from this study were in line with what were found in the US except for course suitability, which became known for the first time as a factor in the choice of university. Moreover, they indicated that course suitability was the most important attribute in their study. Other attributes seemed to have a minor effect on their decision given that students were able to enroll in the courses they wanted.

Dahl (1982) later took a different approach by studying the type of university as a factor on choice. He carried out a longitudinal study of high school students to compare the students’ preferences with where the students actually enrolled. Three quarters of all students changed from one institutional demographic (i.e., public or private, two-year or four-year, in-state or out-of-state) to another. Two-thirds of the students who originally opted for a private institution finally enrolled in a public institution, but 88.8% who considered a public institution finally did so. One-third changed from considering an out-of-state school to attending an in-state school. Whereas, Hu & Hossler (1998) reported that what influenced students to choose between a private or a public institute was the students’ readiness to pay instead of being able to afford to pay.

Hossler (1984) reviewed several other studies on institutional attributes and found that different attributes were ranked in different orders. Nevertheless the most frequently identified characteristics were special academic programs, tuition fees, financial assistance availability, academic reputation, location or proximity to home, size and social atmosphere of the institute. This is more or less similar to the study by Discenza, Ferguson & Wisner (1985) who identified 14 variables that affected college choice process. These variables were faculty quality, academic programs availability, variety of courses offered, reputation, cost, availability of financial aid, location, class size, housing facilities, campus size, peers’ opinions, social/cultural/entertainment activities, sport and dining facilities. However academic reputation was particularly pinpointed by

Shepherd (1985) who developed a questionnaire related to factors influencing students' choice of university and identifying influential factors for students to enroll at the University of Kansas. The result of this study indicated that recruitment scheme for the University of Kansas should focus on the academic reputation of the university rather than the importance of high school staff and community members.

The Carnegie Foundation Survey of the Transition from High School to College (1984–1985) brought to light the effect of the association between choice and physical appearance. The Carnegie Foundation for the Advancement of Teaching surveyed 1,000 high school seniors. The outcomes suggested that although campus visits were ranked sixth in level of the overall importance, but 57% of the students said the visits were important, in addition, it was also indicated that campus visits were the most important and most frequently used source of information in choosing a college. This suggested that the physical property of an institution had a strong relationship to choice and selection of college. This finding was coherent with the work of Ernest Boyer and associates who on behalf of the Carnegie Foundation for the Advancement of Teaching found that the friendliness of people was a factor, but the buildings, the trees, the walkways, and the well-maintained campus yards overwhelmingly came first. The physical appearance of campus was likely to be of the most significance in campus visit impression. Potential students deemed it important to check out the buildings and campus environment. The most revealing finding of the Carnegie Foundation study was that 62% of the students surveyed found that appearance of the grounds and building were influential for their choice decision making during the campus visit. The surveys also asked open-ended questions. The researchers reported choice motives on a college as followed, course subject (20%), reputation of department or university (18%), proximity to home (10.5%), location (7%) and facilities resources (5%). Surveyed students also gave reasons for not attending an institution: course not suitable (13.5%), distance too far (12%), location (7.5%), quality/standards/reputation (8%), did not get offers (6%) and did not like area (5.5%) (Boyer, 1987).

A study conducted by Konnert & Giese (1987) found that students attending schools in small-college athletic conferences indicated that the opportunity to play intercollegiate sports was an important college selection factor.

Grosz (1987) investigated the factors influencing student decision to attend college and examined the effectiveness of methods to inform students about the college. Programs of study or majors offered were the most important factors that influenced college choice decision for both male and female students; whereas housing and athletic programs were attributes which appeared to have little influence. Printed sources of information and faculty members had persuasive effects on student decision to enroll at the college. Direct mailings and campus tours effectively attracted students to the campus. Female students were more likely to be persuaded by college catalog, high school counselor, and scholarship offers. On the other hand, male students were more influenced by their parents. Arnold (1987) who identified and analyzed factors that were important to students in choosing a university, indicated that both males and females did not exhibit differences in reasons with regards to their choice of universities. This study particularly found that quality issues were the main concerns for the respondents. The size of school did not affect the students' choice of university.

Hossler & Gallagher (1987) designed a broadly accepted model by scholars in the field at that time. In their schema, there were three stages categorized as predisposition, search and choice. The predisposition phase was when students develop attitudes toward attending college. It was the first stage in which they decide whether or not to continue their higher studies. The search stage was when the students explored and collected information about institutions they were interested in. The third stage was the stage in which students selected institutions where they would choose to enroll themselves. They noted individual and organizational factors were influential in each stage and focus on the stages in the college choice process.

Once again it was discovered later that students' college choices were influenced by their parents, especially during the early stages of the process, because of the cost and distance constraints (Litten, 1983; Welki & Novratil, 1987). Chapman (1981) noted that high school staff, peers, and college admission officers could exert greater influences on students' college choice when the students selected a set of college of interest, then they made final decisions.

In making college choice students mainly relied on certain information and attributes about the colleges' academic programs, tuition, cost, financial aid, academic reputation,

proximity to home, size and social atmosphere (Keller & McKewon, 1984; Stewart, Johnson & Eberly, 1987; Chapman & Jackson, 1987). On the other hand Hossler, Braxton & Coppersmith (1989) concluded that institutional characteristics had little influence on students. In other words, institutional factors did not have influence on the decision whether to attend a college or university. However, they concluded that when student reached the choice phase, institutional attributes were important determinants. Hossler, et al. (1989) discussed and explained the various choice decision factors related to student background, demographics, and characteristics. Their guidebook provided useful insight and understanding on how socioeconomic and educational factors could have effect on how students would make decisions before a campus visit. Though some authors found that receiving financial aid had an influence on students' college choice, nevertheless, the effect of financial aid on college choice was not consistent across literatures (Jackson, 1978).

A joint study by Fraas & Newman (1989) identified that financial aid and dormitory life quality such as quality of food provided and living circumstances had the most important impact on college choice. Research by Hossler, et al. (1989) further developed a combined three-phase model of student choice: aspirations, search, and choice. Their study explored several other researches related to other three identified phases. For example, they cited Stewart, et al. (1987), who reported that most of the students who chose to study at Michigan State University began exploring their university options while they were in grade 11. They reported that 10% of the students made their decision in their junior year, 70% during their senior year, and 20% after their senior year.

Two models were developed during this period to explain the influences on students' decision-making processes. First, the econometric models which illustrated that a student would select a particular institution if the perceived benefits of attendance outweighed the perceived benefits of non-attendance or attendance at another institution (Hossler, et al., 1989). Second, the sociological models explained that student's college-choice behaviors were impacted by socioeconomic status, academic ability, high school, gender and the opinions of influential persons (Jackson, 1982; Litten, 1983). The basis of the two models was merged in the subsequent studies in order to reveal a more comprehensive perspective of students' college choice.

Paulsen (1990) indicated that a college may appear to be unappealing to students as distance from home and other expenses increased. Despite that, offering financial aid may have positive result on college choice. Nonetheless, even though providing financial aid was found to be an important factor in the college choice process (Hossler, et al., 1989; Manski & Wise 1983), some researchers found that such factor did not necessarily create a strong impact on students' choices (St. John, 1991).

It was found that race, ethnicity, socioeconomic status and parental education influenced students' choice processes (Hossler, Braxton & Coppersmith, 1989). For instance, Caucasian differed from African-American in that the latter ethnic were more likely to collect more sources of information than did the former ethnic (Paulsen, 1990). Throughout the 1990s on to the present, privatization of higher education, and the decline of government funding have resulted in the substantial raise in the cost of attendance at both public and private institutions. As a consequence, there has been increasing demand for financial aid. Universities have employed more aggressive marketing strategies in order to recruit desirable students for more revenue to compensate the budget deficit. Both private and public universities, in addition, have opted for complicated financial aid programs to attract the desirable students. Early choice decision practices were employed to draw the number of well-to do and academically qualified students. Student loan program has become and would continue to be the most essential practice to assure access and the university choice process (Johnstone, 2006).

In his study, Schultz (1991) conducted a survey with high school graduates of Northwest Kansas. The results demonstrated that cost of tuition was the major factor that influenced student choice, followed by published materials by the school and/or college, employment resulting from the educational process, and high academic expectation of their schools. In addition, campus visual attractiveness, exciting atmosphere, campus visit, a visit by a college representative, and availability of programs of interests also influence student choice. The majority of respondents indicated that an offer of scholarship influenced their decision, but it was not statistically significant. Geographic location and financial aid were also found to be important in their decision-making process.

Female students tended to be more committed to college education than did men (Schmit, 1991). Parental support was found to be more effective on male students. It was found that mothers were more supportive of their son's education than their daughter's. With regard to fathers, the higher the educational level of the father, the more support they would provide their children during college choice process. Although evidences showed the impact of parental support, it was noted that such factor was unrelated to college choice process. It was merely defined as encouragement to gain higher education. Factors that were found to have influential effects on students' college choice were familiarity, which referred to universities that were in the students' hometown or nearby regions; availability of the degree option that relate to future career. Whether a university offered a specialist course would affect students' choice when such course was not available locally.

Corley (1991) analyzed the factors influencing student choice of an area of study. Selection of an area of study was largely affected by personal reasons, including interests in the program, personal skills and career-related factors. On the other hand, service and experiential factors were not as important. Significant relationship was observed between area of study and ethnicity, but not with other demographic information, such as age and marital status. College catalog was the most important source of information; however, people were of greater importance for information than media items.

Nora & Cabrera (1992) discovered many influential factors on college choice. These factors included aspirations in education and career, socioeconomic status, ability, parental support, parental education, college attributes (i.e., quality, campus, academic programs, distance from home) and financial limitations were the factors that most influence students in their college-choice processes.

Roberts & Higgins (1992) studied on 2,818 students in England. The findings were the following: Course content/options (63%), Town/city/area (52%), Reputation (30%), Distance from home (29%), Entry requirements (15%), First impressions/atmosphere (10%), Academic support facilities (9%), Social facilities (8%), Housing /accommodations (6%) and Size of institution (6%). By gender, males showed more interest in the course content relating to engineering and technology, science, and math.



Females showed more interest in the courses relating to art, drama, music, health and social sciences, business, law, and teaching. Both males and females ranked different aspects on facilities as follow: library, technology, sports facilities, social clubs, private study facilities, bars, entertainment and student union.

Isaac, Malaney & Karras (1992) studied the correlation between level of parent's education and their children's ambitions in regards to post baccalaureate plans. The results showed that the educational level of same-sex parent affected the level of educational ambitions more than did those of the opposite-sex parent. However, the choice and timing of higher education was influenced by factors, such as finance, field of specialization, and personal and social factors.

Flint (1992) developed another model of college choice by parents of 8<sup>th</sup> grade children by means of surveys to predict preferred institutional characteristics, which included selectivity, highest degree offering, proximity, enrollment, and tuition. Based on the findings, it was revealed that socioeconomic, family, and institutional characteristics influenced the college choice.

Galotti & Mark (1994) reported that female students relied more seriously on parents and peers than did males who mostly consulted with school counselors. Female students were also more concerned on university living arrangement than did males, who were more likely to consider the success of graduates. Females also gave significant importance to admission process, racial diversity, student body character and size, residence halls quality, social atmosphere, geographic location and cultural events on campus. In addition, females also considered distance from home, and parents' and friends' advice as more important for them than males. They also found that students of different academic ability differed in how they approached college choice decision making. Students with higher academic ability tended to have a variety of choices of universities, which could more or less cause complications in their decision making process. These students appeared to set more criteria and have more universities of interest. In addition, these students are likely to look for information by themselves, care less about the cost, but more about financial aid. Furthermore, admission process and graduation requirements were not as concerned as academic strength.

Research on students' perceptions of college characteristics and preference revealed that good academic reputation, quality of degree programs, job placement, facilities, affordability, location, and connection with faculty were all important factors in the choice for college and university (Kallio, 1995; Comm & LaBay, 1996; Delaney, 1999; O'Donoghue, Jentz, Singh & Molyneux, 2000; Morgan & Baron, 2003; Mark, Lusk & Daniel, 2004). Financial assistance, faculty-student relation, degree programs as well as quality of staff and faculties were found to be important by Coccari & Javalgi (1995). Career preparation, library resources, research programs quality, and proximity to home were also found to be important by Martin (1996).

Kotler & Fox's (1995) model was the combination of the two types. According to their research, status-attainment models were based on social theory with the focus on family role, social networks and academic conditions. This model did not consider students and family to be able to make rational decisions. Canale, Dunlop, Britt & Donahue, (1996) stated that academic reputation of the university was a factor that influenced African American students' decisions to attend college for the reason that they would acquire knowledge and skills in a particular field to pursue the jobs they want. They also pointed out that academic reputation could lead to more job opportunities for them (Freeman, 1999).

Alston (1997) investigated the influence of scholarship on enrollment decision and the effect of the award on enhancing racial/ethnic diversity at the university. Students reported that they felt the award was an honor and provide recognition for their hard work. Students did not see the award as incentives for them to enroll in a university. The study suggested that scholarship awards may cause negative effect to the university if not managed properly. The enhancement of racial/ethnic diversity as a result of the awards remained inconclusive. However, this study supported the view that the money spent on these awards might be better spent on need-based financial-aid, and that the need-based awards would enhance diversity and create access more than tuition discounts.

Reagle (1997) studied the impact of individual and organizational factors, which influence student decisions for enrollment in a college or university. Scholarship/financial aids offered was the most important organizational characteristic that impacted

student decision, whereas parental involvement was the most important factor in the decision making process.

Armstrong (1997) conducted focus groups to explore characteristics of the institutions that may attract students as well as factors and sources of information that students considered to be important to their college choice decisions. The study revealed that low cost, convenient location and good academic reputation of their field of study were the most important factors that influence student decision to attend the University of North Texas. In addition, students reported that they were satisfied with the friendly campus environment. Students were not influenced much by the marketing materials used for recruitment.

Joseph & Joseph (1998) found the four most important factors that affect university choice as followed: academic and program issues, cost, location and facilities and peer and family influences. In addition, they found that male students were more concerned about academic value and the campus social life than did female. McDonough, Antonio, Walpole & Perex (1998) discovered that location, religion, reputation and family inclination were important factors in college choice.

Peterson (1990) noted that the brighter students considered faculty, staff, and physical amenities as more significant in the decision-making process. While Clagnett (1999) discovered that low costs, convenient location, small class size, and devoted faculty were influential factors for the students to choose a particular college.

Connor, Burton, Pearson, Poolard & Regan (1999) studied the sources of information which were most helpful for students, and identified the following: Prospectus (40.4%), visit (26.1%), handbooks (15.5%), career advisors (9.7%), current students (9.6%), national guide (7.8%), college staff (7%), teacher (6.7%), and career center staff (4.5%). They also reported demographic differences among gender, race, country of origin, and age.

Canale, et al., (1996) stated that academic reputation of the university is a factor that influence African American students' decisions to attend college for the reason that they would acquire knowledge and skills in a particular field to pursue the jobs they want.

They also see academic reputation as leading to more job opportunities for them (Freeman, 1999).

### **2000-present**

Urbanski (2000) investigated the influencing factors on university choice preference at a Northeastern Minnesota tribal college. The study included a process of three stages of university choice (predisposition, search, and choice) found that the significant factors identified in each stage were similar to the preceding models by Hossler & Gallagher (1987), Hossler, et al. (1989). The sampling size included 42% of the on-campus student population who decided to participate in this study. The findings suggested that in the predisposition stage, students reported that they were aware of their academic capabilities and that they intended to attend the institution. In the search and choice stages, students described several factors that would likely influence their decisions, such as campus location, program offering, cost, friendliness, and class and campus size.

A few years later Perna (2006), who proposed another multifaceted theory of college choice, grouped relevant influential factors into four different layers of categories, each of which influence each previous layer. Perna's framework was an economic or human capital oriented model. It pointed out that student made a cost/benefit analysis in deciding whether to go to college and where to go. This cost/benefit analysis occurred within the four contextual layers. These layers took into account sociological and cultural perspectives. In cost/benefit analysis Perna indicated that higher education need composed of scholastic preparation and attainment and resources, such as household income and financial aid, in turn shape students' consideration of expected costs to attend college, the possible foregone earnings, and expected benefits in terms of monetary and non-monetary rewards.

Perna terms the first layer as habits, which was an individual's dispositions, beliefs, and perceptions obtained from their own environment, conditions, expectations, attitudes, and aspirations shaped by demographic uniqueness like gender, race, SES, as well as cultural background which were cultural knowledge as well as value of college realization, and social resources consisting of information about college and the assistance which college offered. The second layer was high school and community

context, which also included views of costs and benefits. High school and community variables contained types and availability of resources and structural support and barriers. The third layer was the higher education context. It affected the two previous layers and cost/benefit considerations. Marketing and recruitment, location, and institutional characteristics were all important components to this third layer. Finally the fourth layer, the social, economic, and policy context, consisting of demographic characteristics, economic characteristics, and public policy that shape earlier layers. Raposo & Alves (2007) proposed model of choice process which emphasized that personal factors showed the greatest positive influence. Students with different academic interests differed in the importance they considered for various factors. Proximity to home, costs, parent's and school teacher's recommendations could strongly influence university selection, especially for medical students. They suggested that the communication strategy should not only focus on promoting these individual factors to students, but also to promote the university to teachers and professional counselors. On the other hand, for social science and economics students, campus visits could be one of the strategies in addition to promoting individual factors because knowledge about the university was important to their decisions making process.

To pinpoint when, why, and how similarly accomplished youth become funneled toward different higher education destinations, Radford (2009) elaborated the process of three stages of college choice previously proposed by Urbanski (2000) and identified six stages in students 'paths: predisposition, preparation, exploration, application, admissions, and matriculation. Each stage was explored with special attention given to differences of gender, race, and social class. The results revealed that the students' application decisions were followed by their matriculation decisions. Students' application and matriculation decisions were shaped primarily by conclusions and preferences developed during the exploration stage. The secondary factor in producing differences in enrollment patterns was the choices students and their families made during the matriculation stage. Where the students applied and matriculated was largely determined by the conclusions and college preferences they developed during the exploration phase.

During this period studies were more specific to groups of students, field of study, and context consequently studies became more complex. However, dominant factors

remained similar to what were discovered prior to 2000. Factors mentioned frequently were reputation and academic related factors, campus and facilities-related factors, external persons influence, course suitability, future career, cost, financial aid, and gender difference.

Ashworth & Evans (2001) conducted a cross-section study on factors which influenced student decision to study economics. It was found that mathematical skill and prior knowledge influenced students' choice to consider economics program of study. The influence of peer group and teacher were also important role the decision making process. Women tended to choose economics when there were a significant number of women studying in the course.

In Australia, Soutar & Turner (2002) ranked the importance of factors on student-faculty relationships such as academic advice, campus life and academic quality such as teaching, curriculum, and future career. They also conducted a conjoint analysis study on high school seniors in Western Australia and found that outstanding predictors of university choice were program suitability, reputation, prospective career, and teaching quality.

In the study conducted by Noel-Levitz, Inc. (2007) 364 high school students were interviewed. The respondents ranked the factors found to be important for them as follows: Largeness of campus (24%), Cleanliness (24%), Landscaping (24%), Architecture (20%), Friendliness (15%), Smallness of campus (14%), Activity and traffic (6%).

As evidenced by the comprehensive review of literature relating to university and college choice the majority of research over time has been undertaken in the United States. Price, Mutzendorf, Smith & Agahi (2003) studied the influence of facilities on students' choice of university in the United Kingdom in 2000 and 2001. The institutional characteristics rankings were consistent in all surveys. The eight top-ranked attributes were as follows: courses availability, computer facility, library quality, teaching reputation, availability of areas for self-study or group studies, quality of public transportation and a friendly attitude toward students. However, other attributes as followed: cost of living, accommodation cleanliness, university grounds, university

accommodation, lecture theatre quality, student social facilities and campus shops variety had varied ranking.

In Asia, Lau (2005), in the study on the influence of campus facilities on university choice for student in Hong Kong, found that among the top 16 influencing factors on choice of university, seven factors were facilities-related factors. Students, in general, perceived the quality of library facilities as more important in making their choice of university followed by the quality of university ground, availability of quiet areas, and the quality of lecture theatre. IT facilities in the university dormitory, health services, and areas for self-study were also considered important, while the availability of university-owned accommodation factor and the availability of self-catering facilities near campus were regarded as neutral and not important. Other factors, which were considered important for their choice of university, were good teaching and research reputation, cost of living in the university, availability of financial aids or scholarships, and the opportunities for part-time employment.

Yamamoto (2006) examined the university selection criteria of students in Turkey discovered that apart from the external influences, such as marketing communication tools used by the university, the centralized testing system of student selection and placement, families were very influential in the process of university selection.

Wagner & Fard (2009) identified factors that had significant effects towards Malaysian students' intentions to pursue higher education. The most important factors for students were cost of education, subject matter and structure of the degree. Students would also be more likely to attend higher educational institutes where a wide range of course and specialist programs were offered. Other factors such as the influences from family, friends, physical aspects and facilities of the university, and institutional information also were pointed out as having some influence on students' intentions, but to a lesser extent.

Vossensteyn (2005) found that students did not like to take loans for their studies. He explained this disposition as debt aversion. Students may object to take up loans for studying and that they are worried about debt which would incur during and after their study.

Reynolds & Cain (2006), in their study on the influence of facilities on the of students recruitment and retention in the United States discovered that campus attractiveness and facility quality influenced student's decision process, though not necessarily a deciding factor. However, absence, insufficient, or inadequately kept up important facilities may likely to have negative impact on choice for a significant number of respondents. They also indicated that a student's decision had direct correlation with institutional characteristics and facilities. The comparative analyses indicated that students with different demographic background showed different perceptions and consideration on the characteristic and the environmental setting of the institution. Lopez del Puerto (2009), also found that student educational outcomes are greatly affected by the perceptions on the physical environment. Though the results indicated that the campus facilities play a small part in the students' satisfaction, the physical environment did influence satisfaction with the graduate school program.

Burns (2006) revealed that a visit to campus was most useful information approach for university aspirants. Availability of scholarships and relatives who attended the university and campus residential halls were the most influential institutional characteristics, followed by college decision to attend the university and the social interactions for the students respectively.

Higher Education Research Institute (2007) reported in their research on the importance of college ranking and college choice in 1995 and 2006 that students consistently had the college's good academic reputation as their main reason for their choice of college. This is confirmed by Franklin (2008) who asserted that the reputation of an institution where the degree is earned is associated with that person throughout their life.

According to Long (2008) financial aid was critical to improving college access and success but without sufficient financial aid students would resort to loans or work to pay for their studies. This in turn would impact academic performance and reduce the chances that a student will persist to graduation.

However as confirmed by Schoenherr (2009), financial aid was found to be the most crucial factor in predicting whether students would attend a university. He also found



that though costs and academic reputation were significant predictors, they were of secondary importance compared with the concern to financial aid by high achieving students.

### **Study undertaken in Thai contexts**

There were some studies conducted in the Thai context on the influencing factors on choice of university. Yamchuti (2002) studied the factors influencing college choice on the newly opened private colleges in Thailand. The findings suggested that student's educational aspirations, significant others, formal college marketing efforts, college characteristics, expectation of college life, self-ratings of academic ability impact student's decisions to enroll at newly opened private college in Thailand. In another situation, Pimpa (2003) examined the Influence of Family, Peers, and Agents on Thai students' Choices of Education. This study investigated the influences of family, peers, and agents on Thai student's choices of international education. Family can influence student's choice by means of finance, information, expectation, persuasion, and competition. However, peers and agents influence student's choice through information, competition and persuasion. The most influencing factors were identified as financial support and information from agents. On the contrary, older Thai students' decisions are more likely to be affected by peers rather than family. In similar instance, Pimpa (2004) studied the relationship between Thai students' choices of international education and influencing factors from family. He found Thai students generally have five choices with regards to study abroad, which included the decision to study abroad, choice of country, city, academic program, and university. Family could influence their choice of international education through the following aspects: financial support, information from family members, family expectations, competitions among family members, and persuasion from family. All five choices of international education and influencing factors were positively correlated. Financial support was the strongest influencing factor, followed by family expectation. The other three factors had lower impact with the competition among family members the least influencing factor.

In 2006 Tawornchot and colleagues examined the attitude and the need of Thai students going to graduate studies. He studied the attitude and need towards the Thai students for postgraduate study in international curriculum. Characteristics of individuals that had an impact on intention and demand of Thai students studying Master's Degree in

international program included gender, age, cumulative GPA, occupation, income and educational level of parents. Furthermore, the factor that positively influenced Thai student's intention and demand for pursuing Master's Degree in international program most was the image and location of the university, followed by occupational interests, curriculum and tuition fee (Thawornchot, Napha-Aruk, Kaewsiripong & Ankarungrattana, 2006).

Pimpa (2007) conducted a study on reference groups and choices of vocational education: Case of Thailand. This study identified factors, which influenced choice of vocational education, which included personal attitude, curriculum, potential employment, attractiveness of campus, and tuition fees. Parents and secondary school teachers were suggested to be influential to students' decisions to enroll in vocational institutions.

Suwankiri (2007) studied the variables affecting the population characteristics that influence the decision for further study. These variables included age, gender, grade point average, parents' education level, parents' occupation, and the family's financial status. The results showed that female students continue to study more than male students. Students whose parents received a bachelor's degree or higher and are working as government officials or running businesses have higher chances to continue their studies than students whose parents received lower education and are in other occupations. Parents influenced students' motivation, expectations, and the decision to study at a higher level. Students with a good financial background were more likely to continue their studies than students with an inferior financial background.

### **Summary**

In closing this chapter we may be able to conclude how university choice has been in the past, has changed over time, and will be changing in the future. The development of access to higher education, university enrollment, marketing strategies/practices, and demographic change affected enormously the factors students and parents considered in their choice of university. Factors students used in their consideration has shed light to their choice process experience leading to the knowledge of the causes, what they implied, continued, changed and would likely to change in course of time. Whether

these factors will have implications on the future generation, especially, the Thai high school students in their decision on their higher studies is an important consideration.

On the extensive examination of all factors influencing the students' choice of higher education institution and other related models and theories dated back to the early years of the 20<sup>th</sup> century to the current days, the appropriate research design was chosen and the areas and scope of the study were laid down. The findings from previous studies have informed the researcher in the various stages taken in the construction of the data collection instruments and sampling design. The study was to be of exploratory nature with mixed mode design to capture any unknown or changes in the factors involved in the decision-making process of the Thai high school students prior to their choice making moments.

## **Chapter Three**

### **Methodology**

#### **Overview of the chapter**

The purpose of the study was to investigate what factors affect high school student's choice of university in Thailand. A mixed mode methodology was employed in this study, with both quantitative and qualitative methods serving different purposes in sequential phases. A focus group was conducted to guide the development of the data collection instrument used in the actual study. A pilot test was carried out to ensure the validity and reliability of the data gathering instrument – the questionnaire. In the final stage of data collection, semi-structured interviews were conducted to confirm the findings and further explore potentials for future study. Purposive sampling design was chosen as the most appropriate approach in recruiting the sample size of over 1,000 Thai high school students, who were about to make their decision on where and which institution to attend for their higher education programs and institutions. Both descriptive and inferential data analysis were conducted for data interpretation and content-based analysis was employed for the qualitative data.

The expected outcomes of this study will be the increased knowledge of what influences the Thai students who aspired to attend university, the choice of university and the implementation of the university in planning and policy making in the Thai context.

To address the purpose of the study the following research questions are posed:

- What factors influence students' choice of university in Thailand?
- Which attributes or characteristics of the university influence students' opinions and perceptions on university choice?
- Which persons influence students' decision making on choice of university?
- What source of information do students use for decision making on choice of university?

Newman & Benz (1998) contended that the research questions of a study dictate the selection of research methods and understanding the centrality of the questions guides the researcher in all other decisions during a research project. In the course of decision-making on the research methodology and design for this study, the researcher employed a mixed methods approach after consultations with experts in the field of study, experienced researchers and a review of literature. The selected design was chosen in

relation to the researcher's choice of research paradigm and the nature of the context and purpose of the study.

### **Research paradigms**

The nature of the paradigms is summarized in Guba & Lincoln (1994) as:

*A paradigm may be viewed as a set of basic beliefs (or metaphysics) that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of the "world," the individual's place in it, and the range of possible relationships to that world and its parts, as, for example, cosmologies and theologies do. The beliefs are basic in the sense that they must be accepted simply on faith (however well argued); there is no way to establish their ultimate truthfulness. (p. 107)*

Creswell (1994) used the terms "quantitative and qualitative paradigms" to describe positivism and post-positivism and explained how they help in the design of any study:

*Paradigms in the human and social sciences help us understand phenomena: they advance assumption about the social world, how science should be conducted, and what constitutes legitimate problems, solutions, and criteria of proof. As such, paradigms encompass both theories and methods. (p.1)*

The quantitative paradigm is often defined as the traditional, the positivist, the experimental, or the empiricist paradigm; the qualitative paradigm is the constructivist approach or naturalistic, the interpretative approach, or the post-positivist or post-modern perspective which began as a countermovement to the positivist tradition in the late 19<sup>th</sup> century (Guba & Lincoln, 1989; Creswell, 1994; Best & Kahn, 1998; Lincoln & Guba, 2000). Other terminologies used are 'normative' and 'interpretive' paradigms (Cohen & Manion, 1989). The paradigms were adopted in this study as they were found to be clearer and related closely to the study being undertaken. Their definitions are given as follows:

*The normative paradigm (or model) contains two major orienting ideas: first, that human behavior is essentially rule-governed; and second, that it should be*

*investigated by the methods of natural science. The interpretive paradigm, in contrast to its normative counterpart, is characterized by a concern for the individual. Whereas normative studies are positivist, all theories constructed within the context of the interpretive paradigm tend to be anti-positivist (Cohen & Manion, 1989, pp. 38-39).*

To further explain the differences between the two paradigms, Creswell (1994) and Cohen & Manion (1989) often contrasted them by dimensions based on the assumptions behind them. It was also pointed out that a clear understanding of these assumptions helps to provide directions for the researchers in designing all phases of their study. The summary of the contrasts between the two paradigms based on their assumptions is presented in the following table.

Table 3.1. Summary of the contrasts between the two paradigms based on assumptions

Assumption	Question	Quantitative/ Positivist/ Normative	Qualitative/ Post-positivist/ Interpretive
Ontological	What is the nature of reality?	Objective and singular	Subjective and multiple
Human nature	What is the nature of the relationship between human beings and their environment?	Responding mechanically as conditioned by external circumstances; macro-concepts— society, institutions, norms, positions, roles	Initiating their own actions with free will; micro-concepts— individual perspective, personal construct, negotiated meanings, definitions of situations
Epistemological	What is the relationship of the researcher to that researched?	Independent from that being researched	Interacting with that being researched
Axiological	What is the role of values?	Value-free and unbiased	Value-laden and biased
Rhetorical	What is the language of research?	Formal, based on set of definitions, impersonal voice, use of accepted quantitative words	Informal, evolving decisions, personal voice, accepted qualitative words
Methodological	What is the process of research?	Deductive; cause and effect; static design with categories isolated before study;	Inductive; mutual simultaneous shaping of factors; emerging design

context-free; generalizations leading to prediction, explanation and understanding; accurate and reliable through validity and reliability	with categories identified during research process; context-bound; patterns, theories developed for understanding; accurate and reliable through verification
---	---

---

Source: Adapted from Creswell (1994) and Cohen & Manion (1989)

Perceptions of reality are deemed subjective and can be seen in multiple facets. Reality is also context-oriented and situational. We bring into the reality of the world we perceive what we think about ourselves and the world we reside in, be that a group, organization or society.

To ascertain that the validity and reliability of the research methods were well established, particularly with the aspects of subjective interpretation involved, the strengths and weaknesses of the quantitative and qualitative methods were combined and used to complement each other.

*The goal of mixed methods research is not to replace either of these approaches (quantitative and qualitative approaches) but rather to draw from the strengths and minimize the weaknesses of both in single research studies and across studies (Johnson & Onwuegbuzie, 2004, p. 14).*

The researcher relied on evolving decisions as questions or issues which were raised in various stages of the study. Taking into consideration the inductive nature of the study, whereby most variables remained unknown at the beginning, the combination of both quantitative and qualitative approaches was deemed most appropriate for this study in its context.

### **Research design**

According to Patton (2002), in regard to the notion of quantitative versus qualitative approaches to research, researchers should face the challenge to match research methods and paradigms to the purposes, questions and issues raised in their study.

*They need to know and use a variety of methods to be responsive to the nuances of particular empirical questions and the idiosyncrasies of specific stakeholder needs (Patton, 2002, p. 585).*

The idea of combining quantitative and qualitative approaches to research and the use of both quantitative and qualitative methods in the same study has become increasingly accepted only during the past two decades (Denzin, 1989; Patton, 1990, 2002; Bryman, 1988, 1992; Creswell, 1998, 2003; Tashakkori & Teddlie, 1998, 2003; Johnson & Onwuegbuzi, 2004). Though it was not clearly defined when it was first introduced in the 1950s (Campbell & Fiske, 1959), Creswell (1994) contended that the combined quantitative and qualitative design was advantageous to a better understanding of the concept being tested or explored; it was only later that the concept of mixed mode design was introduced (Creswell, 2003). In his discussions on combining quantitative and qualitative approaches, Creswell (2003) focused on range of methods and gave the following description:

*(The methods) wherein the original intent was to triangulate findings, to demonstrate convergence in results. More recently, authors have broadened the purposes for mixing methods to include an examination of overlapping and different facets, to use the methods sequentially, to find contradictions and new perspectives, and to add scope and breadth to a study (Creswell, 2003, p. 189).*

The most appropriate research strategy chosen for this particular study was the Sequential Explanatory Strategy, which is characterized by the collection and analysis of quantitative data followed by the collection and analysis of qualitative data (Creswell, 2003). A mixed method is defined as any study that combines or mixes theoretical and/or technical aspects of quantitative and qualitative research within the same study (Creswell, 1994; Johnson & Onwuegbuzi, 2004). It is important that the differing aspects and characteristics of both quantitative and qualitative methods are clearly understood before an approach can be employed. A summary of how the two research methods differ on various factors related to the research process is presented in the following table.



Table 3.2. Summary of characteristics of quantitative and qualitative research methods

Factor	Quantitative	Qualitative
Researcher	Concerned with outcomes/products	Concerned with process and interested in meaning
Training and experience of the researcher	Technical writing skills; computer statistical skills; library skills	Literary writing skills; computer text-analysis skills; library skills
Research mode	Deductive	Inductive
Research problem	Hypotheses based on theoretical rationale; existing body of literature and theories; known variables	Immature due to a conspicuous lack of theory and previous research; variables unknown; context important
Data collected	Hard data	Soft data
Data collection techniques	Passive interaction through questionnaire and/or experimental design	Active interaction with sample population; observation by active participation
Sample population	Large population	Small population
Research variables	Small number	Large number
Data collection	Before and after training or experiment	On-going observation and interview
Relationship	Distant and short-term	Intense and long term with subjects
Research context	Controlled	Uncontrolled
Data analysis	Statistical analyses (e.g., descriptive, inferential statistics), using specific procedures, such as SPSS	Content/interpretive analyses through themes, patterns, and narrative synthesis, using coding and descriptive statistics, including ranking, frequency, percentages, etc.

Source: Adapted from Creswell (1994), Reichardt & Rallis (1994) and Sogunro (2002)

Various definitions are given and different terminologies are used to describe mixed methods research (Tashakkori & Teddlie, 2003); researchers vary in their reasons for employing a particular design for an appropriate study and the mixing or the combining can be within one study or among several studies in a program of inquiry (Creswell, 2003). As there are many ways and levels to combine both quantitative and qualitative elements in research projects as well as various types, designs and research strategies to serve the purposes of the study, the researcher started by answering the following questions as the research plans were mapped out (Rocco, Bliss, Gallagher & Perez-Prado, 2003):

1. **When?** *Mixing may occur at any point or at multiple points within a research project, from the purpose statement and statement of the research question, to the data collection and management, to data analysis, to drawing inferences from the interpretation of the findings.*
2. **In what order?** *Mixing may be done sequentially/interactively, using information gained from one to make decisions about the other or in simultaneous/parallel portions brought together only in the final analysis of the research project.*
3. **At what level?** *Data collection and analysis can be mixed between and within levels. Levels may include the individual, group, organization, and society.*
4. **In what proportions?** *Quantitative or qualitative components may be used equally, or one may be more dominant.*
5. **To what degree are the tools/techniques different?** *There are quantitative and qualitative data-gathering tools/techniques that are similar, such as scaled questionnaire and a structured interview, and those that are farther apart such as an achievement test and an open-ended interview.*
6. **Does the type of data dictate the type of analysis?** *No. Qualitative data may be quantified by converting it to numbers for quantitative analysis. Likewise, quantitative data may be qualitatively analyzed. For instance, a profile of a group and/or individual's opinion and perception may be developed based on quantitative data.*
7. **What is one benefit of mixing?** *Mixing makes room for both exploratory inductive process that begins with empirical evidence of the particular and proceeds to a level of abstracting/theorizing/generalizing and the confirmatory deductive process of hypothesis testing of theories.*

Researchers have increasingly accepted the underlying assumption that there are inherent biases in any method of data collection or analysis and more are turning to mixed methods to conduct stronger studies. The combination of quantitative and qualitative approaches with their inherent strengths and weaknesses was seen as complementary and beneficial. The biases in any particular data source, investigators and method would then be cancelled out when used in conjunction with other data sources, investigators and methods (Campbell & Fiske, 1959; Denzin, 1978; Punch, 1998; Freeman, 1998; Grix, 2010). The fundamental principle of the method chosen stated that it was actually wise to collect multiple sets of data using different research methods in such a way that the resulting mixture or combination would have complementary strengths and non-overlapping weaknesses (Brewer & Hunter, 1989). However, it is essential to point out that mixed methods research although offering great opportunities for practising and beginning researchers, is itself not free from certain weaknesses. Table 3.3 outlines the strengths and weaknesses of mixed research.

Table 3.3. Strengths and weaknesses of mixed research

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>- Words, pictures, and narrative can be used to add meaning to numbers.</li> <li>- Numbers can be used to add precision to words, pictures and narrative.</li> <li>- Can provide quantitative and qualitative research strengths.</li> <li>- Researcher can generate and test a grounded theory.</li> <li>- Can answer a broader and more complete range of research questions because the researcher is not confined to a single method or approach.</li> <li>- The specific mixed research designs can provide specific strengths. (For example, in a two-stage sequential design, the first stage results can be used to develop and inform the purpose and design of the second stage component.)</li> <li>- A researcher can use the strength of an additional method to overcome the weaknesses in another method by using both in a research study.</li> <li>- Can provide stronger evidence for a conclusion through convergence and corroboration of findings.</li> <li>- Can add insights and understanding that might be missed when only a single method is used.</li> </ul>	<ul style="list-style-type: none"> <li>- Can be used to increase the generalization of the results.</li> <li>- Qualitative and quantitative research used together produce more complete knowledge necessary to inform theory and practice.</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>- Can be difficult for a single researcher to carry out both qualitative and quantitative research, especially if two or more approaches are expected to be used concurrently; it may require a research team.</li> <li>- Researcher has to learn about multiple methods and approaches and understand how to mix them appropriately.</li> <li>- Methodological purists contend that one should always work within either a qualitative or quantitative paradigm.</li> <li>- More expensive.</li> <li>- More time-consuming.</li> <li>- Some of the details of mixed research remain to be worked out fully by research methodologists (e.g., problems of paradigm mixing, how to qualitatively analyze quantitative data, how to interpret conflicting results.)</li> </ul>
---	---

Source: Adapted from Johnson & Onwuegbuzie, 2004, p. 21.

Frameworks to categorize the various types or designs include those based on the philosophical positioning or paradigms of researchers which are roughly divided into two: the pragmatist and the dialectical. The pragmatists tend to use whatever approaches that work for the particular research problems under study and their decisions are made without any commitment to a particular design, for specific problems and to make the data collection and analysis more accurate and/or the inference more useful (Patton, 1988; Reichardt & Rallis, 1994; Tashakkori & Teddlie, 1998; Creswell, 1998).

Pragmatic frameworks are often those developed according to the three main stages in research: the type of project, the type of data collection and operations, and the type of data analysis and inference (Tashakkori & Teddlie, 1998). Meanwhile, the dialectical

researchers emphasize more the benefit of mixing research paradigms as making the study more ethical and stronger in the sense that it represents a plurality of interests, voices and perspectives. Though their aims for utility and accuracy are the same as for the pragmatists, they normally obtain these through complementarities and not compatibility (Greene & Caracelli, 1997).

Other dimensions, which should be taken into consideration when planning a mixed methods research, are those involving the different stages of the study, paradigm emphasis and time ordering of the quantitative and qualitative phases combined in the study (Johnson & Onwuegbuzi, 2004). Figure 3.1 suggests how a researcher can create more user-specific and more complex designs to serve his/her purposes in the study.

		Time Order Decision	
		Concurrent	Sequential
Paradigm Emphasis Decision	Equal Status	QUAL + QUAN	QUAL → QUAN QUAN → QUAL
	Dominant Status	QUAL + quan QUAN + qual	QUAL → quan qual → QUAN QUAN → qual quan → QUAL

Figure 3.1. Mixed method design matrix (Johnson & Onwuegbuzi, 2004)

Besides the main concept of triangulation, Greene, Caracelli & Graham (1989, p. 259.) propose reasons and purposes why researchers have chosen to combine methods in a single study. This analysis is taken from the review of 57 studies. The five purposes have been summarized as follows:

1. **Triangulation:** to increase the validity of a study in the sense of seeking convergence of results.
2. **Complementarity:** to increase validity and interpretability by measuring the overlapping, but different facets of a phenomenon.
3. **Development:** to increase validity of a study wherein the first method is used sequentially to help inform the second method.

*4. **Initiation:** to add depth and breadth to inquiry results and interpretations in search for fresh insights and perspectives.*

*5. **Expansion:** to widen the scope of inquiry by including multiple components to extend the breadth and range of the study.*

Accepting that a mixed mode research design was the most appropriate for this type of study, it was important to determine the distribution of a phenomenon within a chosen population. This strategy is often stated and referred to as the model used when a researcher develops and tests an instrument (Creswell, 1999).

The researcher decided to begin the qualitative inquiry through a series of focus group discussions with the high school students to capture the cultural aspects to identify the factors influencing student choice decision making. This approach would complement the list of factors found in the related literatures for survey instrument development, followed by the survey (quantitative approach) and later the in-depth interviews (qualitative approach). The sequential design was chosen with the intention of employing the quantitative methods in the second phase for threefold purpose: to describe the nature of existing conditions, to identify standards against which existing conditions can be compared and to determine the relationships that exist between specific events (Cohen & Manion, 1989).

Priority and emphasis would then be placed on the quantitative approach as the initial statistical analysis and which would provide direction to the qualitative data-collection process. In brief, the output of the survey would be used to develop the interview questions and frame the criteria used in the analysis. While the integration of both types of data may occur at several stages in the process of the study, statistical analysis techniques would be required to analyze the qualitative data from the interviews. The decision was determined by taking into consideration the criteria for choosing a strategy proposed by Creswell (2003).

<i>Implementation</i>	<i>Priority</i>	<i>Integration</i>	<i>Theoretical perspective</i>
No sequence concurrent	Equal	At data collection	Explicit
Sequential-Qualitative first	Qualitative	At data analysis	
Sequential-Quantitative first	Quantitative	At data interpretation	Implicit
		With some combination	

Figure 3.2. Decision choices for determining a mixed methods strategy of inquiry (Creswell, 2003, p. 211)

Six major approaches have been identified by Creswell (2003, pp. 215-219): Sequential Explanatory Strategy, Sequential Exploratory Strategy, Sequential Transformative Strategy, Concurrent Triangulation Strategy, Concurrent Nested Strategy, and Concurrent Transformative Strategy. These approaches vary according to the sequence; nature and emphasis of how quantitative and qualitative techniques are employed in data gathering and analysis processes throughout the study.

The researcher identified as most appropriate for this study the Sequential Explanatory Strategy which, according to Creswell (2003), is the most straightforward among the six approaches. In the data collection and data analysis stages of this study, both quantitative and qualitative approaches were employed as the study started off with focus group discussions, the distribution of the survey questionnaire and followed with the in-depth interviews. The main purpose of this research strategy was to use the qualitative results to explain more clearly, to better interpret and if possible to expand the findings of the preceding quantitative study. The steps taken in the study are best presented in the following figure.

### Sequential Exploratory Strategy

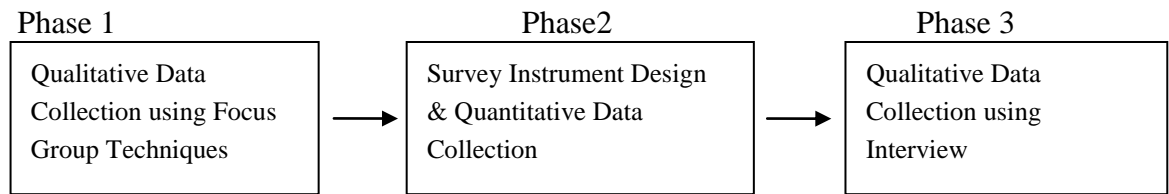


Figure 3.3. Sequential Explanatory Design (Creswell, 2003)

### Data gathering procedures

The data gathering procedures in this study involved both quantitative and qualitative research techniques and they were combined in different stages. The researcher started the study with the qualitative methods, which included a focus group and a pilot study to develop the proper instrument for the survey. The Sequential Exploratory Strategy was used to implement this design with the priority given to the qualitative aspect of the study (Creswell, 2003). This strategy was characterized by an initial phase of qualitative data collection and analysis, which was followed by a phase of quantitative data collection and analysis. This research was conducted over three phases. The first phase was carried out by using focus group techniques in order to gather the necessary factors, identifying the possible factors for choice of higher education in the Thai context, in addition to those found in the relevant literatures. These factors were used to construct the survey instrument in the second phase. The survey was meant to answer the research questions, as well as to later provide guidance for the opinions and perceptions analysis scheme. This instrument was the tool for data collection from a larger population in this phase in order to explore the phenomenon and expand the qualitative findings in the third phase using interview techniques with a smaller group of students in order to confirm the findings in the preceding phase. This strategy to implement a mixed mode design is shown in Figure 3.1.

### Sampling design

The Sage Dictionary of Social Research Methods groups together types of sampling, such as convenience, volunteer and purposive. Purposive sampling was chosen by the researcher, as it fit the purpose, budget and timeframe of the study. In purposive sampling, also termed as purposive or judgmental sampling, the researcher specified the characteristics of a population of interest and then tried to locate individuals who fit those characteristics (Johnson & Christensen, 2004). Specific characteristics for

selection criteria were constructed and the researcher located the participants through initial permission and volunteering. Students who were the unit of analysis in the study were Grade 12 high school students in both public and private high schools, from five regions which represented all the students from all the urban, regional and remote areas in Thailand (*see Appendix D*).

A list of all the high schools in Thailand was obtained from the Ministry of Education and contacts were made with some of the schools in all five regions. The school administrators (Principals, Directors and/or Deputies) were contacted by telephone in person. In the discussions prior to the request for the permission to conduct the research at their schools, details of the data gathering procedures and analysis were discussed and the ethical issues and consent forms were presented. It was agreed that the students taking part in the study must do so voluntarily, that students and their schools remain anonymous in the thesis, and that all information and data must be treated with confidentiality. Finally, permissions were granted from 17 schools on a voluntary basis for the survey.

### Sample size

The overall total size of the possible population of the study, students in both public and private high schools in Thailand, is **382,298** (Ministry of Education, 2009b). Though the sampling design adopted in this study is not random sampling, the researcher decided to ensure minimal error by employing the scientific identification of the sample size (Frankford-Nachmias & Nachmias, 1996). Thus, confidence interval is established at 95% or an alpha value at .05, and the t value estimated at 1.96. Due to the variation errors from sampling elements, the study error was to be accepted at 5%. In order to ascertain a design effect, the actual sample size was aimed at a greater number than estimated.

Total of sample size for the study:

$$n = \frac{N}{1 + Ne^2} = \frac{382,298}{1 + 382,298(.05)^2}$$

$n$  = total sample size                       $n = 400 (399.99)$   
 $N$  = total population  
 $e$  = error estimation



## **Participants**

Therefore, a total of 1,012 students volunteered as the sample for this study. The research population comprised of students in high schools representing all regional schools in the North, the Northeast, the East, the South and the Central (including Bangkok). In the current educational system of Thailand, the six years before higher education are considered the turning and crucial point in the students' educational paths. In this study, only the students in their last year of high school at both the public and private high schools were included. Accessibility to the information of the students is possible directly through the schools. After the official request together with attached information sheets and required documents were submitted to the schools, the permission for the research was granted.

After the permissions from the schools were granted, the students were asked to take part in the study on a voluntary basis with their consent given in all the three stages of data collection – focus group discussions, the survey and the interviews. Those who participated in the focus group discussions were also informed beforehand that their opinions would be needed for the review of documents and confidentiality assured.

## **Data collection**

### **Phase 1: Qualitative Data Collection:**

The qualitative method (the focus group discussions) preceded the quantitative methods (the survey) and was to be followed by the qualitative method (the interviews) to better explain and interpret the findings of the quantitative study previously completed. In the attempt to develop a survey instrument for the study, with little research conducted in similar contexts and no appropriate samples to draw from, the researcher decided to use an expert system and a focus group, and to conduct an extensive pilot study to test and confirm the validity and reliability of the instrument.

### ***Focus Group***

This phase involved a series of focus group discussions with 20 grade 12 high school students. The objective of the focus group discussion was to capture personal and circumstantial factors and dimensions to identify the factors influencing student choice

decision making, to confirm, and to complement these factors as found in related literature.

### ***Purposive selection of the focus group***

The focus group discussions were organized with representatives in the metropolitan, as well as the regional areas, contributing to identifying different cultural and social beliefs. Other considerations, such as relevant demographic and socioeconomic information, were also taken into account in order to enhance representation of the students' diversity. The samples of the focus group discussions were chosen from the grade 12 high school students who were ready to apply for admissions in 2009. This arrangement added to the robustness, richness and creditability of the data. The participants for the focus group discussions were deemed appropriate with sampling from one public and one private school from both the male and female student population.

### ***Focus group discussions procedures:***

The student participants were informed to understand that the aim of this study was to investigate and understand the information on factors, which influence high school students' selection of their preferred universities in Thailand. They were informed of the acceptable protocols of consent, participation and confidentiality, as required by the University of Wollongong (*see Appendix B*). The focus group participants and the discussions were tape-recorded for subsequent data transcription and all the data collected would then be analyzed by the researcher.

During the discussions the researcher encouraged the participants to share how and what they would think, feel or consider about the university they would prefer to attend (what factors were taken into consideration when they choose a university). They were asked to rank the characteristics, which were important to them when they make their choice of a university. They were also urged to list what would influence them most in making this choice. The amount of effort they made in their university search was also required. The many external persons, such as teachers, school counselor, parents, friends, relatives or university representatives, who would influence their decision making in making their choice on university they would attend were also urged to be identified. This focus group discussion would last 45 minutes to one hour.

The outcomes of the focus group discussions would be the list of different factors with sufficient importance, which would have influence on the participants' preferred university. The researcher assumed that the results would confirm the list of the university characteristics and how the decision on choice would be made in the questionnaires development for quantitative data collection.

## **Phase 2: Quantitative Data Collection**

### ***Survey instrument development***

The qualitative data obtained from the focus group discussions and factors identified from the literature review were used to develop the draft survey instrument with the potential to get the necessary information from the targeted population to answer the research questions. Demographic and socioeconomic backgrounds were also included in the survey instrument.

The questionnaire consisted of three parts.

#### ***Part I:***

The demographic and socioeconomic background of the respondents was included in the first part of the survey instrument. The population comprised of respondents of both genders and educational majors from private and public high schools. Their academic performance, activity and family factors were also taken into account. This part of the questionnaire is a nominal scale, which is a number or letter assigned to each object serving as labels for identification of classification (Zikmund, 2003).

#### ***Part II:***

Factors affecting the opinions and perceptions of the Thai high school students on choice of university in Thailand were included in the second part of the survey instrument. This part comprised of a total of thirty questions. All the questions used on interval scale for the respondents to indicate their opinions and perceptions. A five-point Likert-scale was applied in the questionnaire with 1 indicating 'not important', 2 indicating 'little important', 3 indicating 'moderately important', 4 indicating 'very important' and 5 indicating 'most important.' The 30 factors on opinions and perceptions were grouped into 11 categories of influencing factors; namely:

- Type of University
- Medium of Instruction

- Curriculum
- University Atmosphere
- Admissions Standard
- University Reputation
- University Services
- University Location
- Living Expenses
- Tuition Fees
- Financial Aid

*Part III:*

Perception of the major influences on decision making, for example parents, friends or self was also investigated. As well, where students sought information from was explored. The third part comprised of a total of fifteen questions. All the questions used an interval scale for the respondents to indicate their opinion. A five-point Likert-scale was applied in the questionnaire with *never*, *rarely*, *sometimes*, *often* and *always* as the choices available. Decision making was assumed to occur, apart from the students themselves, by way of consultation provided by persons who would influence the high school students' decision making, such as parents, teachers, school counselors, family relatives or friends. Whereas sources of information which influenced the decision making could be from friends, advice from alumni or students of the concerned university, information from the university's media or website, participation in a counseling session organized by the universities, campus visits or attending education fairs and exhibition.

***Survey instrument development: Pilot Study***

The first survey questionnaire was drafted to address the four research questions posed:

- What factors influence students' choice of university in Thailand?
- Which attributes or characteristics of the university influence students' opinions and perceptions on university choice?
- Which persons influence students' decision making on choice of university?
- What source of information do students use for decision making on choice of university?

### **Pilot study and validation of the survey instrument**

The first objective of the survey instrument administration was to seek results from the selected group of students, as well as from other faculty members. Appropriate consideration is given on the length of the instrument, time used to complete, degree of difficulty and possibility of creating confusion or being misled when the survey was administered. Another objective was to probe further to ascertain whether there would be other factors, which might have been overlooked during the stage of focus group discussions. The survey instrument was also validated during this phase.

The first version of the survey instrument (*see Appendix C*) was subjected to the initial examination by the expert panel at the University of Wollongong in the attempt to develop an appropriate instrument. It was later presented to a group of academics (consisting of 4 teachers and 2 school administrators) in the chosen school sites in Thailand for the logical analysis of item content and construct of the measurement. Certain changes were made in terms used in the questionnaire according to the comments made by the experts and those academics included in the focus group. For example, it was decided that information from the students concerning their ‘decision-making’ would be helpful. A question was developed that required students to disclose who influenced their decision-making processes. Also, a category in the demographic section was included which identified if the student’s parents were ‘widowed’.

Information was added and terms were clarified in accordance with the current and common practices. Finally, the survey instrument was implemented for further validity and reliability tests in the first pilot study prior to the implementation of the study for a larger group of students.

Creswell (2009) reminds us that researchers need to be aware of possible threats to validity, specifically for this study threats to statistical conclusion validity. According to Cresswell (2009, pp. 162-164) validity threats arise when experimenters draw inaccurate inferences from the data either through inadequate statistical power or through the violation of statistical assumptions. In this study, the survey instrument was checked for validity by undertaking a pilot study and addressing any perceived threats to validity.

Two hundred copies of the Thai version questionnaire were sent to four schools located in four different regions. Two private and two public schools were selected. Students were asked to answer voluntarily. The four schools were similar in size and numbers of students.

***Purposive selection of the participants for the pilot study***

The population was drawn from approximately 200 grade 12 high school students from both public and private schools in different regions resulting in 196 respondents. They were recruited from representatives in the metropolitan, as well as the regional areas contributing to identifying different cultural and social aspect ways of life and beliefs. Other considerations, such as relevant demographic and socioeconomic information, were also taken into account in order to enhance representation of the students' diversity. The samples of the participants were selected from the grade 12 high school students who were ready to apply for admissions in 2009. This arrangement added creditability of the data collected.

There were 100 male and 96 female respondents participated in this pilot study. The majority of students surveyed, 140 or 71.4% indicated that they were 18 years of age. Two students did not indicate the gender and two students did not indicate their age. Most of the participants were from Bangkok or 77.6%, about 14.8% were from other regions. Students who participated in the survey had previously nominated an area of study at the senior secondary level. The educational major could be either a science major or an arts major. Of the 98 participants 28.1% indicated they were from a science major and 55.1% indicated they were from arts major while 16.8% did not indicate their 'major'.

About 50% of the students who participated in this study indicated that they have a grade point average of more than 3.01. 8 participants did not indicate their grade point average. The household income for the majority of students appeared to be more than 50,000 baht per month. The highest level indicated for the father's education level was a Bachelor's degree with 80 or 40.8% responses. Interestingly the second highest was the high school level and lower than high school at 18% each. When examining the mother's education, the Bachelor's degree is the highest level with 84 or 42.3%

responses. As with the father's education, the second highest for the mother's education level was high school and lower than high school with 26% and 21% respectively.

To further establish the reliability of measurement for questions 1-30 of the opinions and perceptions part and questions 1-16 of the information (decision making) part, each of which has several or more subparts, the covariance matrix and correlation matrix for all items were analyzed using Cronbach alpha formula (Cronbach, 1951) and the item total statistics was indicated in Table 3.4.

Table 3.4. Cronbach alpha of responses to factors on opinions and perceptions on choice of university factors

#### Opinions and Perceptions

Label	N	Alpha	Standardized item alpha
Type of University	185	0.8358	0.8371
Medium of Instruction	191	0.7021	0.7023
University Atmosphere	187	0.7311	0.7310
Admissions Standard	191	0.7655	0.7656
University Reputation	192	0.8616	0.8618
University Services	189	0.7961	0.7727
University Location	190	0.7237	0.7239
Financial Aid	190	0.716	0.7147

#### Decision-Making

Label	N	Alpha	Standardized item alpha
Persons who Influence decision	193	0.7947	0.7990
Source of Information	193	0.8665	0.8634

Wiersma (1995), stating that reliability is a statistical concept based on the association between two sets of scores representing the measurement obtained from the instrument when it is used with a group of individuals, contended that:

*Reliability coefficients can take on values from 0 to 1.0 inclusive. Conceptually, if a reliability coefficient were 0, there would be no "true" component in the observed score. On the other hand, if the reliability coefficient were 1.0, the*

*observed score would contain no error; it would consist entirely of the true score. Clearly, in educational measurement, it is desirable to obtain high reliability coefficients, although coefficients of 1.0 are very rare indeed. (Wiersma, 1995, pp. 309-310.)*

As the reliability coefficients for all items (questions 1-30 of the opinions and perceptions part and questions 1-16 in the information (decision making part) were clearly close to 1.0 , the reliability of internal consistency was thus established and the survey instrument was ready for the actual study. For the inferential statistical analysis in the actual study, *the mean score of the output of each of these questions* will be used.

After the analysis of the results was completed, it was evident that the data generated from the analysis was informative as anticipated, however, with the consultation with the supervisors another element on decision-making i.e., “*You made the decision by yourself*” was included. As the reliability coefficients for all items were clearly close to 1.0, the reliability of internal consistency was thus established and the survey instrument was ready for the actual study.

### **Phase 3: Qualitative Data Collection:**

The objective of this phase was to explore the phenomenon and expand the quantitative findings. Another methodological reason is to make the findings more credible and trustworthy by confirming and testing the data with an interview of students selected from a diverse background and fields of study in the metropolitan based high schools.

### **Qualitative methods**

The main purpose of the research design chosen for this study, Sequential Explanatory Design (Creswell, 2003), was to use the results from the qualitative methods to explain more clearly, to better interpret and if possible to explore the phenomenon and expand the findings of the quantitative study previously completed. Among the many ways of collecting qualitative data, the researcher decided to employ the interview as it was appropriate for the purpose of the study as well as practical and realistic in the context of the study. The interviews were conducted after the preliminary analysis of the data collected from the survey was completed.



## ***Interviews***

Interviews are used to gather information regarding an individual's opinions and perceptions; his or her beliefs, and feelings; and demographic data. While interviewing is basically about asking questions and obtaining answers, much has to be considered before a decision is made as to what are the most appropriate methods for one's study. Interviewing has a wide variety of forms and a multiplicity of uses. Most commonly, different types of interviews are distinguished by the degree of structure in the interview questions and the degree of standardization in the methods of inquisition across different settings and situations (Patton, 1980; Minichiello, Aroni, Timewell & Alexander, 1990; Fielding, 1996; Merriam, 1998; Fontana & Frey, 1994; Punch, 1998; Wisker, 2008). An example of the continuum of interviewing methods based on the degree of structure involved is shown in the table below.

Table 3.5. The continuum of interviewing methods

Structured interviews	Focused or semi-structured interviews	
		Unstructured interviews
Standardized interviews	In-depth interviews	In-depth interviews
Survey interviews	Survey interviews	Clinical interviews
Clinical history taking	Group interviews	Group interviews
		Oral or life history interviews

Source: Minichiello et al., 1990, p. 89

For this study, the researcher chose to employ in-depth semi-structured interviews. The respondents were asked a series of pre-established questions, which were all open-ended with no pre-set response categories. Though there were no specific interview schedules fixed, the standardized sequence and types of questions were used. The exact wording and sequence of questions and the fact that all questions were worded in completely open-ended format serve the researcher's purpose to increase comparability of responses. Data collected were thus complete for each respondent and this strategy also helped to facilitate the organization and analysis of the data in the later stage. As all interviews were carried out by only one interviewer (the researcher), issues of interviewer bias or effects were eliminated.

Recognizing the importance of location and time and their influence on the quality of data, all interviews were conducted at the school sites and there was no limit on time set

for each interview session. The respondents were encouraged to elaborate on any or all of their answers when and if they felt so inclined. Careful consideration was given to communication and listening skills to establish appropriate rapport between the interviewer and those interviewed to maximize the quality, reliability and validity of the interview data obtained. As the purpose of interviewing is *to find out what is in or on someone's mind, and not to put things in someone's mind* (Patton, 1990, p. 278), the researcher made certain that those interviewed clearly understood that the researcher did not hold any preconceived notions and that personal perspectives were not once shown on any issues involved in the interviews.

### ***Interview questions***

As the purpose of the interviews was to explain more clearly, to better interpret and if possible to explore the phenomenon and to expand the findings of the quantitative study from the survey, the interview questions were developed from the questions included in the survey. In the following step, the research supervisors and the experts at the University of Wollongong approved the questions before they were used in the interviews. The questions being open-ended allowed the respondents to elaborate more on their opinions, perceptions, beliefs and experiences on the issues raised and this made possible the expansion of the data gathered from the survey. The questions used in the interviews were as follows:

1. *Does the private or public university matter if you have to make a choice?*
2. *What do you take into your consideration when you make a university choice?*
3. *What factors influence you most regarding choice of university?*
4. *Describe how you would make your choice.*
5. *What are the factors you find most useful in making university choice?*
6. *Does university reputation matter?*
7. *Why is it important to consider a university near your home?*
8. *Do you take cost or financial aid programs into consideration? If so, why?*
9. *Do you consult anyone before making your choice? If so, who?*
10. *How do you gather information on the university of your choice?*
11. *Do you intend to make a campus visit before making decision? Why?*
12. *Have you ever attended any education exhibition to gather information? Why?*
13. *How do your friends make their choice? What issues seem to concern them most?*

*14. Do you think you will follow your friends 'advice or decision? If yes, why? If no, why not?*

*15. Who will be the last person to decide for you about your university choice? By yourself, your parent(s) or someone else?*

### ***Interview procedures***

There were 8 participants included in the interview. The semi-structured interviews were conducted at 4 school sites at the interviewees' convenience and choices of location and time. The interview questions were all open-ended presented to the respondents and the interviews were tape-recorded for subsequent data transcription. Prior to each interview, respondents were asked to complete a copy of the survey questionnaire for cross-checking of their answers at a later stage as well as to provide them with some background of the questions and possible choices of answers. The outcome of the study will be the increased knowledge of what influence the choice of universities, thus help guide the higher education institutions in their future planning and policy making.

The interview participants' consent to take part in the interview was entirely voluntary, if any of them felt that the study was intrusive or whenever they were reluctant to discuss further, they were informed that they could withdraw at any stage. Their refusal to participate or withdrawal of consent would in no way affect their relationship with the Faculty of Education or the University of Wollongong and the researcher would analyze all the data collected. They were advised that they would not be required to undertake any other activities beyond answering the questionnaire and that it would take approximately forty five minutes to one hour. All measures to be taken to ensure confidentiality of all responses and data related to the participants throughout the study and any publication later were clearly explained.

### **Mixed methods data analysis**

Onwuegbuzie & Teddlie (2003) proposed that a mixed methods analysis offers a more comprehensive analytical technique than does either quantitative or qualitative data analysis alone.

*In particular, mixed methods data analysis allows the researcher to use the strengths of both quantitative and qualitative analysis techniques so as to understand phenomena better. The ability to get more out of the data provides the opportunity to generate more meaning, thereby enhancing the quality of data interpretation (Onwuegbuzie & Teddlie, 2003, p. 353.)*

These authors also claimed analysis allows the researcher to fulfill the five purposes of evaluations outlined by Greene, et al. (1989): triangulation, complementarity, development, initiation and expansion. As the sequential explanatory design was selected for this study for the purpose of confirming and expanding the data gathered by the quantitative methods with the data gathered by the qualitative methods, the researcher found this proposal most appropriate for the data analysis in this study.

The data collected in the survey (quantitative approach) in the first phase of this study were analyzed and used to determine the participants in the interviews (qualitative approach) in the second phase. Consequently, data gathered from both approaches would be analyzed and used in answering the research questions. In regards to representativeness and legitimation, the researcher wished to be able to extract adequate data and validate the data. The following table shows the stages which were proposed by Onwuegbuzie & Teddlie (2003), then adapted and applied for the data analysis process in this study.

Table 3.6. Stages of mixed methods data analysis process

Stage	Definition
1. Data reduction	Reducing quantitative data (e.g. descriptive statistics, exploratory factor analysis) and qualitative data (e.g. exploratory thematic analysis)
2. Data display	Reducing quantitative data (e.g. tables, graphs) and qualitative data (e.g. matrices, charts, graphs, networks, lists)
3. Data transformation	Qualitizing and/or quantitizing data (e.g. possible use of effect sizes, exploratory factor analysis)
4. Data correlation	Correlating quantitative data with qualitized data
5. Data consolidation	Combining both data types to create new or consolidated variables or data sets
6. Data comparison	Comparing data from different data sources
7. Data integration	Integrating all data into a coherent whole or two separate sets (i.e., quantitative and qualitative ) of coherent wholes

Source: Onwuegbuzie & Teddlie (2003, p.375)

The analysis of data from both quantitative and qualitative approaches was carried out in four stages as described below:

1. Data reduction – At the beginning of this stage, guidance and suggestions were sought out by the researcher from the supervisors, research experts from the University of Wollongong and Assumption University. First and foremost, the data gathered from the survey instrument, 1012 questionnaires, were computed for descriptive and inferential statistics. Included in the descriptive statistics were measures of frequency, mean, percentage and standard deviation. Data gathered from the qualitative methods, the focus group, were reduced by confirmatory content analysis to suit the purpose of the study. This included transcribing the discussion tapes, writing summaries, coding, making clusters and writing memos. The analysis of the data from the focus group provided the researcher the expected confirmation of the findings from the survey and some in-depth explanation of the phenomenon related to the objectives of the study.
2. Data display – Consultations with the supervisors and experts from the University were made concerning the ways and means to reduce and organize the analyzed data in the most appropriate and simplified fashion for accuracy and clear understanding in the data presentation stage. For numerical data, tables were recommended. Qualitative data were displayed in narratives and authentic excerpts were included for effective presentation.
3. Data transformation – The process of data transformation adopted herein was literally employed to define the modification of data in quantitative and qualitative forms to fit specific purposes. As well as the focus on factors included in the research questions, the additional themes, which emerged during the study, were also taken into consideration in designing the appropriate data types for presentation in the later stage. There were mixed types for both quantitative and qualitative data as each decision made was deemed most appropriate and effective for the specific purpose.
4. Data comparison – Data collected and analyzed in both quantitative and qualitative forms were compared as the data were subjected to triangulation for validation purpose. For further analyses, data in both forms were compared for *initiation* and *complementarity* purposes (Greene, et al., 1989).

### **Treatment of the data**

In the stage of the data analysis, the data gathered from questionnaires was analyzed by means of the Statistical Package for the Social Sciences (SPSS). A descriptive analysis was conducted to identify the respondents' demographic information comprising of gender, home address, type of school attended, high school study major, academic performance, household income and level of parental education. The influencing factors on the university characteristics including type of university, medium of instruction, curriculum, admissions standard, university atmosphere, university reputation, university services, university location, living expenses, tuition fees, and financial aid were cross tabulated with the demographic information of the students to elicit the opinions and perceptions on the preference of university by percentage.

### **Data presentation**

There is wide consensus that mixing different types of methods can strengthen a study, particularly one with combined or mixed purposes (Greene & Caracelli, 1997; Creswell, 2003; Punch, 1998; Tashakkori & Teddlie, 2003; Grix, 2010).

The integration of both approaches occurred in various stages of the study and the combination of both approaches was carefully planned to facilitate the study and serve specific purposes where and when necessary. Creswell, Plano Clark, Gutmann & Hanson (2003, p. 221) contended that it was possible for researchers to integrate components of both quantitative and qualitative research during the different phases of question specification, data collection, data analysis and interpretation. Table 3.7 illustrates the various stages of integration of the two approaches.

Table 3.7. Stages of integration of quantitative and qualitative approaches

Research				
	Research problems/ Data questions	Data collection method	Data analysis/procedure	Data interpretation
Quantitative	Confirmatory	Instruments	Descriptive statistics	Generalization
		Observations	Inferential statistics	Prediction based
	Outcome based	Documents		Interpretation of theory
		Score oriented		
Qualitative	Exploratory	Interviews	Description	Particularization
		Documents	Identify themes/	(contextualizing)
	Process based	Observation	categories	Larger sense-making
		Audiovisual	Look for inter-	Personal
	Descriptive	Participant-	connectedness	interpretation
		determined	among	Asking questions
	Phenomenon of interest	process	categories/themes	
		Open-ended process Text/image oriented	(vertically and horizontally)	

The following table shows the survey questions and they are classified by their focuses on various opinions and perceptions. The responses from each question would be analyzed and interpreted in accordance with the classification in terms of their percentage in agreement and disagreement.

Table 3.8. Survey questions according to the opinions and perceptions

Opinions and Perceptions	Question numbers	Question Statements
Type of University	1	The university is a private institution.
	2	The university is a public institution.
	3	The university is affiliated to a religious organization.
Medium of Instruction	4	The university is an international institution with English as the medium of instruction.
	5	The university offers some English programs.
Curriculum	6	The university is comprehensive, offering a variety of academic programs in humanities and science.

University Atmosphere	7	There are foreign students and faculty members, making the university a truly international community.
	8	The university offers various extracurricular activities on a regular basis.
	9	The university provides the environments and atmosphere which are conducive to learning.
	10	The university has clear rules and regulations.
Admissions Standard	11	The university has its own admission examination and selection procedures.
	12	It required preparation and personal effort to pass the exam and get accepted to the university.
	13	The university admission system is highly competitive.
University Reputation	14	The university has a good reputation for academic excellence.
	15	The university has a good reputation for qualified lecturers.
	16	The university has a good reputation for quality graduates.
	17	The university has a good reputation for high technology in all its infrastructure and teaching & learning facilities.
University Location	19	The university is in a convenient location.
	20	The university is not far from your residence.
	21	There are student dormitories and apartments near the university.
Living Expenses	22	The living expenses (food, transportation, accommodation etc.) on campus are reasonable.
Tuition Fees	23	The tuition fees are average compared to other institutions of the same type.
Financial Aid	24	There are possibilities to apply for a scholarship.
	25	It is possible to apply for a loan for tuition.
	26	It is possible to apply for a loan for accommodation expenses.
University Services	27	It is possible to get a part time job on campus.
	28	It is possible to join an exchange program or study abroad.
	29	The university has an academic advising system.
	30	The university provides career guidance and job placement counseling.
	18	The university offers adequate and quality library resources and services.



<b>Opinions and Perceptions</b>	<b>Question numbers</b>	<b>Question Statements</b>
Persons who Influence decision	1	You made the decisions by yourself.
	2	You consulted with your parents.
	3	You consulted with your teachers.
	4	You consulted with your school counselors.
	5	You consulted with your family relatives.
	6	You consulted with your friends.
	7	You acquired information from the school counselors or teachers before making choices.
	8	You got the approval or permission from your parent(s) before making any decisions.
Source of Information	9	You listened to your friends and follow their advice or choices.
	10	You searched for the information from various sources and make your own decision based on that.
	11	You sought advice from university students who already enrolled in the program/the university you are interested in.
	12	You got advice and information from the alumni of the university you are interested in.
	13	You obtained information from the university through the media and website before making any decisions.
	14	You participated in the counseling activities organized at your school by different universities before making any decisions.
	15	You visited the university and see for yourself before making any decisions.
	16	You attended education fairs, exhibitions etc. to learn more about the choices before making your decisions.

### **Study Limitations**

The limitations of this study are as follows:

1. The respondents included in the sample were Thai high school students, ages 17-18years old in their last year of school. The respondents undertook the survey on voluntary basis. The design and distribution of the survey instrument were not designed for sample balance in terms of gender, location, study majors etc. Thus, the analyses and interpretations are limited to the sample chosen.

2. The factors identified and included in the study are based on the main stream of Higher Education sector found in private and public universities in Thailand. Therefore, the survey data collected may not represent the higher education sector as a whole.
3. In regard to the sample, the results and interpretations of the study may not necessarily suggest or prescribe how a particular college or university should recruit and retain students due to the discrepancies in the institution context and system.
4. The data collected should not be considered statistically precise for financial forecasting or investment related to recruitment and retention.
5. The literature review is limited to recently published research, textbooks, magazines, or articles in periodicals regarding student choice only.

With all issues and aspects of limitation taken into consideration, the research procedures designed to answer the research questions with both validity and reliability ensured were strictly followed. The data collected was processed and analyzed, both qualitatively and quantitatively. The findings of the study were reported in the next chapter with significant data highlighted and discussed in an attempt to shed light on the influencing factors on the decision-making of Thai high school students on their choice of university.

## **Chapter Four**

### **Findings of the study**

#### **Overview of the chapter**

From the mixed mode methodology employed in the study, both qualitative and quantitative data were interpreted and presented in this chapter with the aims to answer all the research questions and explore some insights and in-depth information relevant to the study topics. Based on the findings, description and interpretation were made on the factors which influence the choices Thai high school students make on the programs and institutions for their higher education. The influencing factors considered in the study include:

- Gender
- Home address
- Type of school attended
- High school study major
- Academic performance
- Household income
- Level of parental education

Using a survey instrument developed according to appropriate methodology, information was gathered with regards to influencing factors and university characteristics. The influencing factors included:

- Type of university
- Medium of instruction of the university
- Curriculum of the university
- Admission process of the university
- The atmosphere of the university
- Reputation of the university
- Services provided by the university
- Location of the university
- Living expenses appropriate to the university
- Tuition fees charged by the university
- Availability of financial aid

Influencing factors were measured using a nominal scale and the characteristics of the university measured on a three point ordinal scale. Descriptive statistics were used to review variations in possible decisions with regard to university choice according to the characteristics of the university when considered according to identified influencing factors.

### **Findings from the interview**

The chosen research design for the study is the Sequential Explanatory Strategy (Creswell, 2003) with the purpose to use the qualitative results to explain more clearly, to better interpret and if possible to expand the findings of the quantitative results. Semi-structured interview was conducted with 8 students who took part in the interview on a voluntary basis. They were interviewed at 4 school sites at their chosen time with no time limit on the interview. Standard procedures to ensure the confidentiality of the information and anonymity of the sources were strictly followed in accordance with the prescribed University code of ethics.

The interview transcripts which were processed through the triangulation process of member checking (Denzin & Lincoln, 2000), the findings were compared with those from the quantitative data collection with the use of the survey questionnaire. In the combined data analysis process, it was evident that the qualitative data from the interviews confirmed most of the significant findings from the survey, particularly in regard to the affecting factors of the student's choice in their higher education programs and institutions.

Some noteworthy comments and perceptions made by those interviewed, which shed light on the decision process and some explanation about their perceptions on the factors included in the have been strategically placed throughout this chapter.

### **Survey instrument implementation**

A reasonable random sample of students was drawn from approximately 382,298 senior secondary high school students from both public and private schools in Thailand. Five different regions were accessed, South, North, Northeast, East, and Central (including Bangkok).

After the survey instrument was submitted to the various tests and measures to establish the content and construct validity and internal reliability, it was implemented in the actual study (*see Appendix C*). Information on the study population was sought and data analyzed to identify the sampling size and study sites. All these students shared common characteristics as they were students following the curriculum of the Ministry of Education of Thailand. Standard formula for the calculation of proper sampling size was used and the result was estimated at the minimum of 400 in number (see more details in Sample size).

Initial contacts via telephone were made with various schools in the five regions of Thailand for necessary information and official permissions to conduct the study 25 schools were identified and chosen as they fit the selection criteria of the sampling and their locations were within the manageability of the researcher. After the initial contacts with the school administrators, permission was granted from 24 schools.

Appointments were made with the 17 schools from the 5 regions. There were about 1,200 grade 12 students from these 17 schools who volunteered to take part in the survey. The total number of questionnaires distributed was 1,200 and 1,185 questionnaires were returned. The total number of questionnaires used in the data analysis was 1012 as 173 were not completely answered.

Student participants were provided with clear instructions developed as part of the pilot study, such as proposed aim of the study, expected outcomes, consent protocols for participation and expected length of completion time.

### ***Participants' profile***

In summary, the population for this study was drawn from 382,298 senior secondary high school students from both public and private schools in Thailand. Five different regions were accessed, South, North, Northeast, East, and Central (including Bangkok) to have geographical representation of students. Participants were recruited by purposive sampling from 17 schools, 9 and 8 are public and private schools respectively. These 17 schools were selected as previous experience indicated that students from these schools generally enrolled in higher education institutions. Through the use of the research assistants, students were invited to participate in completing a

questionnaire/survey. From 17 schools in five regions, 1,012 students willingly completed the survey used as the basis for this study.

### *Number of questionnaires*

The number of surveys administered across the five regions is shown in the following table.

Table 4.1. Distribution of survey questionnaires by regions

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid South	184	18.2	18.2	18.2
North	70	6.9	6.9	25.1
Northeast	269	26.6	26.6	51.7
East	286	28.3	28.3	79.9
Central (including Bangkok)	203	20.1	20.1	100.0
Total	1012	100.0	100.0	

Table 4.1 and 4.2. indicate the number of surveys administered across the five regions, in the public and private schools. For reasons of anonymity the schools have been coded according to region and type of schools (public and private), i.e., South Public High School 1 refers to a public high school used in this study, which is located in the Southern region of Thailand.

Table 4.2. Distribution of survey questionnaire by regions and schools

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid South South Public High School 1	50	4.9	4.9	4.9
South South Public High School 2	47	4.6	4.6	9.6
South South Public High School 3	87	8.6	8.6	18.2
North North Private High School 1	45	4.4	4.4	25.1
North North Public High School 2	25	2.5	2.5	20.7
Northeast Northeast Private High School 1	53	5.2	5.2	30.3
Northeast Northeast Private High School 2	109	10.8	10.8	89.4
Northeast Northeast Private High School 3	107	10.6	10.6	100.0
East East Public High School 1	92	9.1	9.1	39.4
East East Private High School 2	41	4.1	4.1	43.5
East East Public High School 3	39	3.9	3.9	47.3

East	East Public High School 4	40	4.0	4.0	71.3
East	East Private High School 5	74	7.3	7.3	78.7
Central (including Bangkok)	Central Public High School 1	22	2.2	2.2	49.5
Central (including Bangkok)	Central Private High School 2	56	5.5	5.5	55.0
Central (including Bangkok)	Central Public High School 3	39	3.9	3.9	58.9
Central (including Bangkok)	Central Private High School 4	86	8.5	8.5	67.4
Total		1012	100.0	100.0	

### ***Gender and age***

Participants included male and female students from the public and private high schools and were classified in four different age groups from under 17 years old, 17 years old, 18 years old and over 18 years old. It is important to note that the majority of the students were female which comprised of 683 students or 67.5% of the total surveyed. Table 4.3 indicates the distribution by gender.

The average age of the students surveyed was 17.4 years old. The majority of students surveyed, 576 or 56.9% indicated that they were 17 years of age. The students over 18 years old were the smallest number surveyed, being 20 students or 2%.

Table 4.4 indicates the distribution of students surveyed by age. Three students did not indicate their gender and two students did not indicate their age.

Table 4.3. Participants by gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	326	32.2	32.3	32.3
female	683	67.5	67.7	100.0
Total	1009	99.7	100.0	
Missing 0	3	.3		
Total	1012	100.0		

Table 4.4. Participants by age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid under 17 years old	34	3.4	3.4	3.4
17 years old	576	56.9	57.0	60.4
18 years old	380	37.5	37.6	98.0
over 18 years old	20	2.0	2.0	100.0
Total	1010	99.8	100.0	
Missing 0	2	.2		
Total	1012	100.0		

### *School type and educational major*

1,012 participants were drawn from 17 schools in total. There were 571 students from 8 private schools and 441 students from 9 public schools participated in this study. Table 4.5 indicates the number of students participating in the survey from a particular type of school, either private or public.

Students who participated in the survey had previously nominated an area of study at the senior secondary level. The educational major could be either a science major or an arts major. Of the 1,012 participants 52.9% indicated they were from a science major while 42.4% indicated they were from an arts major. Table 4.6 indicates the number of respondents by their chosen educational majors.

It is interesting to note that 48 participants did not indicate their chosen education major. This could be attributed to one particular school, which does not rely on defining majors for their students.

Table 4.5. Number of students by type of school

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid private	571	56.4	56.4	56.4
public	441	43.6	43.6	100.0
Total	1012	100.0	100.0	



Table 4.6. Number of respondents by educational majors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Arts	429	42.4	44.5	44.5
	Science	535	52.9	55.5	100.0
	Total	964	95.3	100.0	
Missing	0	48	4.7		
Total		1012	100.0		

### *Participants by academic achievement*

In the survey students were required to indicate their grade point average (G.P.A.).

More than 50% of the students who participated in this study indicated that they have a grade point average of more than 3.01. 29 students or 2.9% indicated that they have a grade point average of less than 2. They are the smallest in number. Table 4.7 indicates the distribution of participants by their grade point average. Eight participants did not indicate their grade point average.

Table 4.7. The distribution of participants by grade point average (G.P.A.)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	under 2.00	29	2.9	2.9	2.9
	2.00 - 2.50	128	12.6	12.7	15.6
	2.51 - 3.00	256	25.3	25.5	41.1
	3.01 - 3.50	330	32.6	32.9	74.0
	over 3.50	261	25.8	26.0	100.0
	Total	1004	99.2	100.0	
Missing	0	8	.8		
Total		1012	100.0		

### *Activity participation at high school*

Participants were surveyed concerning their engagement in voluntary extracurricular activities while at high school. The survey result indicated that the majority of high school students participated in activities. It is interesting to note that 462 students or 45.7% were engaged in academic clubs. 153 students or 15.1% did not indicate whether

they participated in any activities. Exactly the same number of students indicated they were involved in sports activities. 197 students or 19.5% declared that they were involved in activities but did not indicate the type of activities which they were engaged in. Table 4.8 indicates the range of activities students participated in and the number of students involved in each activity.

Table 4.8. Type of activity and number of students participating in each activity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	academic clubs	462	45.7	53.8	53.8
	sports	153	15.1	17.8	71.6
	student activities	47	4.6	5.5	77.1
	others	197	19.5	22.9	100.0
	Total	859	84.9	100.0	
Missing	0	153	15.1		
Total		1012	100.0		

### ***Living arrangement***

Participants were surveyed in relation to their living arrangement; 1,009 students or 74.9% who responded to the questionnaires lived with their father and mother. 84 students or 8.3% responded equally stating that they lived with either their mother or relatives. 39 students or 3.9% indicated that they lived with their father alone. Interestingly 44 students or 4.3% indicated that they lived by themselves. Table 4.9 indicates the living arrangement of the respondents. Three participants did not indicate their living arrangement.

Table 4.9. Respondents' living arrangement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	father and mother	758	74.9	75.1	75.1
	father	39	3.9	3.9	79.0
	relatives	84	8.3	8.3	87.3
	mother	84	8.3	8.3	95.6
	alone	44	4.3	4.4	100.0
	Total	1009	99.7	100.0	
Missing	0	3	.3		
Total		1012	100.0		

### ***Parents' occupations***

The survey required the participants to nominate their father's and mother's type of occupation. Respondents could choose from civil servant, own business, business, employee or other. It appears from the data gathered that most of the parents are either employed or self-employed. It is interesting to note that when acknowledging occupations, both father's and mother's occupations defined as business owners scored the largest number (27.1% and 24% respectively). When examining the father's occupation, civil servant is the second largest occupation followed by being an employee. 195 respondents stated that their mother's occupation was a housewife, which is the second highest category. Being a civil servant is equaled with being an employee, followed closely by working for a business. Table 4.10 indicates the father's occupation while Table 4.11 indicates the mother's occupation. 18 and 11 respondents did not indicate their father and mother's occupation. This could be due to the fact that later in the survey 31 respondents indicated that their parents were widowed (see Table 4.15).

Table 4.10. Father's occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	civil servant	227	22.4	22.8	22.8
	own business	274	27.1	27.6	50.4
	business	185	18.3	18.6	69.0
	employee	199	19.7	20.0	89.0
	others	109	10.8	11.0	100.0
	Total	994	98.2	100.0	
Missing	0	18	1.8		
Total		1012	100.0		

Table 4.11 Mother's occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	civil servant	159	15.7	15.9	15.9
	own business	243	24.0	24.3	40.2
	business	151	14.9	15.1	55.2
	employee	159	15.7	15.9	71.1
	others	94	9.3	9.4	80.5
	housewife	195	19.3	19.5	100.0
	Total	1001	98.9	100.0	
Missing	0	11	1.1		
Total		1012	100.0		

***Household income***

Students were asked to report their possible household income. The household income for the majority of students appears to be less than 50,000 Baht per month with 241 or 23.8% indicating this amount. 375 or 37.1% indicated their household income per month was between 25,000-50,000 Baht. 135 respondents or 13.3% indicated the household income was between 50,001 to 75,000 Baht per month. The remainder of respondents, 225 indicated a monthly income of 75,000 Baht and above per month. 7.9% or 80 respondents predicted an income of more than 200,000 Baht per month. Table 4.12 indicates the household income per month of the respondents. 36 respondents did not respond to this question.

Table 4.12. Students' household income per month

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	lower than 25,000	241	23.8	24.7	24.7
	25,000 - 50,000	375	37.1	38.4	63.1
	50,001 - 75,000	135	13.3	13.8	76.9
	75,001 - 100,000	74	7.3	7.6	84.5
	100,001 - 200,000	71	7.0	7.3	91.8
	more than 200,000	80	7.9	8.2	100.0
	Total	976	96.4	100.0	
Missing	0	36	3.6		
Total		1012	100.0		

### ***Parents' education***

Respondents were asked to indicate the level of their father and mother's education. The education level ranged from lower than high school level, high school, diploma, Bachelor's degree, and Master's degree or higher. The highest level indicated for the father's education level was at the bachelor's degree level with 288 or 28.5% responses. Interestingly, the second highest was the level lower than high school at 24%. When examining the mother's education again the Bachelor's degree was the highest level with 316 or 31.2% responses. As with the father's education, second highest for the mother's education level was lower than high school with nearly one-third of all respondents. Table 4.13 indicates father's education level while Table 4.14 indicates mother's education level. A large number of respondents (36 respondents and 26 respondents respectively) did not indicate a level of education for this question. Again this could be due to the number of widowed responses see Table 4.15.

Table 4.13. Level of father's education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	lower than high school	243	24.0	24.9	24.9
	high school	231	22.8	23.7	48.6
	Diploma	125	12.4	12.8	61.4
	Bachelor's degree	288	28.5	29.5	90.9
	Master's degree or higher	89	8.8	9.1	100.0
	Total	976	96.4	100.0	
Missing	0	36	3.6		
Total		1012	100.0		

Table 4.14. Level of mother's education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	lower than high school	303	29.9	30.7	30.7
	high school	211	20.8	21.4	52.1
	Diploma	115	11.4	11.7	63.8
	Bachelor's degree	316	31.2	32.0	95.8
	Master's degree or higher	41	4.1	4.2	100.0
	Total	986	97.4	100.0	
Missing	0	26	2.6		
Total		1012	100.0		

***Parents' marital status***

Respondents were asked to report on their parents' marital status that is whether their parents were married, separated, divorced or widowed. A large majority indicated that their parents were married. 831 or 82.1% indicated that their parents are married. 8.2% or 83 respondents indicated their parents were divorced while 31 respondents or 3.1% indicated that one parent was widowed. Table 4.15 indicates the respondents' parents' marital status. Seven respondents did not indicate their parents' marital status.

Table 4.15. Students' parents' marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	married	831	82.1	82.7	82.7
	separated	60	5.9	6.0	88.7
	divorced	83	8.2	8.3	96.9
	widowed	31	3.1	3.1	100.0
	Total	1005	99.3	100.0	
Missing	0	7	.7		
Total		1012	100.0		

**Findings****1.0 Gender****1.1 Type of university**

Male and female respondents were asked about the opinions and perceptions of their choice of the type of university that may influence their choice. That is, whether the

type of institution, being a private or public university or affiliated to a religious organization, would influence their choice of university.

Table 4.16. Opinions and perceptions on the type of university by gender

<i>Type of university</i>	<i>Male</i>			<i>Female</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is a private institution	33.1	45.4	21.5	36.8	44.2	19.0
The university is a public institution	16.9	29.6	53.5	8.7	22.3	69.0
The university is affiliated to a religious organization	64.4	28.2	7.4	64.0	25.9	10.1

A public university was considered as more important for their choice of university by both male and female respondents with the percentage of 53.5% of the males and by 69.0% of the females. A significantly high number of responses demonstrated that whether or not universities were affiliated to religious organization had no effect on their decision making. Therefore, the status of being a public university was an important factor in choice and other types of universities were considered to be of less importance in terms of university choice.

*Both my parents graduated from well-known public universities and they think that I should also go to a public university for my future success. I'm not sure that I could get in the program that I want because it is very competitive. I don't want to disappoint them. They said it would be ok if I had to study in a private university but I know that they would be disappointed if I do.*

## 1.2 Medium of Instruction

Both male and female respondents were asked about the opinions and perceptions of the type of instruction undertaken by a university. That is, whether the medium of instruction, using English or offering some English instruction would influence their choice of university. The choices of the medium of instruction at the University for the respondents to select from included whether the University used English as the medium of instruction or whether it offered some English instruction.

Table 4.17. Opinions and perceptions on the medium of instruction by gender

<i>Medium of instruction</i>	<i>Male</i>			<i>Female</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is an international institution with English as medium of instruction	22.2	31.0	46.8	24.4	31.8	43.9
The university offers some English programs	12.7	40.1	47.2	11.9	36.0	52.1

Both male and female respondents thought that the fact that the university offering some English programs was considered important for their choice of university. Interestingly, there were significantly higher numbers of both male and female respondents who considered the status of universities as international institutions with English as medium of instruction as of no importance.

*My father has his own company and my mother is a housewife. Both of them wanted me to study at ABAC because they want me to be good at English. My father said that English was very important nowadays, especially if you want to do business with foreigners. Education is an investment for the future. And I think my parents know best and they also want the best for me.*

### 1.3 University Curriculum

Both male and female respondents were asked about the opinions and perceptions of the programs offered by a university. That is, whether curriculum of the university which offers a variety of academic programs in humanities and science, would influence their choice of university.

Table 4.18. Opinions and perceptions on the university curriculum by gender

<i>Curriculum of the university</i>	<i>Male</i>			<i>Female</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is comprehensive, offering a variety of academic programs in humanities and science	18.0	33.8	48.2	15.0	35.1	49.9



The majority of the respondents of both genders considered the comprehensiveness of the university curriculum as of some importance, while about half of them deemed this university characteristic as important. However, while females would prefer a comprehensive university there is no significant difference in the perception between the male and female respondents.

*I think the family and society treat boys and girls differently in our society. At school our teachers usually suggest that girls study languages and boys sciences. They said girls did better in languages but I don't think so. My parents also said that it would be better for me to study Arts –Business English so I could get a good job later when I graduate. When I asked my friends –the boys – their parents usually encouraged them to study BBA or science programs.*

*Most families prefer boys, I guess. In that case, I'm lucky because I think my parents are more willing to invest on my education more than what they do for my two sisters. I was sent to a private school from early childhood and I also had a lot of special lessons and after class tutoring. They also expect more from sons than daughters. My parents have high expectation about my success in studies and later in my professional life. I think they want me to take care of my sisters in the future after they are gone.*

#### **1.4 University Atmosphere**

Male and female respondents were asked about the opinions and perceptions of the atmosphere of the university and how this may affect their choice. That is, whether the atmosphere of the university, making the university a truly international community by including many foreign students; offering various extracurricular activities on regular basis; providing an environment and atmosphere which is conducive to learning or using clear rules and regulation would influence their choice of university.

Table 4.19. Opinions and perceptions on the university atmosphere by gender

<i>University atmosphere</i>	<i>Male</i>			<i>Female</i>		
	NI %	MI %	I %	NI %	MI %	I %
There are foreign students and faculty members ,making the university a truly international community	18.3	32.7	48.9	16.8	34.2	48.9
The university offers various extracurricular activities on regular basis	10.9	32.0	57.0	10.8	31.7	57.4
The university provides the environments and atmosphere which are conducive to learning	3.2	15.5	81.3	3.1	12.5	84.5
The university has clear rules and regulation	13.7	32.7	53.5	13.1	32.7	54.2

The majority of male and female respondents stated that the university which provides the environments and atmosphere conducive to learning as the most important for their choice of university, while females indicated slightly higher. While the university which offers extracurricular activities; the university with clear rules and regulation; and the university with foreign students and faculty members were also regarded as important. The least important factor for both male and female was having foreign students and faculty as part of the university community.

### 1.5 University Admission Standard

Male and female respondents were asked about the opinions and perceptions of university in relation to the admission standards required. That is, whether the admission standard which has its own admission examination and selection procedures or requiring preparation and personal efforts to pass the exam and get accepted to the university or being highly competitive, would influence their choice of university.

Table 4.20. Opinions and perceptions on the university admission standard by gender

<i>Admission standard</i>	<i>Male</i>			<i>Female</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university has its own admission examination and selection procedures	5.6	26.4	68.0	4.7	25.5	69.8
It required preparation and personal efforts to pass the exam and get accepted to the university	9.2	32.4	58.5	6.5	26.9	66.6
The university admission system is highly competitive	22.9	38.0	39.1	15.9	37.8	46.3

More than 80% of both male and female respondents considered the universities with their own admission examination and selection procedures as of some importance for their choice of university, whereas the universities with highly competitive admission system were perceived as of the least importance by respondents of both genders. Overall, the female respondents perceived the admission standards as slightly more important than their male counterparts.

### 1.6 University Reputation

Both male and female respondents were asked about their opinions and perceptions of whether the perceived reputation of the University was an important factor. That is, whether the reputation of the university which has a perceived good reputation for academic excellence, qualified lecturers or quality graduates would influence their choice of university.

Table 4.21. Opinions and perceptions on the university reputation by gender

<i>Reputation of the university</i>	<i>Male</i>			<i>Female</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university has a good reputation for academic excellence	12.7	28.5	58.8	7.3	31.3	61.4
The university has a good reputation for qualified lectures	8.5	29.9	61.6	7.0	25.7	67.3
The university has a good reputation for quality graduates	5.3	25.4	69.4	4.1	22.6	73.3
The university has a good reputation for high technology in all its infrastructure and teaching & learning facilities	6.3	22.9	70.8	4.9	20.3	74.8

The majority of respondents regardless of their gender, more than 90%, deemed the factor of the university reputation as of some importance; whereas, the female's perceptions was slightly higher in all aspects. While similar in results, the one factor that the respondents considered of the highest importance was the university reputation for high technology in all its infrastructure and teaching and learning facilities.

*I don't think that my parents and I have placed much importance on the type of universities whether they are private or public. It has more to do with the other factors such as the reputation of the university and its location when we have to make the choice. The other thing that is deemed significant is the advantage of the English language curriculum. Nowadays it is very important that we have good command of English if we plan to go for further studies or get a good job after college graduation.*

### 1.7 University Services

Male and female respondents were asked about their opinions and perceptions whether the services provided by a university would influence their choice. That is, whether the services of the university offering adequate and quality library resources and services, providing possibility to join an exchange program or study abroad; has an academic advisory system or providing career guidance and job placement counseling, would influence their choice of university.

Table 4.22. Opinions and perceptions on the university services by gender

<i>University services</i>	<i>Male</i>			<i>Female</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university offers adequate and quality library resources and services	7.0	25.7	67.3	3.9	20.3	75.8
It is possible to join an exchange program or study abroad	25.8	27.6	46.6	28.3	28.4	43.3
The university has the academic advising system	23.0	19.1	58.0	31.4	18.3	50.3
The university provides career guidance and job placement counseling	19.4	19.4	61.1	32.2	15.0	52.8

The fact that the university offers adequate and quality library resources and services was deemed as of the highest importance by respondents of both genders. Other factors,

including the exchange and overseas programs, academic advising system, career guidance and job placement counseling, were deemed as of some importance. However, it is noted that more female respondents demonstrated that these factors dealing with academic and future career opportunities and the counseling and advising services, were not important. Although females indicated library services were important.

*I don't think that the quality and quantity of the university services are set high on priorities when it comes to choose where to go for college education. I don't think it will make much difference or matter that much once we start taking the course. I think the quality of the course –curriculum –and the quality of the instructors are much more crucial to the success of the learners. Maybe the services are not up to the standard we expect but we can make do with whatever is available. The more serious problem will be that we find the quality of education provided below standard.*

### 1.8 University Location

Male and female respondents were asked about the opinions and perceptions of the university in relation to location. That is, whether the location of the university, being in a convenient location, not far from their residence or whether there are student dormitories and apartments near the university, would influence their choice of university.

Table 4.23. Opinions and perceptions on the university location by gender

<i>University location</i>	<i>Male</i>			<i>Female</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is in a convenient location	5.3	19.4	75.4	4.1	20.0	75.9
The university is not far from your residence	33.1	28.5	38.4	25.4	31.2	43.4
There are student dormitories and apartments near the university	16.5	26.4	57.0	8.8	24.1	67.2

Nearly all the respondents, males and females, considered the factor of universities being in a convenient location as important to their choice of university. Interestingly, a

considerable number of both male and female respondents, 33.1% and 25.4% respectively, perceived the factor that universities located closer to their residences as not important.

### 1.9 Living Expenses

Male and female respondents were asked whether the opinions and perceptions of the living expenses at a university would influence their choice. That is, whether the living expenses in the university which are reasonable, would influence their choice of university.

Table 4.24. Opinions and perceptions on the living expense by gender

<i>Living expenses</i>	<i>Male</i>			<i>Female</i>		
	NI %	MI %	I %	NI %	MI %	I %
The living expenses(food, transport ,accommodation etc.) on campus are reasonable	8.1	21.5	70.4	5.5	20.0	74.5

The majority of the respondents, 70.4% of males and slightly higher 74.5% of females regarded living expenses as important for their choice of university. Females were more concerned about the living expenses than the males.

### 1.10 Tuition Fees

Male and female respondents were asked about their opinions and perceptions of the level of tuition fees charged by a University in relation to choice. That is, whether the tuition fees of the university which are average compared to other institutions of the same type, would influence their choice of university.

Table 4.25. Opinions and perceptions on the Tuition fees by gender

<i>Tuition fees (cost)</i>	<i>Male</i>			<i>Female</i>		
	NI %	MI %	I %	NI %	MI %	I %
The tuition fees are average compared to other institutions of the same type	10.9	29.6	59.5	5.2	26.5	68.3

While the respondents of both genders agreed that the factor of tuition fees was important, the number of males (10.9%) who thought of this as of no importance was double their female counterparts (5.2%).

*I studied in a public school so my English is not as good as my friends'. Most of them studied in private schools so they studied more English than we did. Private schools teach more English and they also have more foreign teachers to help their students learn to speak English. They also get better teachers because the tuition fees are much higher than the public schools.*

### 1.11 Financial aid

Both male and female respondents were asked about the opinions and perceptions of whether a University provided financial aid to students. That is, whether the financial aid which provide possibilities to apply for a scholarship or possibility to apply for a loan for tuition or for accommodation expenses or possibility to get a part time job on campus, would influence their choice of university.

Table 4.26 Opinions and perceptions on the financial aid by gender

<i>Financial aid</i>	<i>Male</i>			<i>Female</i>		
	NI %	MI %	I %	NI %	MI %	I %
There are possibilities to apply for a scholarship	12.0	25.7	62.3	10.6	20.3	69.1
It is possible to apply for a loan for tuition	33.9	36.4	29.7	31.5	32.7	35.8
It is possible to apply for a loan for accommodation expenses	34.6	34.3	31.1	30.2	35.5	34.3
It is possible to get a part time job on campus	29.3	30.7	39.9	30.2	35.1	34.6

The majority of the respondents in both gender groups considered the possibilities to apply for a scholarship as of the highest importance. Overall, the respondents were divided in their perceptions towards the other factors dealing with the possibilities of loan application for tuition fees, accommodation expenses and part time jobs on campus, with no significant difference between the males and females. Although females are more concerned with the possibility of a scholarship.

*Many people now tend to look at education as an investment so they pay a lot of attention on financial factors in their decision making. Some parents and students are more concerned about the budgets and the availability of financial aids than the type of programs and job opportunities after graduation when they choose where to go and what to study. I don't know whether that is wise but it is true that many people are more concerned about how they are going to pay for the university education than what they are getting out of it.*

## **2.0 Region of Residence**

### **2.1 Type of university**

Respondents from high schools situated in the South, the North, the Northeast, the East and the Central and Bangkok regions were asked about their opinions and perceptions of university in relation to their university choice. That is, whether the type of institution, being a private or public university or affiliated to a religious organization, would influence their choice of university.



Table 4.27. Opinions and perceptions on the type of university by region of residence

<i>Type of university</i>	<i>South</i>			<i>North</i>			<i>Northeast</i>			<i>East</i>			<i>Central and Bangkok</i>		
	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
The university is a private institution	45.9	31.4	22.7	32.8	43.8	23.4	28.1	54.2	17.7	36.6	44.1	19.3	36.0	45.2	18.8
The university is a public institution	5.2	15.1	79.7	18.8	26.6	54.7	11.6	30.1	58.2	11.3	25.2	63.4	13.4	25.3	61.3
The university is affiliated to a religious organization	70.3	20.3	9.3	62.5	25.0	12.5	58.6	30.1	11.2	67.6	25.6	6.7	61.8	29.6	8.6

A public university was considered as most important for their choice of university by all the respondents from the five regions with the highest percentage of 79.9% of the South followed by 63.4% of the East, 61.3% of the Central and Bangkok, 58.2% of the

Northeast and 54.7% of the North. A significantly high number of responses demonstrated that whether or not universities were affiliated to religious organizations had no effect on their decision making.

*Our family are all Buddhists but I went to a Christian school when I was young. I don't think it makes any difference because in Thailand any religions are well accepted. Most of my friends and the teachers at the school are also Buddhists and some are Muslim. I never see any problems there.*

## **2.2 Medium of Instruction**

Respondents were asked about the opinions and perceptions on the type of instruction undertaken by a university. That is, whether the medium of instruction, using English or offering some English instruction would influence their choice of university.

Table 4.28. Opinions and perceptions on the medium of instruction by region of residence.

<i>Medium of instruction</i>	<i>South</i>			<i>North</i>			<i>Northeast</i>			<i>East</i>			<i>Central and Bangkok</i>		
	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
The university is an international institution with English as medium of instruction	24.4	29.7	45.9	25.4	30.2	44.4	18.9	31.3	49.8	28.7	35.0	36.3	22.6	30.1	47.3
The university offers some English programs	12.2	33.7	54.1	14.3	33.3	52.4	10.4	39.4	50.2	14.8	38.8	46.4	10.8	37.1	52.2

Across all regions, respondents thought that the fact that universities offered some English programs was considered important for their choice of university. Interestingly, there were significantly higher numbers of respondents (about a quarter) in all regions who considered the status of universities as international institutions with English as medium of instruction as of no importance.

### **2.3 University Curriculum**

Respondents were asked about the opinions and perceptions of the programs offered by a university. That is, whether curriculum of the university which offers a variety of academic programs in humanities and science, would influence their choice of university.

Table 4.29. Opinions and perceptions on the university curriculum by region of residence

<i>Curriculum of the university</i>	<i>South</i>			<i>North</i>			<i>Northeast</i>			<i>East</i>			<i>Central and Bangkok</i>		
	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
The university is comprehensive, offering a variety of academic programs in humanities and science.	20.9	34.9	44.2	14.3	38.1	47.6	8.8	37.3	53.8	15.7	28.8	55.5	21.5	38.2	40.3

Across all regions, majority of respondents said that the comprehensiveness of the university curriculum was important. It was noteworthy to state that for some reasons the respondents from the Northeast region deemed this factor as not important at a significantly lower number (8.8%).

#### **2.4 University Atmosphere**

Respondents were asked about the opinions and perceptions of the atmosphere of the university and how this may affect their choice. That is, whether the atmosphere of the university, making the university a truly international community by including many foreign students; offering various extracurricular activities on regular basis; providing the environments and atmosphere which are conducive to learning or using clear rules and regulation, would influence their choice of university.

Table 4.30. Opinions and perceptions on the university atmosphere by region of residence

<i>University atmosphere</i>	<i>South</i>			<i>North</i>			<i>Northeast</i>			<i>East</i>			<i>Central and Bangkok</i>		
	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
There are foreign students and faculty members, making the university a truly international community	18.6	37.2	44.2	22.2	23.8	54.0	13.3	34.5	52.2	19.5	31.8	48.7	16.7	36.0	47.3
The university offers various extracurricular activities on regular basis	13.5	25.7	60.8	11.1	33.3	55.6	10.4	34.1	55.4	10.2	30.5	59.3	9.7	34.9	55.4
The university provides the environments and atmosphere which are conducive to learning	1.8	12.3	86.0	6.3	9.5	84.1	2.8	12.0	85.1	2.1	11.0	86.9	4.8	20.4	74.7
The university has clear rules and regulation	11.7	32.9	49.1	17.5	39.7	42.9	11.2	26.5	62.2	10.2	28.8	61.0	19.9	37.6	42.5

Out of the four factors dealing with the university environment, the majority of respondents across all regions deemed the fact that the university provides the environments and atmosphere which are conducive to learning as the most important. About 80% of the respondents from all regions thought that the university being a truly international community was of some importance; whereas, about 90% of them considered the factor that the university offering various extracurricular activities on regular basis as important. Interestingly, with the exception of the North and the Central region and Bangkok, around 90% of the respondents deemed the existence of clear rules and regulation as moderately important and important. About 20% of the respondents from the North and the Central region and Bangkok thought that whether or not there were clear rules and regulation in the universities was not at all important.

## **2.5 University Admission Standard**

Respondents from high school from five different regions were asked about the opinions and perceptions of a university in relation to the admission standards required. That is, whether the admission standard which has its own admission examination and selection procedures or requiring preparation and personal efforts to pass the exam and get accepted to the university or being highly competitive, would influence their choice of university.



Table 4.31. Opinions and perceptions on the university admission standard by region of residence

<i>Admission standard</i>	<i>South</i>			<i>North</i>			<i>Northeast</i>			<i>East</i>			<i>Central and Bangkok</i>		
	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
The university has its own admission examination and selection procedures	3.6	24.9	71.6	9.5	27.0	63.5	5.6	22.1	72.3	3.8	25.8	70.3	5.4	30.6	64.0
It required preparation and personal efforts to pass the exam and get accepted to the university	2.4	29.0	68.6	7.9	38.1	54.0	9.2	22.9	67.9	6.4	27.5	66.1	10.2	33.4	55.4
The university admission system is highly competitive	17.2	37.9	45.0	17.5	36.5	46.0	20.9	34.5	44.6	15.3	39.0	45.8	19.4	41.4	39.2

The respondents from the five regions favored more on the university which has its own admission standard and selection procedures for their choice than the university which required personal effort to pass the examination to get accepted. In comparison to other factors the university with admission system highly competitive was considered less important by all the respondents. It is also noted that respondents from the Central region and Bangkok showed the least importance for this factor.

## **2.6 University Reputation**

Respondents from high schools from different regions were asked about the opinions and perceptions whether the reputation of the university was an important factor. That is, whether the reputation of the university which has a good reputation for academic excellence, qualified lecturers or quality graduates, would influence their choice of university.

Table 4.32. Opinions and perceptions on the university reputation by region of residence

<i>Reputation of the university</i>	<i>South</i>			<i>North</i>			<i>Northeast</i>			<i>East</i>			<i>Central and Bangkok</i>		
	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
The university has a good reputation for academic excellence	10.7	27.2	62.1	9.5	30.2	60.3	7.2	28.1	64.7	9.7	34.1	58.9	8.6	35.5	55.9
The university has a good reputation for qualified lectures	6.5	20.2	73.2	3.2	28.6	68.3	7.6	26.5	65.9	8.9	27.5	63.6	7.5	32.3	60.2
The university has a good reputation for quality graduates	5.4	20.8	73.8	1.6	23.8	74.6	4.4	22.5	73.1	5.1	20.8	74.2	3.8	30.1	66.1
The university has a good reputation for high technology in all its infrastructure and teaching & learning facilities	6.0	19.0	75.0	9.5	33.3	57.1	2.8	16.9	80.3	5.1	20.3	74.6	7.0	25.3	67.7

The majority of the respondents of all regions thought that the university reputation factor was important for their choice of university. They identified the university with good reputation for high technology in all its infrastructure and teaching and learning facilities as typically important. It is noted that the respondents from the Central region and Bangkok had the lowest consideration on the reputation of the university in all respects as compared to other regions.

*I think some universities are more well-known than others because of the prestige and public perceptions of the names of the universities. A lot of people never know anything about these universities but they believe one is better than the others because of their perceptions based on what they hear or feel about the universities. Not many people really know much about the curriculum or real situations of the universities but they think they know which are better than others.*

## **2.7 University Services**

Respondents from high schools from five different regions were asked about the opinions and perceptions whether the services provided by a university would influence their choice. That is, whether the services of a university which offers adequate and quality library resources and services or providing possibility to join an exchange program or study abroad, or has the academic advising system or providing career guidance and job placement counseling, would influence their choice of university.

Table 4.33. Opinions and perceptions on the university services by region of residence

<i>University services</i>	<i>Central and Bangkok</i>			<i>East</i>			<i>Northeast</i>			<i>North</i>			<i>South</i>		
	I	MI	NI	I	MI	NI	I	MI	NI	I	MI	NI	I	MI	NI
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
The university offers adequate and quality library resources and services.	60.2	32.3	7.5	76.3	19.1	4.7	75.9	18.9	5.2	61.9	33.3	4.8	83.3	14.9	1.8
It is possible to join an exchange program or study abroad.	55.9	29.6	14.5	45.1	27.5	27.5	51.2	29	19.8	19	30.2	50.8	30.4	25	44.6
The university has the academic advising system.	64	23.1	12.9	50.6	19.7	29.6	68.5	18.1	13.3	20.6	17.5	61.9	32.1	12.5	55.4
The university provides career guidance and job placement counseling.	66.7	23.1	10.2	55.4	12.4	32.2	71.4	14.5	14.1	17.5	27	55.6	33.9	13.1	53

It is noted that the respondents from different regions had diverse opinions and perceptions on the university services. All of the respondents considered a university which offers adequate and quality library resources and services important for their choice with the highest number from the respondents from the South. Only the respondents from the Northeast, the East and the Central region and Bangkok regarded positively to the type of university with the possibility to join an exchange or study abroad program or with academic advising system or provides career guidance and job placement whereas respondents from the South and the North mostly were of different opinion and considered these factors as not important for their university choice.

## **2.8 University Location**

Respondents from high school from different regions were asked about the opinions and perceptions of university in relation to location. That is, whether the location of the university, being in a convenient location, not far from their residence or there are student dormitories and apartments near the university, would influence their choice of university.

Table 4.34. Opinions and perceptions on the university location by region of residence

<i>University location</i>	<i>South</i>			<i>North</i>			<i>Northeast</i>			<i>East</i>			<i>Central and Bangkok</i>		
	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
The university is in a convenient location	3.6	16.7	79.8	3.2	25.4	71.4	4.8	19.7	75.5	4.2	17.8	78.0	5.4	23.7	71.0
The university is not far from your residence	23.8	28.0	48.2	23.8	33.3	42.9	33.7	31.3	34.9	27.5	30.1	42.4	25.8	30.1	44.1
There are student dormitories and apartments near the university.	8.9	20.8	70.2	15.9	27.0	57.1	10.4	22.1	67.5	8.9	26.3	64.8	16.1	29.6	54.3

Most of the respondents from the five regions indicated that convenient location of the university was important for their choice of university followed by the university with student dormitories and apartments nearby. Proximity to home was considered more or less important but at a much lower percentage than the other two factors

## **2.9 Living Expenses**

Respondents from high school from different regions were asked about the opinions and perceptions of the expense of living at a university would influence their choice. That is, whether the living expenses in the university which are reasonable, would influence their choice of university.



Table 4.35. Opinions and perceptions on the living expense by region of residence

<i>Living expenses</i>	<i>South</i>			<i>North</i>			<i>Northeast</i>			<i>East</i>			<i>Central and Bangkok</i>		
	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
The living expenses(food, transport ,accommodation etc.) on campus are reasonable.	3.0	17.9	72.9	7.9	15.9	76.2	8.4	16.9	74.7	5.1	25.0	69.9	7.5	23.7	68.8

The majority of the respondents regarded living expenses important for their choice of university. The respondents who came from the South, being the largest number, were more concerned about living expenses than those from other regions.

### **2.10 Tuition Fees**

Respondents from high school from the five different regions were asked about their opinions and perceptions of the level of tuition fees charged by a university in relation to choice. That is, whether the tuition fees of the university which are average compared to other institutions of the same type, would influence their choice of university.

Table 4.36. Opinions and perceptions on the Tuition fees by region of residence

<i>Tuition fees (cost)</i>	<i>South</i>			<i>North</i>			<i>Northeast</i>			<i>East</i>			<i>Central and Bangkok</i>		
	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
The tuition fees are average compared to other institutions of the same type.	4.8	22.6	72.6	4.8	28.6	66.7	8.8	28.5	62.7	3.8	28.8	67.4	11.3	28.5	60.2

The majority of the respondents from all regions agreed that the factor of tuition fees was important for their choice. Interestingly, a considerable number of respondents from the Central region and Bangkok, 11.3%, perceived this factor as not important.

### **2.11 Financial aid**

High school respondents from five different regions were asked about their opinions and perceptions whether a university provided financial aid to students. That is, whether the financial aid which provide possibilities to apply for a scholarship or possibility to apply for a loan for tuition or for accommodation expenses or possibility to get a part time job on campus, would influence their choice of university.

Table 4.37. Opinions and perceptions on the financial aid by region of residence

<i>Financial aid</i>	<i>South</i>			<i>North</i>			<i>Northeast</i>			<i>East</i>			<i>Central and Bangkok</i>		
	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I	NI	MI	I
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
There are possibilities to apply for a scholarship	8.3	22.6	69.0	9.5	19.0	71.4	13.3	20.1	66.7	5.9	19.5	74.6	17.2	28.0	54.8
It is possible to apply for a loan for tuition	39.3	25.0	35.7	36.5	28.6	34.9	28.6	36.3	35.1	31.3	34.8	33.9	30.6	38.7	30.6
It is possible to apply for a loan for accommodation expenses	34.5	33.9	31.5	42.9	23.8	33.3	28.6	35.9	35.5	29.6	33.9	36.5	31.7	39.8	28.5
It is possible to get a part time job on campus	33.9	34.5	31.5	50.8	31.7	17.5	27.0	29.0	44.0	27.9	36.5	35.6	25.8	36.0	38.2

Respondents from the five different regions had diverse opinions and perceptions on the university financial aid program. The majority of the respondents from all regions indicated the possibilities to apply for a scholarship as of the highest importance, however, the respondents from the Central region and Bangkok regarded this factor as less important than those from other regions. Overall, the respondents were divided in their perceptions towards the other factors dealing with the possibilities of loan application for tuition fees, accommodation expenses and part-time jobs on campus, with no significant difference among the different regions.

### 3.0 Type of school

#### 3.1 Type of university

Respondents from both private and public high schools were asked about their opinions and perceptions on the type of university that would influence their choice of university. That is, whether the type of institution, being a private or public university or affiliated to a religious organization, would influence their choice of university.

Table 4.38. Opinions and perceptions on the type of university by type of high school

<i>Type of university</i>	<i>Private</i>			<i>Public</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is a private institution	28.6	51.1	20.3	45.1	36.1	18.8
The university is a public institution	15.2	30.9	53.9	5.9	16.5	77.6
The university is affiliated to a religious organization	61.8	28.8	9.4	67.3	23.7	9.0

A public university was considered as more important for their choice of university by both private and public high school respondents. A private university was less favored by both the private and public high school respondents; however, public high school respondents were more in favor of public university. A significantly high number of responses demonstrated that whether or not universities were affiliated to religious organizations had no effect on their decision making. Therefore, a public university was an important factor in choice and other type of universities were considered to be of less important factor for university choice.

*Thai people are class conscious so they prefer public universities. They think that if they graduate from public universities, regardless of the programs or grades, they will become one of the prestigious group members—the concept of RoonPi RoonNong—solidarity among the alumni. This is considered very important and useful when you start working as you will get a lot of support and assistance from your colleagues who graduate from the same institutions.*

### 3.2 Medium of Instruction

Respondents from both public and private high schools were asked about their opinions and perceptions of the type of instruction undertaken by a university. That is, whether the medium of instruction, using English or offering some English instruction, would influence their choice of university.

Table 4.39. Opinions and perceptions on the medium of instruction by type of high school

<i>Medium of instruction</i>	<i>Private</i>			<i>Public</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is an international institution with English as medium of instruction	17.9	31.3	50.9	31.6	32.1	36.3
The university offers some English programs	11.1	37.6	51.2	13.7	36.8	49.5

It is noted that the medium of instruction was considered important by the respondents but not significantly. Both the private and public high school respondents were slightly more in favor of the universities offering some English programs than universities as international institution with English as medium of instruction. Interestingly, there were significantly higher numbers of the respondents from private high school who considered these two factors as important.

### 3.3 University Curriculum

Respondents from both public and private high schools were asked about their opinions and perceptions of the programs offered by a university. That is, whether curriculum of a university which offers a variety of academic programs in humanities and science, would influence their choice of university.

Table 4.40. Opinions and perceptions on the university curriculum by type of high school

<i>Curriculum of the university</i>	<i>Private</i>			<i>Public</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is comprehensive, offering a variety of academic programs in humanities and science	14.2	37.3	48.5	18.1	31.6	50.3

Overall, the respondents were of similar opinion that a university having a comprehensive curriculum which involves both humanities and science was important for their choice. Only 14.2% and 18.1% of private and public high school respondents regarded that the curriculum of the university was not important for their choice of university respectively.

### 3.4 University Atmosphere

Respondents from both public and private high schools were asked about their opinions and perceptions of the atmosphere of a university and how this may affect their choice. That is, whether the atmosphere of the university, making the university a truly international community by including many foreign students; offering various extracurricular activities on regular basis; providing the environments and atmosphere which are conducive to learning or using clear rules, would influence their choice of university.

Table 4.41. Opinions and perceptions on the university atmosphere by type of high school

<i>University atmosphere</i>	<i>Private</i>			<i>Public</i>		
	NI %	MI %	I %	NI %	MI %	I %
There are foreign students and faculty members ,making the university a truly international community	14.2	32.1	53.7	21.2	36.3	42.5
The university offers various extracurricular activities on regular basis	9.6	33.1	57.3	12.5	29.9	57.7
The university provides the environments and atmosphere which are conducive to learning	3.5	13.1	83.5	2.6	13.8	83.6
The university has clear rules and regulation	14.8	33.1	52.1	11.2	32.2	56.6



It is noted that a university with the environments and atmosphere conducive to learning was the most important for choice of university as compared to other factors of the university atmosphere. A university, which offers extracurricular activities; a university with clear rules and regulation; and the university with foreign students and faculty members were also regarded important. Both type of high school respondents considered a university, which offers extracurricular activities equally important. More private high school respondents favored the university with foreign students and faculty members important than did their public high school counterparts.

### 3.5 University Admission Standard

Respondents from both public and private high schools were asked about their opinions and perceptions in relation to the admission standards required, that is, whether the admission standard which has its own admission examination and selection procedures or requiring preparation and personal efforts to pass the exam and get accepted to the university or being highly competitive, would influence their choice of university.

Table 4.42. Opinions and perceptions on the university admission standard by type of high school

<i>Admission standard</i>	<i>Private</i>			<i>Public</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university has its own admission examination and selection procedures	5.6	26.5	67.9	4.2	24.5	71.3
It required preparation and personal efforts to pass the exam and get accepted to the university	9.2	31.0	59.8	4.7	25.6	69.7
The university admission system is highly competitive	20.2	39.4	40.4	15.4	35.8	48.8

A university having its own admission examination and selection procedures was considered by both private and public high school respondents as important for their choice of university, whereas the universities with highly competitive admission system were more favored by the public high school respondents. However, this factor was perceived as of least importance by respondents of both types of schools. Overall, the public high school respondents perceived more importance for all the factors of the admission standards as more important than their private high school counterparts.

### 3.6 University Reputation

Respondents from both public and private high schools were asked about their opinions and perceptions whether the reputation of a university was an important factor, that is, whether the reputation of a university which has a good reputation for academic excellence, qualified lectures or quality graduates, would influence their choice of university.

Table 4.43. Opinions and perceptions on the university reputation by type of high school

<i>Reputation of the university</i>	<i>Private</i>			<i>Public</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university has a good reputation for academic excellence	8.8	30.6	60.6	9.1	30.3	60.6
The university has a good reputation for qualified lectures	7.7	27.5	64.8	7.1	26.2	66.8
The university has a good reputation for quality graduates	4.6	23.8	71.5	4.2	22.8	73.0
The university has a good reputation for high technology in all its infrastructure and teaching & learning facilities	3.8	18.8	77.3	7.3	24.1	68.6

It is noted that most of the private and public high school respondents considered all aspects of the university reputation important for their choice of university. The majority of respondents regardless of their type of high schools, more than 90%, deemed all aspects of the university reputation as of importance. However, a university with good reputation for high technology in its entire infrastructure and teaching and learning facilities was given highest importance by private high school respondents, while the public high school respondents considered a university with quality graduates the highest importance.

### 3.7 University Services

Respondents from both public and private high schools were asked about their opinions and perceptions whether the services provided by a university would influence their choice. That is, whether the services of a university which offers adequate and quality library resources and services or providing possibility to join an exchange program or

study abroad or has the academic advising system or providing career guidance and job placement counseling, would influence their choice of university.

Table 4.44. Opinions and perceptions on the university services by type of high school

<i>University services</i>	<i>Private</i>			<i>Public</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university offers adequate and quality library resources and services	5.8	23.5	70.8	3.7	19.9	76.4
It is possible to join an exchange program or study abroad	20.1	27.5	52.4	37.5	28.9	33.6
The university has the academic advising system	17.2	18.6	64.2	44.4	18.4	37.3
The university provides career guidance and job placement counseling	16.2	16.4	67.3	44.4	16.3	39.4

The fact that a university offers adequate and quality library resources and services was deemed as of the highest importance by respondents of both types of high schools. Other factors, including the exchange and overseas programs, academic advising system, career guidance and job placement counseling, were deemed as of some importance for the private high school respondents. However, it is noted that more of the public high school respondents demonstrated that these factors, on the contrary, were not important.

### 3.8 University Location

Respondents from both public and private high schools were asked about their opinions and perceptions in relation to location, that is, whether the location of the university, being in a convenient location, not far from their residence or there are student dormitories and apartments near the university, would influence their choice of university.

Table 4.45. Opinions and perceptions on the university location by type of high school

<i>University location</i>	<i>Private</i>			<i>Public</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is in a convenient location	4.2	21.5	74.2	4.7	17.5	77.7
The university is not far from your residence	29.8	31.9	38.3	25.4	28.0	46.6
There are student dormitories and apartments near the university	11.7	27.3	61.0	10.7	21.5	67.8

Nearly all the respondents from both private and public high schools considered the factor of a university in a convenient location the most favorable factor for their choice of university followed by a university with dormitories and apartments was slightly less favored. The university within distance from home was considered the least important. Interestingly, a considerable number of both private and public high school respondents, 29.8% and 25.4% respectively, perceived the factor that universities located closer to their residences as not important.

### 3.9 Living Expenses

Respondents from both public and private high schools were asked about their opinions and perceptions of the expense of living at a university would influence their choice, that is, whether the living expenses in the university which are reasonable, would influence their choice of university.

Table 4.46. Opinions and perceptions on the living expense by type of high school

<i>Living expenses</i>	<i>Private</i>			<i>Public</i>		
	NI %	MI %	I %	NI %	MI %	I %
The living expenses(food, transport ,accommodation etc.) on campus are reasonable	8.1	20.4	71.5	3.9	20.7	75.4

Most of the respondents from private high schools and slightly more of the public high schools regarded living expenses as important for their choice of university. There were only 8.1% and 3.9% of the respondents from both private and public high school who considered this factor as not important. Therefore, living expenses factor was regarded rather important by most of the respondents.

### 3.10 Tuition Fees

Respondents from both public and private high schools were asked about their opinions and perceptions of the level of tuition fees charged by a University in relation to choice of university. That is, whether the tuition fees of the university which are average compared to other institutions of the same type, would influence their choice of university.

Table 4.47. Opinions and perceptions on the Tuition fees by type of high school

<i>Tuition fees (cost)</i>	<i>Private</i>			<i>Public</i>		
	NI %	MI %	I %	NI %	MI %	I %
The tuition fees are average compared to other institutions of the same type	8.7	29.0	62.3	4.7	25.4	69.9

While the private and public high school respondents respectively agreed that the tuition fees was important for their choice of university, there were slightly more respondents from the public schools than the private high schools in favor of this factor. The number of the private high school respondents who thought of this as of no importance was double their public high school counterparts.

### 3.11 Financial aid

Respondents from both public and private high schools were asked about their opinions and perceptions whether a university providing financial aid to students the factor influencing their choice, that is, whether the financial aid which provide possibilities to apply for a scholarship or possibility to apply for a loan for tuition or for accommodation expenses or possibility to get a part time job on campus, would influence their choice of university.

Table 4.48. Opinions and perceptions on the financial aid by type of high school

<i>Financial aid</i>	<i>Private</i>			<i>Public</i>		
	NI %	MI %	I %	NI %	MI %	I %
There are possibilities to apply for a scholarship	11.9	22.7	65.4	9.7	20.9	69.4
It is possible to apply for a loan for tuition	31.3	36.0	32.7	33.6	30.7	35.7
It is possible to apply for a loan for accommodation expenses	31.7	35.4	32.9	31.5	34.4	34.1
It is possible to get a part time job on campus	27.9	32.7	39.5	32.8	34.9	32.3

The majority of the respondents indicated the possibilities to apply for a scholarship as of the highest importance. Overall, the respondents were divided in their perception towards other factors dealing with the possibilities for loan application for tuition fees, accommodation expenses and part time job on campus, with no significant difference between the private and public high school respondents. Loans and part-time jobs were indicated as not important factor for their choice of university.

#### 4.0 Major of study

##### 4.1 Type of university

Respondents from Art and Science High School Educational Major were asked about their opinions and perceptions of their choice for the type of university that would influence their choice, that is, whether the type of institution, being a private or public university or affiliated to a religious organization, would influence their choice of university.

Table 4.49. Opinions and perceptions on the type of university by major of study

<i>Type of university</i>	<i>Art</i>			<i>Science</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is a private institution	36.1	38.2	25.7	35.5	51.5	13.0
The university is a public institution	12.5	24.4	63.1	10.1	24.9	65.0
The university is affiliated to a religious organization	62.2	26.3	11.4	66.4	26.5	7.1

A public university was considered as more important for their choice of university by both Art and Science high school educational major respondents. A private university was considered to be a less important factor for university choice while a significantly high number of responses demonstrated that whether or not universities were affiliated to religious organization had no effect on their decision making. Therefore, a public university was an important factor in choice and other type of universities were considered to be a less or not important factor for university choice.

#### 4.2 Medium of Instruction

Respondents from Art and Science High School Educational Major were asked about their opinions and perceptions of the type of instruction undertaken by a university, that is, whether the medium of instruction, using English or offering some English instruction, would influence their choice of university.

Table 4.50. Opinions and perceptions on the medium of instruction by major of study

<i>Medium of instruction</i>	<i>Art</i>			<i>Science</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is an international institution with English as medium of instruction	21.4	29.4	49.1	26.1	33.7	40.1
The university offers some English programs	11.9	35.3	52.8	12.8	39.0	48.2

The medium of instruction was regarded as rather important by the respondents of both educational majors. They favored more on universities offering some English programs than the university offering English as the medium of instruction. It is noted that the Art educational major students were slightly more concerned on this factor.

#### 4.3 University Curriculum

Respondents from different high school educational major were asked about their opinions and perceptions of the curriculum offered by a university, that is, whether curriculum of the university which offers a variety of academic programs in humanities and science, would influence their choice of university.

Table 4.51. Opinions and perceptions on the university curriculum by major of study

<i>Curriculum of the university</i>	<i>Art</i>			<i>Science</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is comprehensive, offering a variety of academic programs in humanities and science	22.1	40.8	37.1	9.4	28.0	62.6

It is noted that more respondents from Science educational major considered the curriculum of a university more important for their choice of university than the respondents for Art educational major. The number of Art educational major students (22.1%) who thought the comprehensiveness of the university curriculum as of no importance was more than double their Science educational major counterparts.

#### 4.4 University Atmosphere

Respondents from Art and Science High School Educational Major were asked about their opinions and perceptions of the atmosphere of the university and how this may affect their choice, that is, whether the atmosphere of a university, making the university a truly international community by including many foreign students; offering various extracurricular activities on regular basis; providing the environments and atmosphere which are conducive to learning or using clear rules and regulation would influence their choice of university.

Table 4.52. Opinions and perceptions on the university atmosphere by major of study

<i>University atmosphere</i>	<i>Art</i>			<i>Science</i>		
	NI %	MI %	I %	NI %	MI %	I %
There are foreign students and faculty members ,making the university a truly international community	15.2	33.6	51.2	19.5	34.2	46.3
The university offers various extracurricular activities on regular basis	12.8	28.5	58.7	8.9	35.6	55.5
The university provides the environments and atmosphere which are conducive to learning	3.3	14.8	82.0	3.0	11.9	85.1
The university has clear rules and regulation	16.1	33.9	50.0	10.3	31.4	58.3



The majority of the Art and Science educational major respondents stated that a university which provides the environment and atmosphere conducive to learning as the most important for their choice of university, while the university which offers extracurricular activities; the university with clear rules and regulation; and the university with foreign students and faculty members were regarded less important.

#### 4.5 University Admission Standard

Respondents from Art and Science High School Educational Majors were asked about their opinions and perceptions in relation to the admission standards required by a university, that is, whether the admission standard which has its own admission examination and selection procedures or requiring preparation and personal efforts to pass the exam and get accepted to the university or being highly competitive, would influence their choice of university.

Table 4.53. Opinions and perceptions on the university admission standard by major of study.

<i>Admission standard</i>	<i>Art</i>			<i>Science</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university has its own admission examination and selection procedures	5.2	27.3	67.5	4.8	24.3	70.9
It required preparation and personal efforts to pass the exam and get accepted to the university	7.9	33.2	59.0	6.7	24.3	69.0
The university admission system is highly competitive	18.8	38.6	42.6	17.7	37.2	45.2

It is noted that respondents from Art and Science educational major considered all factors of the admission standard important for their choice of university. Most of them indicated the universities with their own admission examination and selection procedures as the most important factor followed by the university which required personal effort to pass the examination and get accepted as next important, whereas the universities with highly competitive admission system were perceived as of the least importance by respondents. Overall, the Science educational major respondents perceived the admission standards as more important than their Art educational major counterparts.

#### 4.6 University Reputation

Respondents from Art and Science High School Educational Major were asked about their opinions and perceptions whether the reputation of a university was an important factor, that is, whether the reputation of the university which has a good reputation for academic excellence, qualified lectures or quality graduates, would influence their choice of university.

Table 4.54. Opinions and perceptions on the university reputation by major of study

<i>Reputation of the university</i>	<i>Art</i>			<i>Science</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university has a good reputation for academic excellence	10.7	30.1	59.2	7.3	30.7	61.9
The university has a good reputation for qualified lectures	7.9	25.8	66.3	7.1	28.7	64.2
The university has a good reputation for quality graduates	6.3	23.9	69.8	2.5	23.2	74.3
The university has a good reputation for high technology in all its infrastructure and teaching & learning facilities	6.6	21.9	71.6	4.1	20.4	75.5

The majority of respondents regardless of their high school educational major, more than 90%, deemed all the factors of the university reputation important for their choice of university; whereas, the Science educational major respondents' perceptions were slightly higher in all aspects. While similar in results, the one factor that the respondents considered of the highest importance was the university reputation for high technology in all its infrastructure and teaching and learning facilities.

#### 4.7 University Services

Respondents from Art and Science High School Educational Majors were asked about their opinions and perceptions whether the services provided by a university would influence their choice, that is, whether the services of the university which offers adequate and quality library resources and services or providing possibility to join an exchange program or study abroad, or has the academic advising system or providing career guidance and job placement counseling, would influence their choice of university.

Table 4.55. Opinions and perceptions on the university services by major of study

<i>University services</i>	<i>Art</i>			<i>Science</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university offers adequate and quality library resources and services	5.5	23.9	70.7	4.4	20.4	75.2
It is possible to join an exchange program or study abroad	30.4	24.9	44.6	24.8	30.8	44.4
The university has the academic advising system	31.9	18.6	49.5	25.7	18.8	55.6
The university provides career guidance and job placement counseling	30.9	17.3	51.9	25.7	15.7	58.6

The respondents from both the high school educational majors regarded all the four factors on university services important for their choice, however at different levels of importance. A university offering adequate and quality library resources and services was deemed as of the highest importance by respondents of both majors. Other factors, including the exchange and overseas programs, academic advising system, career guidance and job placement counseling, were deemed as of some importance.

However, it is noted that more Art educational major respondents demonstrated that these factors dealing with academic and future career opportunities and the counseling and advising services, were not important.

#### **4.8 University Location**

Respondents from Art and Science High School Educational Major were asked about their opinions and perceptions in relation to location of university, that is, whether the location of the university, being in a convenient location, not far from their residence or there are student dormitories and apartments near the university, would influence their choice of university.

Table 4.56. Opinions and perceptions on the university location by major of study

<i>University location</i>	<i>Art</i>			<i>Science</i>		
	NI %	MI %	I %	NI %	MI %	I %
The university is in a convenient location	5.3	19.5	75.3	3.7	20.4	75.9
The university is not far from your residence	22.5	33.3	44.2	33.5	26.6	39.9
There are student dormitories and apartments near the university	11.8	26.9	61.3	11.0	22.5	66.5

Nearly all the respondents, Art and Science educational majors, considered the factor of universities in a convenient location as important to their choice of university followed by a university with dormitories and apartments nearby which was regarded slightly less important. Interestingly, a considerable number of respondents from both majors, 22.5% and 33.5% respectively, perceived the factor that universities located closer to their residences as not important.

#### 4.9 Living Expenses

Respondents from Art and Science High School Educational Majors were asked about their opinions and perceptions of the expense of living at a university would influence their choice, that is, whether the living expenses in the university which are reasonable, would influence their choice of university.

Table 4.57. Opinions and perceptions on the living expense by major of study

<i>Living expenses</i>	<i>Art</i>			<i>Science</i>		
	NI %	MI %	I %	NI %	MI %	I %
The living expenses(food, transport ,accommodation etc.) on campus are reasonable	5.3	20.1	74.6	7.6	20.6	71.8

The majority of the respondents by 74.6% of Art and slightly lower 71.8% of Science educational majors regarded living expenses as important for their choice of university. Only 5.3% and 7.6% of the same respondents thought that this factor was not important for the choice of university. The Art educational major students were more concerned about the living expenses than their counterparts.

#### 4.10 Tuition Fees

Respondents from Art and Science High School Educational Majors were asked about their opinions and perceptions of the level of tuition fees charged by a university in relation to choice of university. That is, whether the tuition fees of the university which are average compared to other institutions of the same type, would influence their choice of university.

Table 4.58. Opinions and perceptions on the Tuition fees by major of study

<i>Tuition fees (cost)</i>	<i>Art</i>			<i>Science</i>		
	NI %	MI %	I %	NI %	MI %	I %
The tuition fees are average compared to other institutions of the same type	7.4	30.0	62.6	6.7	24.8	68.6

The majority of the respondents, 62.6% of Art and slightly higher 68.6% of Science major, regarded living expenses as important for their choice of university. Science educational major students were more concerned about the living expenses than their counterparts.

#### 4.11 Financial aid

Respondents from Art and Science High School Educational Major were asked about their opinions and perceptions whether a university provided financial aid to students in relation to choice of university, that is, whether the financial aid which provide possibilities to apply for a scholarship or possibility to apply for a loan for tuition or for accommodation expenses or possibility to get a part-time job on campus, would influence their choice of university.

Table 4.59. Opinions and perceptions on the financial aid by major of study

<i>Financial aid</i>	<i>Art</i>			<i>Science</i>		
	NI %	MI %	I %	NI %	MI %	I %
There are possibilities to apply for a scholarship	11.2	24.3	64.6	10.6	19.5	70.0
It is possible to apply for a loan for tuition	34.6	29.5	35.9	29.6	38.4	31.9
It is possible to apply for a loan for accommodation expenses	31.9	33.0	35.0	31.5	37.0	31.5
It is possible to get a part time job on campus	29.5	32.2	38.3	30.8	35.2	34.0

The majority of the respondents from the Art and Science high school educational majors considered the possibilities to apply for a scholarship as of the highest importance, whereas the respondents felt similarly about on the degree of importance with the possibilities to apply for a loan for tuition fees or accommodation expenses or to get a part time job on campus. There was no significant influence which would impact them differently.

## 5.0 Grade Point Average

### 5.1 Type of university

Respondents with low, average, and high GPA were asked about their opinions and perceptions of their choice for the type of university that would influence their choice of university, that is, whether the type of institution, being a private or public university or affiliated to a religious organization, would influence their choice of university.

Table 4.60. Opinions and perceptions on the type of university by grade point average

<i>Type of university</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is a private institution	20.8	41.7	37.5	35.1	36.8	28.1	36.3	46.1	17.6
The university is a public institution	16.7	37.5	45.8	21.9	30.7	47.4	9.4	23.4	67.2
The university is affiliated to a religious organization	62.5	20.8	16.7	56.1	28.1	15.8	65.3	26.8	8.0

A public university was considered as more important for their choice of university by the low, the average, and the high GPA respondents. A private university was considered to be a less important factor for university choice for the average and high level of GPA respondents but those with low GPA seemed to prefer a private university. The respondents with average and high GPA, on the other hand, preferred the public university. A significantly high number of responses demonstrated that whether or not universities were affiliated to a religious organization had no effect on their decision making. Therefore, a public university was an important factor in choice and other type

of universities were considered to be of less or not important factor for university choice.

## 5.2 Medium of instruction

Respondents with low, average, and high GPA were asked about their opinions and perceptions of the type of instruction undertaken by a university. That is, whether the medium of instruction, using English or offering some English program, would influence their choice of university.

Table 4.61. Opinions and perceptions on the medium of instruction by grade point average

<i>Medium of instruction</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is an international institution with English as medium of instruction	37.5	29.2	33.3	23.0	31.0	46.0	23.4	31.9	44.7
The university offers some English programs	16.7	45.8	37.5	12.4	41.6	46.0	12.2	36.5	51.4

The university offering some English programs was considered of some importance for their choice of university by the low, the average and the high GPA respondents.

Whereas the university with English as the medium of instruction was regarded important only by the Average and High GPA respondents , however these two factors were indicated as not important by the low GPA respondents. Interestingly, the low GPA respondents indicated these two factors with low importance.

## 5.3 University Curriculum

Respondents with low, average, and high GPA were asked about their opinions and perceptions of the programs offered by a university. That is, whether the curriculum of a university offering a variety of academic programs in humanities and science, would influence their choice of university.

Table 4.62. Opinions and perceptions on the university curriculum by grade point average

<i>Curriculum of the university</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is comprehensive, offering a variety of academic programs in humanities and science	29.2	33.3	37.5	21.2	38.1	40.7	14.7	34.6	50.8

It is noted that the level of importance the respondents indicated for university choice correlated with their level of GPA. The respondents with higher GPA paid more attention to the comprehensiveness of the university curriculum than those with lower GPA.

#### **5.4 University Atmosphere**

Respondents with low, average and high GPA were asked about the opinions and perceptions of the atmosphere of the university and how this may affect their choice. That is, whether the atmosphere of the university, making the university a truly international community by including many foreign students; offering various extracurricular activities on regular basis; providing the environments and atmosphere which are conducive to learning or using clear rules and regulation would influence their choice of university.



Table 4.63. Opinions and perceptions on the university atmosphere by grade point average

<i>University atmosphere</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
There are foreign students and faculty members ,making the university a truly international community	25.0	45.8	29.2	18.6	32.7	48.7	16.9	33.9	49.2
The university offers various extracurricular activities on regular basis	8.3	62.5	29.2	15.9	26.5%	57.5%	10.1%	31.7 %	58.2%
The university provides the environments and atmosphere which are conducive to learning	4.2	25.0	70.8	7.1	17.7	75.2	2.5	12.3	85.2
The university has clear rules and regulation	8.3	58.3	33.3	21.2	38.9	39.8	12.3	31.1	56.6

The majority of all the respondents stated that the university which provided the environments and atmosphere conducive to learning was the most important factor for their choice of university. The university offering extracurricular activities; the university with clear rules and regulation; and the university with foreign students and faculty members were regarded as important only by the average and high GPA, while low GPA respondents indicated these three factors were of moderate importance.

### 5.5 University Admission Standard

Respondents with low, average and high GPA were asked about the opinions and perceptions of a university in relation to the admission standards required and how this influenced their decision-making. The admission standard is refined by whether or not the university has its own admission examination and selection procedures which are highly competitive and which may require preparation and personal efforts to pass the exam and get admitted to the university.

Table 4.64 Opinions and perceptions on the university admission standard by grade point average

<i>Admission standard</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university has its own admission examination and selection procedures	8.3	37.5	54.2	8.0	32.1	59.8	4.5	24.5	71.0
It required preparation and personal efforts to pass the exam and get accepted to the university	8.3	41.7	50.0	12.5	29.5	58.0	6.6	28.3	65.1
The university admission system is highly competitive	33.3	37.5	29.2	18.8	37.5	43.8	17.6	38.1	44.4

The respondents of all level of GPA considered the university with their own admission examination and selection procedures; the university which requires personal effort to pass the examination to get accepted as of some importance for their choice of university. Whereas the university with highly competitive admission system was perceived as of the least importance by respondents of all GPA level. More of the low GPA respondents regarded this factor as of no importance.

## 5.6 University Reputation

Respondents with low, average and high GPA were asked about the opinions and perceptions whether the reputation of the University was an important factor for university choice. In other words, whether the reputation of the university which has a good reputation for academic excellence, qualified lectures or quality graduates would influence their choice of university.

Table 4.65. Opinions and perceptions on the university reputation by grade point average

<i>Reputation of the university</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university has a good reputation for academic excellence	25.0	45.8	29.2	14.3	31.3	54.5	7.6	30.1	62.3
The university has a good reputation for qualified lectures	16.7	45.8	37.5	10.7	30.4	58.9	6.7	25.9	67.4
The university has a good reputation for quality graduates	16.7	41.7	41.7	10.7	30.4	58.9	3.2	21.8	75.0
The university has a good reputation for high technology in all its infrastructure and teaching & learning facilities	4.2	37.5	58.3	10.7	21.4	67.9	4.6	20.5	74.9

The university with good reputation for high technology in all its infrastructure and teaching & learning facilities was considered similar to the university with good reputation for quality graduates as of some importance by all respondents. Whereas the university with good reputation for qualified lecturers and academic excellence was regarded as of some importance only by the average and high GPA respondents, the low GPA respondents thought that these two factors were moderately important. It is noted that the higher the GPA the more number of respondents who considered the factors of the university reputation important for their choice.

## 5.7 University Services

Respondents with low, average and high GPA were asked about the opinions and perceptions about the services provided by a university would influence their choice of university. That is, whether the services of the university which offers adequate and quality library resources and services or providing possibility to join an exchange

program or study abroad, or has an academic advisory system or providing career guidance and job placement counseling, would influence their choice of university.

Table 4.66. Opinions and perceptions on the university services by grade point average

<i>University services</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university offers adequate and quality library resources and services	8.3	37.5	54.2	6.3	21.4	72.3	4.6	21.3	74.1
It is possible to join an exchange program or study abroad	29.2	33.3	37.5	25.9	27.7	46.4	27.6	27.9	44.4
The university has the academic advising system	33.3	12.5	54.2	24.1	21.4	54.5	29.4	18.3	52.4
The university provides career guidance and job placement counseling	25.0	29.2	45.8	24.1	22.3	53.6	29.0	14.9	56.1

Most of the respondents from all level of GPA indicated all aspects of the services of the university important for their choice, however at different levels. The university offering adequate and quality library resources and services was deemed as of the highest importance. Other factors, including the exchange and overseas programs, academic advising system, career guidance and job placement counseling, were deemed as of some importance, however there was a considerable number of respondents who indicated these factors were of no importance.

## 5.8 University Location

Respondents with low, average and high GPA were asked about the opinions and perceptions of university in relation to location. That is, whether the location of the university, being in a convenient location, not far from their residence or the presence of student dormitories and apartments near the university, would influence their choice of university.

Table 4.67. Opinions and perceptions on the university location by grade point average

<i>University location</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is in a convenient location	16.7	25.0	58.3	6.3	16.1	77.7	3.8	20.2	76.0
The university is not far from your residence	41.7	12.5	45.8	23.2	35.7	41.1	28.3	30.0	41.8
There are student dormitories and apartments near the university	8.3	37.5	54.2	20.5	24.1	55.4	9.9	24.4	65.7

The university location aspects were indicated important for their choice of university. Nearly all the respondents of all GPA level considered the factor of the university in a convenient location as important for their choice of university followed by the university with dormitories and apartments nearby regarded slightly less important. Interestingly, a considerable number of respondents perceived the factor that university located closer to their residences as not important. It is noted that the higher the GPA the more number of respondents who considered the factors of the university location important for their choice.

## 5.9 Living Expenses

Respondents with low, average and high GPA were asked about the opinions and perceptions of the expense of living at a university would influence their choice. That is, whether the reasonable living expenses in the university would influence their choice of university.

Table 4.68. Opinions and perceptions on the living expense by grade point average

<i>Living expenses</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The living expenses(food, transport ,accommodation etc.) on campus are reasonable	4.2	20.8	75.0	10.7	22.3	67.0	5.8	20.1	74.1

The majority of the respondents of all levels of GPA regarded living expenses as important for their choice of university.

### 5.10 Tuition Fees

Respondents with low average and high GPA were asked about the opinions and perceptions of the level of tuition fees charged by a University in relation to choice. That is, whether the tuition fees of the university which are average compared to other institutions of the same type, would influence their choice of university.

Table 4.69. Opinions and perceptions on the Tuition fees by grade point average

<i><b>Tuition fees (cost)</b></i>	<i><b>Low</b></i>			<i><b>Average</b></i>			<i><b>High</b></i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The tuition fees are average compared to other institutions of the same type	12.5	41.7	45.8	8.9	33.9	57.1	6.4	26.3	67.3

Most of the respondents agreed that the factor of tuition fees was important for their choice of university. The level of importance indicated seemed to correlate with the level of their GPA. The higher the GPA the more concerned they were with the tuition fees.

### 5.11 Financial aid

Respondents with low, average and high GPA were asked about the opinions and perceptions regarding a university providing financial aid to students were important in relation to choice of university. That is, whether the financial aid which provide possibilities to apply for a scholarship or the possibility to apply for a loan for tuition or for accommodation expenses or the possibility to get a part time job on campus, would influence their choice of university.

Table 4.70. Opinions and perceptions on the financial aid by grade point average

<i>Financial aid</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
There are possibilities to apply for a scholarship	20.8	41.7	37.5	13.4	33.0	53.6	10.1	19.7	70.2
It is possible to apply for a loan for tuition	33.3	37.5	29.2	34.8	30.4	34.8	31.9	34.0	34.1
It is possible to apply for a loan for accommodation expenses	29.2	45.8	25.0	33.9	33.0	33.0	31.2	34.9	33.9
It is possible to get a part time job on campus	20.8	37.5	41.7	30.4	29.5	40.2	30.3	34.0	35.7

Respondents with different level of GPA had diverse opinions and perceptions on the university financial aid program. The possibility to apply for a scholarship was regarded as important especially for the higher GPA respondents. The possibility to get a part-time job on campus; the possibility to apply for a loan for tuition or a loan for accommodation expenses were regarded with low importance. There was no significant different between the GPA level respondents towards these three factors. Respondents with low GPA indicated the factors on financial aid of no importance.

## 6.0 Household income

### 6.1 Type of university

Respondents from different household incomes were asked about their opinions and perceptions on the type of university that would influence their choice. That is, whether the type of institution, being a private or public university or affiliated to a religious organization, would influence their choice of university.

Table 4.71. Opinions and perceptions on the type of university by household income

<i>Type of university</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is a private institution	38.6	43.9	17.6	30.4	49.0	20.6	34.8	38.4	26.8
The university is a public institution	9.0	21.9	69.1	12.4	25.3	62.4	18.1	32.6	49.3
The university is affiliated to a religious organization	64.5	26.7	8.8	64.4	26.8	8.8	60.1	28.3	11.6

A public university was considered as more important for their choice of university by the respondents with low, average and high household income. A significantly high number of responses demonstrated that whether or not universities were affiliated to religious organization had no effect on their decision making. Similarly, the private university was regarded as moderately important. A significantly high number of responses demonstrated that whether or not universities were affiliated to a religious organization had no effect on their decision making. Therefore, a public university was an important factor in choice and other types of universities were considered to be of less importance factor for university choice.

## 6.2 Medium of Instruction

Respondents from different household income were asked about the opinions and perceptions of the type of instruction undertaken by a university. That is, whether the medium of instruction, using English or offering some English instruction, would influence their choice of university. The choices of the medium of instruction at the University for the respondents to select from included whether the University used English as the medium of instruction or whether it offered some English instruction.



Table 4.72. Opinions and perceptions on the medium of instruction by household income

<i>Medium of instruction</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is an international institution with English as medium of instruction	27.0	31.0	42.0	21.1	31.4	47.4	13.8	34.1	52.2
The university offers some English programs	13.8	36.1	50.1	9.3	38.7	52.1	10.1	42.0	47.8

It is noted that all aspects of the medium of instruction at the university were regarded to some extent important. However, respondents from high household income were slightly more in favor of the university being an international institution with English as the medium of instruction, while the university offering some English programs was more favored by the respondents from low household income.

## 6.2 University Curriculum

Respondents from different household income were asked about the opinions and perceptions of the programs offered by a university. That is, whether the curriculum of the university offering a variety of academic programs in humanities and science, would influence their choice of university.

Table 4.73. Opinions and perceptions on the university curriculum by household income

<i>Curriculum of the university</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is comprehensive, offering a variety of academic programs in humanities and science	14.9	35.8	49.4	16.5	31.4	52.1	16.8	33.6	49.6

The majority of the respondents of all levels of household income considered the comprehensiveness of the university curriculum as of some importance, while about

half of the respondents deemed this university characteristic as important. However, there is no significant difference in the perception among the respondents.

### 6.3 University Atmosphere

Respondents from different household incomes were asked about the opinions and perceptions of the atmosphere of the university and how this may affect their choice. That is, whether the atmosphere of the university, making the university a truly international community by including many foreign students; offering various extracurricular activities on regular basis; providing the environments and atmosphere which are conducive to learning or using clear rules and regulations would influence their choice of university.

Table 4.74. Opinions and perceptions on the university atmosphere by household income

<i>University atmosphere</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
There are foreign students and faculty members ,making the university a truly international community	18.0	34.9	47.2	17.0	33.0	50.0	13.9	32.1	54.0
The university offers various extracurricular activities on regular basis	11.0	32.4	56.6	9.8	30.9	59.3	10.2	32.8	56.9
The university provides the environments and atmosphere which are conducive to learning	2.6	13.2	84.2	3.1	11.9	85.1	5.1	16.8	78.1
The university has clear rules and regulation	11.0	32.2	56.8	14.9	33.0	52.1	19.0	32.1	48.9

The majority of the respondents of all levels of household income thought that all aspects of the atmosphere of the university were important for their choice of university. However, their consideration of importance on each factor was different. They believed

that the university which provided the environments and atmosphere which were conducive to learning was typically important for their choice of university. While the university offering extracurricular activities; the university with clear rules and regulation; and the university with foreign students and faculty members were also regarded similarly less important.

#### 6.4 University Admission Standard

Respondents from different household income were asked about the opinions and perceptions in relation to the admission standards required. That is, whether the admission standard which has its own admission examination and selection procedures or requiring preparation and personal efforts to pass the exam and get accepted to the university which is considered highly competitive, would influence their choice of university.

Table 4.75. Opinions and perceptions on the university admission standard by household income

<i>Admission standard</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university has its own admission examination and selection procedures	4.6	25.2	70.2	4.1	25.4	70.5	7.3	25.5	67.2
It required preparation and personal efforts to pass the exam and get accepted to the university	5.3	25.8	68.9	8.3	32.1	59.6	12.4	31.4	56.2
The university admission system is highly competitive	16.0	35.0	49.0	18.7	46.6	34.7	24.8	38.7	36.5

Most of the respondents of all levels of family income pointed out that the universities with their own admission examination and selection procedures were of importance for their choice of university, followed by the university that required personal effort to pass the examination to get accepted was regarded slightly less important. On the other

hand, the universities with a highly competitive admission system were perceived as of the least importance by the respondents.

## 6.5 University Reputation

Respondents from different household income were asked about the opinions and perceptions whether the reputation of the University was an important factor. That is, whether the reputation of the university which has a good reputation for academic excellence, qualified lectures or quality graduates, would influence their choice of university.

Table 4.76. Opinions and perceptions on the university reputation by household income

<i><b>Reputation of the university</b></i>	<i><b>Low</b></i>			<i><b>Average</b></i>			<i><b>High</b></i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university has a good reputation for academic excellence	10.3	29.3	60.4	6.2	34.2	59.6	5.8	29.9	64.2
The university has a good reputation for qualified lectures	7.6	26.5	65.9	7.3	30.7	62.0	5.8	21.9	72.3
The university has a good reputation for quality graduates	4.8	22.7	72.6	3.6	27.1	69.3	3.6	22.6	73.7
The university has a good reputation for high technology in all its infrastructure and teaching & learning facilities	6.3	21.5	72.2	3.6	23.4	72.9	5.1	15.3	79.6

Most of the respondents of all level of household income indicated that all aspects of the university reputation were important for their choice of university. The university with a good reputation for high technology in its entire infrastructure and teaching and learning facilities was given highest importance while the university with the reputation for quality graduates, qualified lecturers and academic excellence were respectively given slightly lower importance. The academic excellence factor was thought to be the least important especially by the low income respondents.

## 6.6 University Services

Respondents from different household income were asked about their opinions and perceptions about the services provided by a university and whether or not the availability of these services would influence their choice. The services of the university as defined in the study include adequate and quality library resources and services or opportunities to join an exchange program or study abroad, academic advising system or career guidance and job placement counseling.

Table 4.77. Opinions and perceptions on the university services by household income

<i>University services</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university offers adequate and quality library resources and services	5.2	20.6	74.2	4.7	23.4	71.9	4.4	24.8	70.8
It is possible to join an exchange program or study abroad	31.2	28.1	40.7	22.9	31.3	45.8	19.7	25.5	54.7
The university has the academic advising system	33.8	18.2	48.0	21.9	19.8	58.3	21.2	17.5	61.3
The university provides career guidance and job placement counseling	33.3	14.7	52.0	19.8	18.8	61.5	21.2	19.7	59.1

Most of the respondents from all level of household income indicated all aspects of the services of the university were important for their choice of university, however at different levels. The fact that the university offers adequate and quality library resources and services was deemed as of the highest importance by respondents of all levels of household income. Other factors, including the exchange and overseas programs, academic advising system, career guidance and job placement counseling, were deemed as of some importance. However, it is noted that more of the low household income respondents demonstrated that these factors dealing with academic and future career opportunities; the counseling and advising services; possibilities for an exchange program or study abroad, were not important.

## 6.8 University Location

Respondents from different household income were asked about the opinions and perceptions of university in relation to location. That is, whether the location of the university, being in a convenient location, not far from their residence or the presence of student dormitories and apartments near the university, would influence their choice of university.

Table 4.78. Opinions and perceptions on the university location by household income

<i>University location</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is in a convenient location	4.2	20.4	75.3	6.3	18.2	75.5	3.6	20.4	75.9
The university is not far from your residence	28.4	28.5	43.1	27.6	35.9	36.5	27.7	28.5	43.8
There are student dormitories and apartments near the university	9.9	23.8	66.3	12.0	30.7	57.3	14.6	21.9	63.5

Nearly all the respondents, male and female, considered the factor of universities in a convenient location as important to their choice of university while the university with dormitories and apartments near the campus was regarded less important. Interestingly, a considerable number of respondents perceived the factor that university located closer to their residences as not important.

## 6.9 Living Expenses

Respondents from different household income were asked about the opinions and perceptions of the expense of living at a university would influence their choice. That is, whether the reasonable living expenses in the university would influence their choice of university.

Table 4.79. Opinions and perceptions on the living expense by household income

<i>Living expenses</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The living expenses(food, transport ,accommodation etc.) on campus are reasonable	5.0	19.9	75.1	8.3	24.5	67.2	8.8	18.2	73.0

Most of the respondents of all level of household income regarded living expenses as important for their choice of university. The low household income respondents indicated living expenses as slightly more important than the average and high income respondents.

### 6.10 Tuition Fees

Respondents from different household income were asked about the opinions and perceptions of the level of tuition fees charged by a University in relation to choice. That is, whether the tuition fees of the university which are average compared to other institutions of the same type, would influence their choice of university.

Table 4.80. Opinions and perceptions on the tuition fees by household income

<i>Tuition fees</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The tuition fees are average compared to other institutions of the same type	5.9	23.8	70.3	6.3	37.0	56.8	13.1	29.2	57.7

The respondents of all level of household income considered tuition fees important for their choice of university. The low household income respondents indicated tuition fees as more important than the average and high income respondents.

### 6.11 Financial aid

Respondents from different household income were asked if the opinions and perceptions about a university providing financial aid to students were of importance for their choice of university. That is, whether the financial aid which provide possibilities

to apply for a scholarship or the possibility to apply for a loan for tuition or for accommodation expenses or the possibility to get a part time job on campus, would influence their choice of university.

Table 4.81. Opinions and perceptions on the financial aid by household income

<i>Financial aid</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
There are possibilities to apply for a scholarship	7.4	19.7	72.9	16.7	28.1	55.2	17.5	22.6	59.9
It is possible to apply for a loan for tuition	30.3	32.7	37.0	29.7	40.1	30.2	41.6	29.2	29.2
It is possible to apply for a loan for accommodation expenses	29.2	34.2	36.6	28.6	41.7	29.7	41.6	29.9	28.5
It is possible to get a part time job on campus	31.4	33.5	35.1	25.0	34.4	40.6	30.7	33.6	35.8

It is noted that respondents with different level of household income had diverse opinions and perceptions on the university financial aid program. The majority of the respondents considered the possibilities to apply for a scholarship as of the highest importance, especially those from the low household income who was more concerned about this factor than others. The possibility to get a part time job on campus also was indicated as of some importance. The university with the possibilities to apply for a loan for tuition or accommodation expenses was considered of somewhat importance by the low household income respondents, whereas the average and high household income respondents considered these two factors as average and not important respectively. Overall, the respondents were divided in their perceptions towards the other factors dealing with the possibilities of loan application for tuition fees, accommodation expenses and part time jobs on campus, with no significant difference between the respondents of different level of household income.



## 7.0 Parental education

### 7.1 Type of university

Respondents with different parental level of education were asked about the opinions and perceptions for the type of university that would influence their choice. That is, whether the type of institution, being a private or public university or affiliated to a religious organization, would influence their choice of university.

Table 4.82. Opinions and perceptions on the type of university by parental education

<i>Type of university</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is a private institution	45.6	38.8	15.6	31.7	47.6	20.7	32.5	45.2	22.2
The university is a public institution	9.4	25.0	65.6	10.6	25.1	64.3	13.5	25.8	60.7
The university is affiliated to a religious organization	65.6	27.5	6.9	59.5	33.9	6.6	63.1	26.6	10.3

A public university was considered as more important for their choice of university by respondents of different level of parental education. However, a significantly high number of responses demonstrated that whether or not universities were affiliated to religious organization had no effect on their decision making. Therefore, a public university was an important factor in choice and other types of universities were considered to be of less important factor for university choice.

*My parents never went to college but they know a lot of things because they have been doing their own business for years. You can say that they learn everything they know by themselves. Although they don't have any university degrees, they want their children to go to college, at least for a Bachelor's degree. They believe that education is a very important factor for any success in life.*

### 7.2 Medium of Instruction

Respondents with different parental level of education were asked about the opinions and perceptions of the type of instruction undertaken by a university. That is, whether

the medium of instruction, using English or offering some English instruction, would influence their choice of university.

Table 4.83. Opinions and perceptions on the medium of instruction by parental education

<i>Medium of instruction</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is an international institution with English as medium of instruction	31.3	30.0	38.8	23.5	31.9	44.7	19.5	32.3	48.2
The university offers some English programs	13.8	36.9	49.4	13.3	38.1	48.7	10.0	39.0	51.0

The university offering some English programs was indicated by the respondents of different level of parental education as important for their choice of university.

Similarly, the university being an international institution with English as medium of instruction was regarded as less important. It is noted that the medium of instruction factors were to some extent important for their choice.

### 7.3 University Curriculum

Respondents with different parental level of education were asked about the opinions and perceptions of the programs offered by a university. That is, whether the curriculum of the university offering a variety of academic programs in humanities and science, would influence their choice of university.

Table 4.84. Opinions and perceptions on the university curriculum by parental education

<i>Curriculum of the university</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is comprehensive, offering a variety of academic programs in humanities and science	16.9	34.4	48.8	15.9	33.6	50.4	14.8	33.2	52.0

The majority of the respondents considered the comprehensiveness of the university curriculum as of some importance, while about half of them deemed this university characteristic as important. However, there was no significant difference in the perception between the respondents of different level of parental education.

#### 7.4 University Atmosphere

Respondents with different parental level of education were asked about the opinions and perceptions of the atmosphere of the university and how this may affect their choice. That is, whether the atmosphere of the university, making the university a truly international community by many foreigners or offering various extracurricular activities on a regular basis or providing the environments and atmosphere which are conducive to learning or using clear rules and regulation, would influence their choice of university.

Table 4.85. Opinions and perceptions on the university atmosphere by parental education

<i>University atmosphere</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
There are foreign students and faculty members ,making the university a truly international community	21.3	27.5	51.3	13.3	37.2	49.6	14.8	31.6	53.6
The university offers various extracurricular activities on regular basis	8.8	32.5	58.8	11.9	30.5	57.5	10.4	33.7	55.8
The university provides the environments and atmosphere which are conducive to learning	3.1	16.3	80.6	2.2	14.2	83.6	4.0	10.8	85.1
The university has clear rules and regulation	8.1	30.6	61.3	13.7	34.1	52.2	15.7	30.9	53.4

The majority of the respondents stated that the university which provides the environments and atmosphere conducive to learning as the most distinctively important for their choice of university. While the university which offers extracurricular activities; the university with clear rules and regulation; and the university with foreign students and faculty members were also regarded as important. The least important factor for them was having foreign students and faculty as part of the university community.

## 7.5 University Admission Standard

Respondents with various parental level of education were asked about the opinions and perceptions of a university in relation to the admission standards required and how these standards would influence their choice of a university. The admission standard of a university is defined by whether or not it has its own admission examination and selection procedures, requires preparation and personal efforts to pass the exam and get accepted to the university and is highly competitive.

Table 4.86. Opinions and perceptions on the university admission standard by parental education

<i>Admission standard</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university has its own admission examination and selection procedures	5.0	24.4	70.6	5.3	23.6	71.1	4.4	26.1	69.5
It required preparation and personal efforts to pass the exam and get accepted to the university	6.3	25.6	68.1	7.6	25.8	66.7	8.0	33.3	58.6
The university admission system is highly competitive	18.1	36.3	45.6	17.3	33.3	49.3	20.5	39.0	40.6

It is noted that the university having its own admission examination and selection procedures and selection procedures was favored more by the respondents than the university that required personal effort to pass the examination to get accepted and the university with admission system highly competitive. The university with a highly competitive admission system was perceived the least important.

## 7.6 University Reputation

Respondents with different parental level of education were asked about the opinions and perceptions of university whether the reputation of the university was an important factor. That is, whether the reputation of the university reflecting academic excellence, qualified lectures or quality graduates, would influence their choice of university.

Table 4.87. Opinions and perceptions on the university reputation by parental education

<i>Reputation of the university</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university has a good reputation for academic excellence	14.4	35.6	50.0	7.1	28.0	64.9	9.2	29.3	61.4
The university has a good reputation for qualified lectures	8.8	28.8	62.5	5.8	27.2	67.0	8.0	25.3	66.7
The university has a good reputation for quality graduates	6.9	21.3	71.9	3.1	22.3	74.6	2.8	24.1	73.1
The university has a good reputation for high technology in all its infrastructure and teaching & learning facilities	6.9	22.5	70.6	4.9	21.0	74.1	4.0	21.3	74.7

Most of the respondents of all levels of parental education indicated that all aspects of the university reputation were important for their choice of university. The university with good reputation for high technology in its entire infrastructure and teaching and learning facilities was given highest importance while the university with the reputation for quality graduates, qualified lecturers and academic excellence were sequentially regarded slightly less important. It is noted that the respondents of all level of parental education were more concerned with the university reputation factor.

## 7.7 University Services

Respondents with different parental levels of education were asked about the opinions and perceptions regarding the services provided by a university would influence their choice. That is, whether the services of the university which offers adequate and quality library resources and services or providing possibility to join an exchange program or study abroad or has the academic advising system or providing career guidance and job placement counseling, would influence their choice of university.

Table 4.88. Opinions and perceptions on the university services by parental education

<i>University services</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university offers adequate and quality library resources and services	4.4	18.1	77.5	5.4	20.1	74.6	5.2	23.3	71.5
It is possible to join an exchange program or study abroad	34.8	31.0	34.2	25.1	27.8	47.1	24.9	28.1	47.0
The university has the academic advising system	39.2	21.5	39.2	29.1	15.2	55.6	24.9	17.7	57.4
The university provides career guidance and job placement counseling	38.6	15.2	46.2	25.6	19.7	54.7	24.9	16.1	59.0

The respondents of all levels of parental education had diverse opinions and perceptions on the university services. The fact that the university offers adequate and quality library resources and services was deemed as the highest importance by respondents of all level of parent education, while those with low level of parental education were most concerned with this factor. Other aspects, including the exchange and overseas programs, academic advising system, career guidance and job placement counseling, were deemed as of some importance, however were more favored by the respondents from the average and high level of parental education, and while the respondents with low level of parental education indicated these factors were as not important.

## 7.8 University Location

Respondents with different parental level of education were asked about the opinions and perceptions of university in relation to location. That is, whether the location of the university, being in a convenient location, not far from your residence or the presence of student dormitories and apartments near the university, would influence their choice of university.

Table 4.89. Opinions and perceptions on the university location by parental education

<i>University location</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The university is in a convenient location	6.9	18.1	75.0	5.8	18.3	75.9	4.0	21.7	74.3
The university is not far from your residence	25.0	26.9	48.1	27.2	29.9	42.9	27.7	31.7	40.6
There are student dormitories and apartments near the university	8.8	25.6	65.6	12.1	23.7	64.3	13.7	24.9	61.4

Nearly all the respondents with different levels of parental education considered the factor of university in a convenient location as important to their choice of university followed by the university with dormitories and apartments near the campus.

Interestingly, a considerable number of the respondents of all level of parental education similarly perceived the factor that universities located closer to their residences as not important.

## 7.9 Living Expenses

Respondents with different parental level of education were asked if the opinions and perceptions of the expense of living at a university would influence their choice. That is, whether the reasonable living expenses in the university would influence their choice of university.

Table 4.90. Opinions and perceptions on the living expense by parental education

<i>Living expenses</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The living expenses(food, transport ,accommodation etc.) on campus are reasonable	3.1	23.8	73.1	6.3	23.7	70.1	6.8	17.7	75.5

The majority of the respondents of all levels of parental education regarded living expenses as similarly important for their choice of university.



### 7.10 Tuition Fees

Respondents with different parental level of education were asked about the opinions and perceptions of the level of tuition fees charged by a university in relation to choice. That is, whether the tuition fees of the university which are average compared to other institutions of the same type, would influence their choice of university.

Table 4.91. Opinions and perceptions on the tuition fees by parental education

<i><b>Tuition fees (cost)</b></i>	<i><b>Low</b></i>			<i><b>Average</b></i>			<i><b>High</b></i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
The tuition fees are average compared to other institutions of the same type	5.0	26.9	68.1	7.1	27.7	65.2	9.6	27.3	63.1

While all of the respondents agreed that the factor of tuition fees was important for their choice of university, the respondents with low level of parental education indicated tuition fees as slightly more important than the other two groups of respondents.

### 7.11 Financial aid

Respondents with different parental level of education were asked if the opinions and perceptions of a university whether a university providing financial aid to students was important for their choice of university. That is, whether the financial aid which provide possibilities to apply for a scholarship or possibility to apply for a loan for tuition or for accommodation expenses or possibility to get a part time job on campus, would influence their choice of university.

Table 4.92. Opinions and perceptions on the financial aid by parental education

<i>Financial aid</i>	<i>Low</i>			<i>Average</i>			<i>High</i>		
	NI %	MI %	I %	NI %	MI %	I %	NI %	MI %	I %
There are possibilities to apply for a scholarship	11.9	23.8	64.4	9.8	17.0	73.2	11.2	20.9	67.9
It is possible to apply for a loan for tuition	31.6	31.0	37.3	25.6	39.5	35.0	36.1	35.3	28.5
It is possible to apply for a loan for accommodation expenses	29.7	35.4	34.8	24.7	40.4	35.0	36.5	33.7	29.7
It is possible to get a part time job on campus	36.1	29.7	34.2	24.7	34.1	41.3	31.7	33.3	34.9

Respondents with different parental education level had diverse opinions and perceptions on the university financial aid program. The majority of the respondents favored the possibility to apply for a scholarship as important for their choice of university. Overall, the respondents were divided in their perceptions towards the other factors dealing with the possibilities of loan application for tuition fees, accommodation expenses and getting part time jobs on campus, with no significant difference. However, the respondents with the low and the average level of parental education were slightly more in favor of the possibilities for loans and part-time job on campus.

The role of parents in university choice should not be underestimated. Students indicated that personal sources of information and recommendations were more important than non-personal sources. Activities such as campus visits appear to be the preferred option rather than brochures, emails and websites. According to the responses by the study respondent's parents took the leading role in the decision-making group, beyond their influence as a source of information.

As one student stated:

*I'm not sure whether it is a good idea or not but it is what my family practices. My parents help me make all the important decisions in life, including my study plans and choices. I think it is ok for me because I know that they love me and truly care about my future.*

*We usually talk to our parents about what we want to do or where we want to study. We tell them what we think and then they will tell us what is good or practical in the real world—the world of the working people. I think our parents know best and they have our best interest when they tell us what we should do. It's also our custom to be obedient and listen to our parents' advice.*

*Some parents never allow their children to make any important decisions themselves although they are going to be the ones facing the consequences or living the lives chosen by the parents. I think it is unfair for the children because they have to do something or become someone that they don't like but many are too afraid to disagree with their parents. Maybe they don't want to disappoint their parents. Some may not dare to argue with their parents because they know that they have to depend on them financially. I think it is also bad for the parents because their children will never learn to be responsible in life. If something goes wrong or if they fail in their study they can easily blame it on their parents for forcing them to do what they don't like*

In the next chapter the discussions and recommendations are presented with the focus on the interpretation of the findings in response to the research questions. The combined analysis of the findings from both the quantitative and qualitative data collected in Phase two –the survey and Phase three-the semi-structured interviews are discussed with the recommendations for future study on the current and future practices of student admission programs.

## **Chapter Five**

### **Discussion, Implications and Recommendations**

#### **Overview of the Chapter**

This chapter discusses the implications of the study based on the findings and analysis and attempts to proffer recommendations for further study and practices. The purpose of the study was to investigate the factors influencing high school student's choice of university in Thailand with the aim to ascertain and explore how Thai high school students aspire to embark on higher studies make their choice of university and why they choose one university over another. The expected outcomes of this study will be the increased knowledge of what influences the Thai students who aspired to attend university, the choice of university and the implementation of the university in planning and policy making in the Thai context.

This study is deemed particularly significant to generate new knowledge of today's higher education management in general, especially in the context of Thailand. In addition, the information on preferences in tertiary education could be better understood in the context of Thai culture, which may have relevance to other cultures in the neighboring countries in the Asian region. In addition, the findings and analysis of the study may shed some light and provide guidance to higher education institutions in their planning and policy making in relation to students admissions.

Most of the respondents surveyed in the study had settled on their preferred choice of university when participating in the study. The results of the study suggested that they had in mind the decisions about the university appropriate for their choice and a set of feasible institution combinations that might have been embarked on quite early while they were in high school.

The 1,012 participants for this study were drawn from the high school population of approximately 382,298 students from 9 and 8 public and private high schools respectively representing the five geographical regions of Thailand. The majority of the students (or 67.5%) were female students. The average age of the students in the study was 17.4 years old and the majority lived with their parents at the time when they

participated in this survey. There were 571 and 441 students (or 56.4% and 43.6%) were from private and public high schools respectively. More than half of the respondents had good academic achievement with more than 3.00 GPA. More students (or 52.9%) were from a science educational major, while the rest of the students had an arts major. More than 35% of the students stated that their parents' educational level was a Bachelor's degree or higher, with less than 30% of the parents who had only finished high school. About 24.7% of the students were from the households with low incomes, 38.4% were average and 36.9% were from households with a higher income.

The major findings are summarized under the proposed research questions and then expanded for discussion in detail.

**1. What are the factors, which influence Thai students' choice of university in Thailand?**

- Public university
- Reputation (especially institutions with high technology)
- Environment and atmosphere of the university ( particularly conducive to learning)
- Good teaching facilities
- Good services (such as the library/counseling services)
- Convenient location to home of student
- Provision of financial aid

**2. Which attributes or characteristics of the university influence opinions and perceptions of the university?**

- Atmosphere
- Physical environment
- Reputation

**3. What persons influence students' decision making on choice of university?**

- Self (students made the decision by themselves)
- Parents and friends
- Students did not rely on schools or councilors for information

#### **4. What sources of information do students use for decision making on choice of university?**

- Students looked for information themselves (from websites, exhibitions, campus visits)

#### **What are the factors, which influence Thai students' choice of university in Thailand?**

When examining students from five different regions, the majority of the students when choosing a type of university preferred a public university; a university with the environment and atmosphere conducive to learning and a university with adequate and quality library and IT resources. The outcomes were consistent across all regions. The respondents stated that they would prefer to choose a university having its own admission standard and selection procedures. Universities with highly competitive admission systems were not given priority for choice, especially by students from the Central (and Bangkok) areas. The highly competitive or exclusive nature of the university may have impacted in the student's decision-making.

Though the students from every region thought that the medium of instruction at a university was of some importance, the majority had less regard towards a university with international elements. Similarly, the comprehensiveness of the university curriculum was also considered of some importance, although students from the Northeastern region deemed this factor the least important (as low as 8.8%). This difference in opinion cannot be accounted for.

Students from all regions considered living expenses, tuition fees and financial aid factors important.

Interestingly, the majority of the students--from all levels of household income and parental education also preferred to choose a public university; the university with the environment and atmosphere conducive to learning; and the university with adequate and quality library and IT resources. Students from lower household incomes and lower parental education qualifications rated these factors higher than those from higher family income or higher parental education qualifications.

Factors such as the possibility to join an exchange program or study abroad program, an academic advising system, career guidance processes and job placement counseling were seen as important by students from households with higher income. This is a similar finding to Maguire & Lay (1981), who highlighted that parental education had the greatest effect on the choice process. Moreover, Litten (1983) found that parental education has a great impact on college choice when compared to other factors such as race and gender. Paulsen (1990) similarly found parental education among many other factors that played important roles in students' college choice processes.

However, as would be expected those from lower income families were rather concerned with level of living expenses, tuition fees, and need for financial aid especially opportunities for scholarships. As well, students with lower levels of parental education thought the tuition fee factor was slightly important.

According to related literature, this is well reflected in the studies by Raley (1972) and Mundel (1974) who reported in their findings on family financial resources that lower-income students were rather sensitive to cost factor for attending college. Though studies showed that family income played an important role in college choice (Zemsky & Oedel, 1983; Flint, 1992) costs of attending a college have lower impact on the decision made by high-SES students (Hearn, 1984; Zemsky & Oedel, 1983). Again this notion is supported by the work of Jackson & Ekstrom in 1985 who found that SES had more influence, allowing students to access more information, especially through their parents experiences. It is interesting to note that little has changed from the 1930s, where studies by Ripperger (1933); Reinhardt (1938) and Corey (1936) all profess that the impact of relatives on choice is important as well as the cost of the course.

In relation to pupils from private and public schools, surprisingly the public university was still considered as more important for their choice by both groups. Both the private and public high school students less favored a private university. This is consistent with Sukhawattanakun, Muangkot, Wongpangson, Kuttangwattana & Promnanuritte (2010) in their study on the factors influencing university selection of grade 12 students in the upper Northeastern region of Thailand. They found that among the 5 important decision factors the in choice of university, the most important finding revealed that students paid higher interest in government universities. Whereas, the study by Padlee,

Kamaruddin & Baharun, (2010) on the Behavior on Choice of International Students in Malaysian Private institutions, reported that quality about learning environment was among the factors, which have strong influence on international students to choose private universities in Malaysia.

In spite of this, more private high school respondents would be more in favor for the university with foreign students and faculty members than did their public high school (more than 90%) counterparts. It is noted that most of the private and public high school respondents considered all aspects of the university reputation important for their choice of university. Another similar finding was reported by Bowers & Pugh (1972), who identified that both parents and students considered the reputation of the university and the specific department in which the student intended to study were the most important reasons for choice. In addition, Raley (1972) found prestige and reputation as institutional factors among the four factors that influenced on student's choice decision making.

It is interesting to note that respondents from private schools thought that cost of living, tuition fee and the opportunity to apply for scholarship was important. Students were indifferent on the medium of instruction and the comprehensiveness of the curriculum at the university, however, students from private high schools paid more attention to the medium of instruction than those responding from the public high schools.

Female students would prefer to choose a public university than other types of universities. Female students were also more concerned on the issues of tuition fees, financial aid, location, reputation of the university, and the university services especially on the quality library resources but male students showed more interest in exchange or study abroad, academic advising, career guidance and job placement counseling.

Although students from Art and Science educational majors had more interest in public university, some would also choose a private university, especially those from Art educational major. Interestingly, more Art students would pay attention to the university being an international institution or use English as the medium of instruction, on the other hand Science students would be more interested in a university with variety of academic programs in science and humanities. While students from both disciplines



would choose a university having its own admission examination and selection procedures but a considerable number of Science students thought that a university which required preparation and personal efforts to pass the examination and get accepted, was an important factor to them.

Another influencing factor, which the students highlighted, was the issue of university services or the adequacy and quality of library resources and services as an influencing factor. Students from the South are more sensitive to this factor than those from other regions. This choice cannot be accounted for. Students when choosing a university do not recognize other aspects of the university services, such as exchange or study abroad programs, academic advising or career job placements. This is inconsistent with the findings in Asian context of Lau (2005) in the study on the influence of campus facilities on university choice for students in Hong Kong. Among the facilities-related factors, students in general perceived the quality of library facilities as more important in making their choice of university. Sukhawattanakun, et al. (2010) also found that Thai students would choose a university with a resourceful and sufficient library.

Students also indicated that university location was equally important to the university services when choosing a university. When considering location, students gave priority to a university in a convenient location. Students from the Southern and Eastern regions regarded university location factor as of more importance than students from other regions. A university having living facilities, such as dormitories or apartments near the university, was a favorable factor for those students from the South, the Northeast and the East. Female students also felt that this was an influencing factor for them to choose or not to choose a university, more than male students.

A university within proximity to home was not considered to be important for their choice and is not consistent with several researches in the past. Corey (1936) and Reeves (1932) included proximity from home as highly influential on choice of college. Holland & Richards (1965), Bowers & Pugh (1972), again found that proximity to home was an important factor. Lisack (1978) also pointed out that proximity to home was one of the four factors that highly impacted college choice among white and black students in Indiana. Paulsen (1990) indicated that a college may appear to be unappealing to students as distance from home and other expenses increased. Roberts &

Higgins (1992) identified distance from home in the short-listed factors by the students in England as a selection criterion of an institution. Nevertheless, there were, apart from the aspects of proximity and distance from home, a considerable number of studies found to be consistent to this finding on the university location related factor.

Armstrong (1997) revealed that convenient location was one of the three most important factors that influence student decision to attend the University of North Texas. While Clagnett (1999) discovered that convenient location was among the four factors that were influential to students when choosing a particular college. Sukhawattanakun, et al. (2010) found that Thai students would choose a university located in peaceful area and supportive environment for learning. This is similar to the study by Hourigan (2011) who uncovered from his study on the role of location in the college choice process that location of an institution was obviously an important attribute in students' decision-making process. However, he indicated that what precisely was important was relatively little known. In addition, how the students considered the importance of location might vary by students' characteristics, including gender, race, socioeconomic status and academic preparation.

In relation to the level of cost of living and tuition fee was less important to the students in general, however, most of the students were more concerned with financial aid when they considered their university choice. They considered that the possibility to apply for a scholarship was most important among the factors on financial aid. Female students thought that this factor was more important for them -more than male students. Students with high GPA were more concerned with this factor than those with lower GPA. Similarly, students from low household income would require scholarships and rated this highly. Students from public high school and students with science educational major were rather more in favor of a university with the possibility to apply for scholarship. It is interesting to note, in general, with the exception of scholarship, students do not favor other forms of financial aid, including loan for tuition or accommodation or to get a part time job on campus. Other researchers in a variety of studies also highlighted these responses. According to Schoenherr (2009), financial aid was found to be the most crucial factor in predicting whether students would attend a university. He also found that though costs and academic reputation were significant predictors, they were of secondary importance compared with the attention to financial aid by high achieving students. Steiner & Wrohlich (2012) examined the effect of

federal students' financial assistance scheme (BAfoeG) provided by the government on enrollment decisions in higher education in Germany. The results showed that an increase of assistance would have a small but significant effect on the average enrollment rate into universities. Prospective students would also be induced to enroll earlier at university if there were higher amounts of assistance. Vossensteyn (2005) explained the disposition why students would avoid taking loans as debt aversion. Students may object to take up loans for studying and that they are worried about debt which would incur while and after their study. This disposition was further explained by the study of Long (2008). According to Long financial aid is critical to improving college access and success but without sufficient financial aid students would resort to loans or work to pay for their studies. This in turn would impact academic performance and reduce the chances that a student will persist to graduation.

### **Which attributes or characteristics of the university influence opinions and perceptions of the university?**

When considering the attributes of a university, the university atmosphere seems to be the dominant characteristic for choice of university. In fact, the five different regions represented by the students surveyed in the study, the outcomes were consistent across the regions. The majority of the students from all demographic backgrounds responded that a university providing an environment and atmosphere conducive to learning was a significant and distinctive influencing attribute for their choice of a university. This characteristic is more appealing to the students with higher GPA and higher level of parental education. Students' GPA and parental level of education appear to correlate to the importance of this factor on their choice of a university. The higher the GPA or the higher the level of parental education the more importance they regard on this factor when they choose a university. However, other attributes on university atmosphere, such as, the presence of foreign students and faculty members, extracurricular activities or having clear rules and regulation were not considered. This finding was congruent with other researchers' studies on the same assumption in various contexts. Reynolds & Cain (2006) in their study on the influence of facilities on the students' recruitment and retention in the United States discovered that campus attractiveness and facility quality influenced student's decision process, though not necessarily a deciding factor. However, absence, insufficient or inadequately kept up important facilities may have a negative effect on choice for a significant number of respondents. They also indicated

that a student's decision has direct correlation with institutional characteristics and facilities. The comparative analyses indicated that students with different demographic backgrounds had different perceptions and considerations concerning the characteristic and the environmental setting of the institution. Amster (2011) emphasized from the results of her study that campus facilities can affect students' selection of higher education institutions. She insisted that the overall appearance and its setting have strong impact on how the institution would communicate its message and vision. It can generate the long-lasting influence on students and their families in their pursuit of institution choice. This is also consistent with the findings by Lopez del Puerto (2009), who also found that the study outcomes of the students were greatly affected by their views on the environment of the campus. Though the results in her study indicated that the campus environment and facilities impacted a small part in the satisfaction of the students, the physical environment did influence satisfaction with the graduate school program.

Next to the university atmosphere, the majority of the students responded with their favor relating to the aspects of a university with a good reputation. In this study most of the students would prefer a university with the reputation for high technology in all its infrastructure and teaching / learning facilities, followed by the university with good reputation for quality graduates. It is surprising to note that these two influencing factors are given more priority than a university with the reputation for qualified lecturers or academic excellence. This phenomenon was rather different but may not be inconsistent with the findings from other studies.

In other countries, students appeared to place the most importance on university reputation in qualified faculty and teaching reputation since the 1960s until today. Brewer & Zhao (2010) found in their study that quality of teaching in an institution is the key element to enhance the reputation of the university as well as brand. Fehlen (2011) cited the UCLA report on a survey of over 200,000 freshmen from some 280 universities that 62% of the respondents, the highest in number, thought that good reputation was a very important influencing factor for their choice of university. He explained that there are potential benefits in attending a well-reputed institution. In addition, employers usually consider institutions of their prospective employees. Similarly, Franklin (2008) asserted that the reputation of an institution where the degree

is earned is associated with that person throughout their life. Higher Education Research Institute (2007) reported in its research on the importance of college ranking and college choice in 1995 and 2006 that students consistently had the college's good academic reputation as their main reason for their choice of college.

Canale, et al. (1996), found that academic reputation of the university is a factor that influences African American students' decisions to attend college for the reason that they would acquire knowledge and skills in a particular field to pursue the jobs they want. They also see academic reputation as leading to more job opportunities for them (Freeman, 1999). Similar findings were reported in previous studies; Baird (1967) was among the researchers who mentioned that qualified academic staff, good academic reputation and programs were the key choice factors for students.

### **What persons influence students' decision making on choice of university?**

Notwithstanding the strong attraction to the university type preferences, there are clear relationships of differentiation among the respondents to other influencing factors. Although, overwhelmingly, students are stating that they make their own decisions. It is quite evident that the other influencing people/person who has influence on students is their friends and family.

Though the respondents overwhelmingly stated that they would make their final decision on their choice of university by themselves, they also stated that they did consult with their parents and listen to their friends before making the important decisions. This is consistent with Chapman's (1981) findings who found that students were strongly persuaded by the comments and advice of their friends and family. Of all the significant persons, parents were the ones that had the greatest impact on the students' choice. Reagle (1997) also stated that parental involvement was the most important factor in the decision making process. According to Johnston (2010) parents were the most important personal sources of information for choice decision making on university. Again, this was supported by Sukhawattanakun, et al. (2010) who studied the influencing factors on university selection of Thai high school students, discovering that while they would make the final decision by themselves they would also consult their parents about their university selection. The findings from this study differ from those of Galotti & Mark (1994) who found that students of different levels of academic

ability described themselves as autonomous in the process of decision-making and relied less on others.

### **What sources of information do students use for decision making on choice of university?**

While students are making their own decisions it is interesting that students do not use school services in this regard, they do not rely on teachers or school counselors to get the information and advice. The main sources of information and consultation were parents, friends, and through websites of the university they were interested in. This is consistent with the findings by Johnston (2010), who studied on who and what influences choice of universities and found that personal sources of information influenced student choice of university. Parents were the most important personal sources of information for decision-making. Among the non-personal sources of information, campus visit was the highest rated and stands far above brochures, emails and website.

University representatives (faculty, staff, coach) were also influential sources of information for students. Whereas the high school staff member did not have much role in student's decision making. Johnston (2010) also indicated that the highest-rated non-family source of information was a visit to the campus. Other studies about Asian students indicated that other persons such as brother or sister, friends, relatives, teachers and other people influence a student's choice (Pimpa, 2005; Wagner & Fard, 2009).

Yamamoto (2006) examined the university selection criteria of students in Turkey and discovered that apart from the external influences, such as marketing communication tools used by the university or the centralized testing system of student selection and placement, families were very influential in the process of university selection.

### **Implications:**

Factors of the physical environment influence perceptions and attitudes of the students on the institution and consequently on the quality of their programs. The physical appearance of the campus is an important factor that should be considered by universities. University management must make necessary decisions whether to allocate the budget to improve their existing services and amenities or to use those funds to

invest in professional development or new technology. To make the best resource allocation, to upgrade their facility will ultimately increase the university's sustainability.

Moreover, it is noted that making financial aid information ready and available for easy access by intending students is crucial as students have responded that this is an important factor in choice. Students want clarification about financial assistance, which is offered during their study. Other financial aid information, such as various forms of scholarship, is also crucial for them to decide what kind of university they are comfortable to choose.

It is beneficial to use the reputation of academic strength to communicate the advantage of the educational offerings of the university. Students have to be informed whether getting educated from an institution is worthwhile for what they spend. Making the strong points, facets, advantages, and effects of the university academic offerings clear will eventually help prospective students choose the university they want, as well as assuring current students to carry on and successfully graduate or even to enroll for further degrees.

Library facilities appear to be one of the top influencing factors in university choice. Universities should improve and provide quality services at the library with well informed system and serviced minded librarian staff. It may also be implied that the usage of the library can be influenced by the architectural layout, color tones and other amenities provided. Cleanliness and visual attractiveness of the library will also help attract users to its facilities. Benchmarking is also another worthwhile thing to do so as to be able to adopt the best practices of the benchmarking libraries. The facilities used by the students should be given serious concern by the university management when considering annual budgets.

The role of parents in university choice should not be underestimated. Students indicated that personal sources of information and recommendations were more important than non-personal sources. Activities such as campus visits appear to be the preferred option rather than brochures, emails and websites. According to the responses by the study respondent's parents took the leading role in the decision-making group,

beyond their influence as a source of information. Universities should take this into account and not only communicate with students, but also with parents and school personnel (faculty, staff, coach, etc.) as these people are influential sources of information for students.

Overwhelmingly public universities were the preferred choice of the respondents surveyed. Private universities should not be dismayed by the fact that students, in general, would pay more attention to the public universities because there was also a considerable segment of students who would consider private universities as important and moderately important for choice. Different sectors of students responded to this choice differently. For example, there are students with high level of household income and parental education who showed somewhat less favor for a public university than others. Students from private high schools and students in arts major programs would give more favor to universities with international features or male students would show more interest in exchange or study abroad programs, academic advising, career guidance and job placement counseling. This indicates that Universities should be aware of the type of student, be it by major, socio-economic circumstance or by gender when attempting to attract students to enroll.

Continuous improvement on the campus facilities, improvement of services, offering of scholarships and financial aid all contribute to the decision making process made by prospective students.

### **Recommendations and further research**

In view of the fact that this study has revealed that there are variations of educational, financial, and occupational outcomes students expected, it is important to examine how institutions could respond to these findings. It is deemed that future research should explore six areas as identified by this study.

Firstly, as far as the students' preferred university is concerned, the program suitability in the field of their interest may be the principal issue. It is still unclear from this study why and how these students would likely choose their field of study that suits them, though it has been clearly indicated that their institution preference seemed to have been formed in relation to a number of distinct factors. Research into the process of



formation of their preference on their particular field of study would provide useful information for higher education in Thailand.

Secondly, since this study has revealed that parents enormously influence students' choice then it is clear they should be consulted more and involved in the decision making process. It would be important to reveal more information about what parents perceive as factors that would influence their choice for their children. Further research studies on this issue is deemed to be as important and useful for higher education institutions, as well as those who are involved in the high-level policy making.

Thirdly, this study outlined the respondents' opinions and perceptions of their considerations in their choice of university, but there are still differences, which could be attributed to misconceptions about a particular university. A more thorough investigation into the respondents' knowledge of an individual institution would be of benefit. Misconceptions and ignorance exist therefore a particular university's capabilities should be promoted widely. Students decision making concerning university choice is early in their secondary school careers, therefore targeting of individuals should be occurring much earlier than in their final year of secondary study.

Fourthly, as student expenditure was included as part of this study, research to examine trends in expenditure of higher education, in relationship to trends in tuition costs should be considered. Since the rise in tuition costs could be due to the increased cost of higher education institutions, a study could aid in assessing the impact of the cost of living, inflation and other economic factors on the cost of tuition, in relation to student choice.

Another important possibility for future research is to investigate the correlation and/ or mismatches between students' expectations based primarily on their choice of university and the reality of what they encounter while attending or enrolled at the university for the duration of their course.

Lastly, the practice of universities putting resources into education fairs and other forms of promotion to attract students is common. According to the students surveyed in this study these activities appear have been minor influencing factors. Therefore

Universities marketing should be targeting prospective students through websites and social media. More resources should be applied to visits for students to university campuses. Marketing and promotion at the time of the student visits would be preferable, as the respondents in this study confirmed that the individual played a great role in decision-making. These exploratory findings raised questions for future research and potentially for the promotion strategies adopted for universities.

## **Conclusions**

The aim of this research study was to provide insights into the phenomena of students' university choice in a Thai context. The data gathered has provided suggestions, recommendations and solutions, for the improvement of higher education policies and practices.

Governments, Ministries and educational policy makers can use the insights gained from this study to understand the decision process of the high school students concerning their educational plans for the future.

The important data gathered, analysed and discussed will provide parents and students more about the range of choices available, make better or informed choices, and ascertain whether their educational and financial investment is worthwhile.

Higher education institutions can take the findings and plan recruitment; admission policies and systems to better address the needs of their potential clients.

This study will make an important contribution to the literature of higher educational management. Importantly, it has achieved its goals as the information on preferences of higher education institutions and courses will be better understood in the context of the Thai higher education sector.

## References

- Alston, S. M. (1997). *A study of the pattern of enrollment differences among students offered a no-need, merit scholarship relative to the achievement of institutional diversity goals* (Doctoral dissertation). University of Maryland College Park, Maryland.
- Amster, J. (2011). *How campus facilities affect the competition for students*. Retrieved March 25, 2012, from <http://www.thecityinsight.com/articles/9-triangle-education/140-campus-facilities-competition-students>
- Armstrong, J. J. (1997). *Factors influencing freshmen students' college choice at the University of North Texas: A focus group study* (Doctoral dissertation). University of North Texas, Texas.
- Arnold, D. K. (1987). *Characteristics of South Dakota high school graduates selecting institutions of higher education* (Doctoral dissertation). University of South Dakota, South Dakota.
- Ashworth, J., & Evans, J. (2001). Modeling students' subject choice at secondary and tertiary levels: A cross-section study. *The Journal of Economic Education*, 32(4), 311-320.
- Association of University Presidents of Thailand. (2010). *Background and knowledge of university admission. The selection system (in Thai)*. Retrieved October 20, 2011, from <http://www.cuas.or.th/info.html>
- Atagi, R. (2002). *School reform policy*. Paper presented to the Asian Development Bank (ADB) and Office of the National Education Commission (ONEC), May 2002.
- Baird, L. (1967). *The educational tools of college bound youth* (Vol. 19). Iowa City, IA: American College Testing Program Research.
- Best, J. W., & Kahn, J. V. (1998). *Research in education*. Boston, MA: Allyn and Bacon.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: John Wiley.

- Bloomgarden, L. (1961). Our changing elite colleges. *National Association of College Admissions Counseling Journal*, 7(1), 10-14.
- Bowen, H. (1977). *Investing in learning: The individual and social value of American higher education*. San Francisco, CA: Jossey-Bass.
- Bowers, T. A., & Pugh, R. C. (1972). *A comparison of factors underlying college choice by students and parents*. Paper presented at the 1972 American Educational Research Association Annual Meeting, April 3-7, 1972, Chicago, IL.
- Boyer, E. L. (1987). *The undergraduate experience in America*. New York: Harper & Row.
- Brewer, A., & Zhao, J. (2010). The impact of a pathway college on reputation and brand awareness for its affiliated university in Sydney. *International Journal of Educational management*, 24(1), 34-47.
- Brewer, J., & Hunter, A. (1989). *Multimethod research: A synthesis of styles*. Newbury Park, CA: Sage.
- Brooking, K., Gardiner, B., & Calvert, S. (2009). *Background of students in alternative education: Interviews with a selected 2008 cohort*. Ministry of Education, New Zealand.
- Bryman, A. (1988). *Quantity and quality in social research*. London: Unwin Hyman.
- Bryman, A. (1992). Quantity and qualitative research: Further reflections on their integration. In J. Brannen (Ed.), *Mixing methods: Qualitative and quantitative research* (pp. 57-78). Aldershot: Avebury.
- Burns, M. J. (2006). *Factors influencing the college choice of African-American students admitted to the College of Agriculture, Food and Natural Resources* (Master's thesis). University of Missouri - Columbia, Missouri.
- Campbell, D., & Fiske, D. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychology Bulletin*, 56(2), 81-105.

- Canale, J. R., Dunlap, L., Britt, M., & Donahue, T. (1996). The relative importance of various college characteristics to students in influencing their choice of college. *College Student Journal*, 30(2), 214-216.
- Carling, A. (1992). Social divisions. In Scott, J. (2000). Rational choice theory. In G. Browning, H. Halcli & F. Webster (Eds.), *Understanding contemporary society: Theories of the present* (pp. 126-138). Thousand Oaks, CA: Sage.
- Central Intelligence Agency. (2012). *The world factbook*. Retrieved October 29, 2012 from <https://www.cia.gov/library/publications/the-world-factbook/geos/th.html>
- Chapman, D. W. (1981). A model of student college choice. *Journal of Higher Education*, 52(5), 490-505.
- Chapman, R. G. (1979). Pricing policy and the college choice process. *Research in Higher Education*, 10(1), 37-57.
- Chapman, R. G., & Jackson, R. (1987). *College choices of academically able students: The influence of no-need financial aid and other factors*. New York: College Board Publications.
- Chorrojprasert, L. (2005). *The use of teaching portfolios by secondary school teachers in Thailand* (Doctoral dissertation). University of Wollongong, New South Wales, Australia.
- Cibik, M. A. (1982). College information needs. *College and University*, 58(1), 97-102.
- Claggett, C. A. (1999). *Recent high school graduate focus groups: Market analysis*. Westminster, MD: Carroll Community College.
- Coccari, R., L., & Javalgi, R. G. (1995). Analysis of students' needs in selecting a college or university in a changing environment. *Journal of Marketing for Higher Education*, 6(2), 27-39.
- Cohen, L., & Manion, L. (1989). *Research methods in education*. London: Routledge.

- Coleman, J. (1973). The mathematics of collective action. In Scott, J. (2000). Rational choice theory. In G. Browning, H. Halcli & F. Webster (Eds.), *Understanding contemporary society: Theories of the present* (pp. 126-138). Thousand Oaks, CA: Sage.
- Comfort, W. W. (1925). *The choice of a college*. New York: MacMillan.
- Comm, C. L., & LaBay, D. G. (1996). Repositioning colleges using changing student quality perceptions: An exploratory analysis. *Journal of Marketing for Higher Education*, 7(4), 21-34.
- Connor, H., Burton, R., Pearson, R., Pollard, E., & Regan, J. (1999). *Making the right choice: How students choose universities and colleges*. Retrieved March 20, 2012 from <http://www.employmentstudies.co.uk/pubs/summary.php>
- Cook, K. S. (1977). Exchange and power in networks of interorganizational relations. *The Sociological Quarterly*, 18(1), 62-82.
- Cook-Sather, A. (2006). Sound presence and power: Student voice in educational research and reform, *Curriculum Enquiry* 36, (359-390).
- Corey, S. M. (1936). Students' university choices. *Journal of Higher Education*, 7(4), 207-211.
- Corley, S. J. (1991). *An analysis of factors which influence choice of an academic program and sources of information used: Implications for recruitment strategies* (Doctoral dissertation). University of the Pacific, California.
- Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (1999). Mixed method research: Introduction and application. In T. Cijek (Ed.), *Handbook of educational policy* (pp. 455–472). San Diego, CA: Academic Press.

- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 209-240). Thousand Oaks, CA: Sage.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Crossman, A. (2010). *Rational choice theory: An overview*. Retrieved May 24, 2010, from <http://sociology.about.com/od/Sociological-Theory/a/Rational-Choice-Theory.htm>
- Dahl, R. W. (1982). *College attendance and institutional choice: Results from the Kentucky longitudinal study*. Paper presented at the 22<sup>nd</sup> Annual Forum of the Association for Institutional Research Meeting, May 16-19, 1982, Denver, CO.
- Davie, R & Galloway, D. (1996). *Listening to children in education*, London.
- Delaney, A. (1999). *A collaborative approach to designing graduate admission studies: A model for influencing program planning and policy*. Paper presented at the 39<sup>th</sup> Annual Forum of the Association for Institutional Research Annual Forum, May 30 - June 3, 1999, Seattle, WA.
- Delors, J. (1996). *Learning: The treasure within*. The report to UNESCO of the International Commission on Education for the Twenty-first Century. Paris: UNESCO.
- Denzin, N. K. (1978). Triangulation. In N. K. Denzin (Ed.), *The research act: An introduction to sociological methods*. New York: McGraw-Hill.

- Denzin, N. K. (1989). *The research act: A theoretical introduction to sociological methods* (3<sup>rd</sup> ed.). Englewood Cliffs, NJ: Prentice Hall.
- Denzin, N. K., & Lincoln, Y. (Eds.). (2000). *Handbook of qualitative research*. London: Sage.
- Discenza, R., Ferguson, J. M., & Wisner, R. (1985). Marketing higher education: Using a situation analysis to identify prospective student needs in today's competitive environment. *NASPA Journal*, 22(4), 18-25.
- Draper, F. W. (1976). Factors affecting college choice of seniors at a predominantly black high school. In J. Kinzie, J. Hayek, M. Palmer, D. Hossler, S. Jacob, & H. Cummings. (2004). *Fifty years of college choice: Social, political and institutional influences on decision-making process*. Indianapolis, IN: Lumina Foundation.
- Ekstrom, R. B. (1985). *A descriptive study of public high school guidance: Report to the Commission for the Study of Precollegiate Guidance Counseling*. Princeton, NJ: Educational Testing Service.
- Employees' Confederation of Thailand. (2012). *Thailand country report*. Paper presented at the 37<sup>th</sup> ACE CEOs and BODs Meeting, May 14, 2012, Singapore.
- Fehlen, D. (2011). *How much should a college's reputation affect your decision?* Retrieved March 20, 2012, from [http://education-portal.com/articles/How\\_Much\\_Should\\_a\\_Colleges\\_Reputation\\_Affect\\_Your\\_Decision.html](http://education-portal.com/articles/How_Much_Should_a_Colleges_Reputation_Affect_Your_Decision.html)
- Fielding, N. G. (1996). Qualitative interviewing. In N. Gilbert (Ed.), *Researching social life* (pp. 135-153). London: Sage.
- Fielding, M. (2004). Transformative approaches to student voice: Theoretical underpinnings, recalcitrant realities, *British Educational Research Journal* 30, 2, 295-311.
- Flint, T. A. (1992). Parental and planning influences on the formation of student college choice sets. *Research in Higher Education*, 33(6), 689-708.



- Fontana, A., & Frey, J. H. (1994). Interviewing: The art of science. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 361-376). Thousand Oaks, CA: Sage.
- Fraas, J., & Newman, I. (1989). *Conjoint analysis: A study of the effects of using person variable*. Paper presented at the 11<sup>th</sup> Annual Meeting of the Mid-Western Educational Research Association, October 18-21, 1989, Chicago, IL.
- Frankford-Nachmias, C., & Nachmias, D. (1996). *Research methods in the social sciences* (5<sup>th</sup> ed.). New York: St. Martin's.
- Franklin, P. (2008). *The reputation of your college and its importance*. Retrieved March 20, 2012, from <http://ezinearticles.com/?The-Reputation-of-Your-College-and-its-Importance&id=970913>
- Freeman, D. (1998). *Doing teacher research*. Boston, MA: Heinle and Heinle.
- Freeman, K. (1999). The race factor in African Americans' college choice. *Urban Education*, 34(1), 4-25.
- Fry, G. W. (2002). *The evolution of education reform in Thailand*. Paper presented at the Second International Forum on Education Forum: Key Factors in Effective Implementation, September 2-5, 2002, Bangkok.
- Galotti, K. M., & Mark, M. C. (1994). How do high school students structure an important life decision? A short-term longitudinal study of the college decision-making process. *Research in Higher Education*, 35(5), 589-607.
- GeoHive. (2012). *The 50 largest (area) countries in the world*. Retrieved June 30, 2012, from [http://www.geohive.com/earth/area\\_top50.aspx](http://www.geohive.com/earth/area_top50.aspx)
- Glasser, W. (1998). *Choice theory: A new psychology of personal freedom*. New York: HarperPerennial.
- Greene, J. C., & Caracelli, V. J. (1997). Defining and describing the paradigm issue in mixed-method evaluation. In J. C. Greene & V. J. Caracelli (Eds.), *Advances in*

*mixed-method evaluation: The challenges and benefits of integrating diverse paradigms*. San Francisco, CA: Jossey-Bass.

Greene, J. C., Caracelli, V. J., & Graham, W. D. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255-274.

Grix, J. (2010). *The foundations of research* (2<sup>nd</sup> ed.). New York: Palgrave Macmillan.

Grosz, E. A. (1987). Feminist theory and the challenge to knowledges. *Women's Studies International Forum*, 10(5), 475-480.

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.

Halle, R. S. (1928). *Which college?* New York: MacMillan.

Hanson, K. & Litten, L. (1982). Mapping the road to academia: a review of research on women, men and the college selection process. In Perun, P. (Ed.), *The undergraduate woman: Issues in education*. Lexington, MA: Lexington.

Hearn, J. (1984). The relative roles of academic ascribed and socioeconomic characteristics in college destinations. *Sociology of Education*, 57(1), 22-30.

Heath, A. (1976). Rational choice and social exchange. In Scott, J. (2000). Rational choice theory. In G. Browning, H. Halcli & F. Webster (Eds.), *Understanding contemporary society: Theories of the present* (pp. 126-138). Thousand Oaks, CA: Sage.

Higher Education Research Institute. (2007). *College ranking & college choice*.

Retrieved March 30, 2012, from

<http://www.heri.ucla.edu/PDFs/pubs/briefs/brief-081707-CollegeRankings.pdf>

- Holland, J. L. (1959). Determinants of college choice. *College and University*, 35(1), 11-28.
- Holland, J. L., & Richards, J. M. (1965). *A factor analysis of student explanations of their choice of a college*. Iowa City, IA: American College Testing Program.
- Homans, G. (1961). *Social behaviour: Its elementary forms*. London: Routledge and Kegan Paul.
- Hooley, G. J., & Lynch, J. E. (1981). Modeling the student university choice process through the use of conjoint measurement techniques. *European Research*, 9(4), 158-170.
- Hossler, D. (1984). *Enrollment management: An integrated approach*. New York: College Entrance Examination Board.
- Hossler, D., & Gallagher, K. S. (1987). Studying student college choice: A three-phase model and the implications for policymakers. *College and University*, 2(3), 207-221.
- Hossler, D., Braxton, J., & Coppersmith, G. (1989). Understanding student college choice. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 5, pp. 231-288). New York: Agathon Press.
- Hourigan, C. P. (2011). *The role of location in the college choice process: A focus on urban colleges and universities* (Doctoral dissertation). Columbia University, New York.
- Hu, S., & Hossler, D. (1998). *The linkage of student price sensitivity with preferences to postsecondary institutions*. Paper presented at the 23<sup>rd</sup> Annual Meeting of the Association for the Study of Higher Education, November 5-8, 1998, Miami, Florida.
- Isaac, P. D., Malaney, G. D., & Karras, J. E. (1992). Parental educational level, gender differences, and seniors' aspirations for advanced study. *Research in Higher Education*, 33(5), 595-606.

- Jackson, G. A. (1978). Financial aid and student enrollment. *Journal of Higher Education*, 49(6), 548-574.
- Jackson, G. A. (1982). Public efficiency and private choice in higher education. *Educational Evaluation and Policy Analysis*, 4(2), 237-247.
- James, R., Baldwin, G., & McInnis, C. (1999). *Which university? The factors influencing the choices of prospective undergraduates*. Retrieved June 30, 2009, from <http://www.dest.gov.au/archive/highered/eippubs/99-3/whichuni.pdf>
- Johnson, B. R., & Christensen, L. (2004). *Educational research: Quantitative, qualitative, and mixed approaches*. Boston, MA: Pearson.
- Johnson, B. R., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Johnston, T. C. (2010). Who and what influences choice of university? Student and university perceptions. *American Journal of Business Education*, 3(10), 15-23.
- Johnstone, D. B. (2006). Financing higher education: Cost-sharing in international perspective. In P. G. Altbach (Ed.), *Global perspectives on higher education* (Vol. 3). Rotterdam: Sense Publishers.
- Joseph, M., & Joseph, B. (1998). Identifying needs of potential students in tertiary education for strategy development. *Quality Assurance in Education*, 6(2), 90-96.
- Jupp, V. (2006). *Sage dictionary of social research methods*. London, Thousand Oaks, California: SAGE Publications.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263-291.
- Kallio, R. E. (1995). Factors influencing the college choice decisions of graduate students. *Research in Higher Education*, 36(1), 109-124.

- Kanjanawasee, S. (2010). *A centralised admissions system would solve many problems*. Retrieved June 15, 2011, from <http://www.nationmultimedia.com/home/2010/02/15/national/A-centralised-admissions-system-would-solve-many-p-30122545.html>
- Keller, M. J., & McKewon, M. P. (1984). *Factors contributing to postsecondary enrollment decision of Maryland National Merit Scholarship Semifinalists*. Paper presented at the Annual Meeting of the Association for the Study of Higher Education (ASHE), March 12-14, 1984, Chicago, IL.
- Kinzie, J., Palmer, M., Hayek, J., Hossler, D., Jacob, S. A., & Cummings, H. (2004). Fifty years of college choice: Social, political and institutional influences on the decision-making process. *The Lumina Foundation for Education. New Agenda Series*, 5(3).
- Kirtikara, K. (2001). *Higher education in Thailand and the national reform roadmap*. Paper presented at the Thai-US Education Roundtable, January 9, 2001, Bangkok.
- Konnert, W., & Giese, R. (1987). College choice factors of male athletes at private NCAA division III institutions. *College and University*, 63(1), 33-44.
- Kotler, P. (1976). *Applying marketing theory to college admissions: A role for marketing in college admissions*. New York: College Entrance Examination Board.
- Kotler, P., & Fox, K. F. A. (1995). *Strategic marketing for educational institutions* (2<sup>nd</sup> ed.). Englewood Cliffs, NJ: Prentice Hall.
- Krampf, R. F., & Heinlein, A. C. (1981). Developing marketing strategies and tactics in higher education through target market research. *Decision Science*, 12(2), 175-193.
- Lau, C. M. (2005). *The impact of physical facilities on student choice of university in Hong Kong*. Hong Kong: The University of Hong Kong.

- Leslie, L., & Brinkman, P. (1988). *The economic value of higher education*. New York: Macmillan.
- Lewis, G. H., & Morrison, S. (1975). *A longitudinal study of college selection technical report# 2*. Pittsburgh, PA: Carnegie-Mellon University.
- Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 163-188). Thousand Oaks, CA: Sage.
- Lisack, J. P. (1978). *Comparisons of the characteristics and plans of Indiana high school seniors by race, and by type program enrolled in: College preparation, business education or vocational education*. West Lafayette, IN: Office of Manpower Studies, Purdue University.
- Litten, L. H. (1980). Marketing higher education: Benefits and risks for the American academic system. *Journal of Higher Education*, 51(1), 40-59.
- Litten, L. H. (1983). *Applying marketing research in college admission*. New York: College Board.
- Long, B. T. (2008). *The effectiveness of financial aid in improving college enrollment: Lessons for policy*. Cambridge, MA: Harvard University.
- Lopez del Puerto, C. (2009). *Relationship between the physical characteristics of higher educational facilities and student attitudes about their graduate school programs* (Doctoral dissertation). Saint Louis University, Missouri.
- Maguire, J., & Lay, R. (1981). Modeling the college choice process: Image and decision. *College and University*, 56(2), 123-139.
- Manski, C., & Wise, D. (1983). *College choice in America*. Cambridge, MA: Harvard University.
- Mark, D. R., Lusk, J. L., & Daniel, M. S. (2004). Recruiting agricultural economics graduate students: Student demand for program attributes. *American Journal of Agricultural Economics*, 86(1), 175-184.

- Martin, C. (1996). *Institutional research and student recruitment or how do institutions of higher education know what attracts students to their doors? Marketing research can help*. Paper presented at the Annual Forum of the Association for Institutional Research, May 5-8, 1996, Albuquerque, NM.
- McDonough, P. M., Antonio, A. L., Walpole, M., & Perex, L. X. (1998). College rankings: Democratized knowledge for whom? *Research in Higher Education*, 39(5), 513-537.
- McGregor, E. (1994). *Economic development and education: Strategies and standards*. Indianapolis, IN: School of Public and Environmental Affairs, Indiana University.
- MedLibrary.org. (2010). *College admissions*. Retrieved November 15, 2011, from [http://medlibrary.org/medwiki/College\\_admissions#Thailand](http://medlibrary.org/medwiki/College_admissions#Thailand)
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Minichiello, V., Aroni, R., Timewell, E., & Alexander, L. (1990). *In-depth interviewing: Researching people*. Melbourne: Longman Cheshire.
- Ministry of Education. (1998). *History of Thai education*. Retrieved November 15, 2011, from <http://www.moe.go.th/English/e-hist01.htm#e-sch.1>
- Ministry of Education. (2009a). *Information and statistics of the Ministry of Education* (in Thai). Retrieved August 21, 2010, from [http://www.moe.go.th/data\\_stat/](http://www.moe.go.th/data_stat/)
- Ministry of Education. (2009b). *Number of all students in both public and private high schools in Thailand (Raw data)*. Bangkok: Author.
- Ministry of Finance. (2010a). *Thailand's economic projection for 2010 (Newsletter)*. Ministry of Finance News, No.81/2010.
- Ministry of Finance. (2010b). *Thailand's economic projection for 2010 and 2011 (Newsletter)*. Ministry of Finance News, No.150/2010.

- Ministry of Science, Technology and Environment. (2000). *Thailand's initial national communication under the United Nations framework convention on climate change*. Bangkok: Author.
- Morgan, Y. J., & Baron, S. (2003). An analysis of student characteristics within the student decision making process. *Journal of Further and Higher Education*, 27(3), 271-287.
- Munday, L. A. (1976). *Impact of educational development, family income, college costs, and financial aid in student choice and enrollment in college*. Iowa City, IA: American College Testing Program.
- Mundel, D. S. (1974). Student choice and college going. *Change*, 6(6), 50-51.
- Murphy, P. E. (1981). Consumer buying roles in college choice: Parents' and students' perceptions. *College and University*, 56(2), 140-150.
- The National Institute of Educational Testing Service. (2009). *About NIETS*. Bangkok: Author.
- National Statistical Office. (2011). *Statistical Thailand yearbook 2011*. Bangkok: Statistical Forecasting Bureau.
- Newman, I., & Benz, C. R. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum*. Carbondale, IL: Illinois Press.
- Noel-Levitz, Inc. (2007). *Why did they enroll? The factors influencing college choice; National research report*. Iowa City, IA: Author.
- Nora, A., & Cabrera, A. F. (1992). *Measuring program outcomes: What impacts are important to assess and what impacts are possible to measure?* Paper presented at the Design Conference for the Evaluation of Talent Search Program, September 30, 1992, Washington, DC.
- O'Donoghue, J., Jentz, A., Singh, G., & Molyneux, S. (2000). IT development and changes in customer demand in higher education. *The Journal of Asynchronous Learning Networks*, 4(1), 2-9.



- Office of Prime Minister. (2000). *Thailand into the 2000's*. Bangkok: The National Identity Board.
- Office of the Education Council. (2007). *Education in Thailand 2007*. Bangkok: Amarin Printing.
- Office of the Higher Education Commission. (2008a). *Thai Higher Education: Policy & Issue*. Retrieved November 15, 2010, from <http://inter.mua.go.th>
- Office of the Higher Education Commission. (2008b). *Thai Higher Education: History*. Retrieved November 15, 2010, from <http://inter.mua.go.th>
- Office of the National Economic and Social Development Board. (1996). *Thailand: The country report on infrastructure development*. Bangkok: Author.
- Office of the National Education Commission. (2003). *Education in Thailand 2002/2003*. Bangkok : Amarin Printing and Publishing.
- Onwuegbuzie, A. J., & Teddlie, C. (2003). A framework for analyzing data in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 351-383). Thousand Oaks, CA: Sage.
- Padlee, S. F., Kamaruddin, A. R., & Baharun, R. (2010). International students' choice behavior for higher education at Malaysian private universities. *International Journal of Marketing Studies*, 2(2), 202-211.
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights form twenty years of research*. San Francisco, CA: Jossey-Bass.
- Patton, M. Q. (1980). *Qualitative evaluation methods*. Beverly Hills, CA: Sage.
- Patton, M. Q. (1988). Paradigms and pragmatism. In D. M. Fetterman (Ed.), *Qualitative approaches to evaluation in education* (pp. 116-137). New York: Praeger.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2<sup>nd</sup> ed.). Newbury Park, CA: Sage.

- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3<sup>rd</sup> ed.). Newbury Park, CA: Sage.
- Paulsen, M. B. (1990). *College choice: Understanding student enrollment behavior*. Washington, DC: The George Washington University.
- Perna, L. W. (2006). Studying college choice: A proposed conceptual model. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. XXI, pp. 91-157). New York: Springer.
- Peterson, A. M. (1990). *New England state college health service nurse managers: Career choice, role perception, and job satisfaction* (Doctoral dissertation). University of Massachusetts Amherst, Massachusetts.
- Pikma, P. (2007). *The university admission system in Thailand: Comparison of freshman grade point averages* (Master's thesis). University of Aveiro, Aveiro, Portugal.
- Pimpa, N. (2003). The influence of peers and student recruitment agencies on Thai students' choices of international education. *Journal of Studies in International Education*, 7(2), 178-192.
- Pimpa, N. (2004). The relationship between Thai students' choices of international education and their families. *International Education Journal*, 5(3), 352-359.
- Pimpa, N. (2005). Marketing Australian university to Thai students. *Journal of Studies in International Education*, 9(2), 137-146.
- Pimpa, N. (2007). *Reference groups and choices of vocational education*. Paper presented at the 2007 Australian Association for Research in Education Conference, November 25-29, 2007, The University of Notre Dame, Australia.
- Pinyoanantapong, A. (2007). *Central university admission system not popular: Poll*. Retrieved June 24, 2012, from [http://www.nationmultimedia.com/2007/06/28/headlines/headlines\\_30038034.php](http://www.nationmultimedia.com/2007/06/28/headlines/headlines_30038034.php)

- Pra Dhammapidok. (1996). *Education reform: Creation of wisdom (in Thai)*. Bangkok: Amarin Printing.
- Price, I., Matzdorf, F., Smith, L., & Agahi, H. (2003). The impact of facilities on student choice of university. *Facilities*, 21(10), 212-222.
- Punch, K. F. (1998). *Introduction to social research: Quantitative and qualitative approaches*. Thousand Oaks, CA: Sage.
- Radford, A. W. (2009). *Where do they go? How gender, race, and social class shape high school valedictorians' paths to their undergraduate institutions* (Doctoral dissertation). Princeton University, New Jersey.
- Raley, G. (1972). Factors influencing college choice. In J. Kinzie, J. Hayek, M. Palmer, D. Hossler, S. Jacob, & H. Cummings. (2004). *Fifty years of college choice: Social, political and institutional influences on decision-making process*. Indianapolis, IN: Lumina Foundation.
- Raposo, M., & Alves, H. (2007). *A model of university choice: An exploratory approach*. Retrieved October 20, 2008, from [http://mpa.ub.uni-muenchen.de/5523/1/MPRA\\_paper\\_5523.pdf](http://mpa.ub.uni-muenchen.de/5523/1/MPRA_paper_5523.pdf)
- Reagle, M. D. (1997). *Individual and organizational factors impacting students' decision to attend a Southern Baptist college or university in Texas* (Doctoral dissertation). Pepperdine University, California.
- Reeves, E. M. (1932). Which college? *Journal of Higher Education*, 3(2), 67-74.
- Reichardt, C. S., & Rallis, S. F. (1994). The relationship between the qualitative and quantitative research traditions. In C. S. Reichardt & S. F. Rallis (Eds.), *The qualitative-quantitative debate: New perspectives* (pp. 5-11). San Francisco, CA: Jossey-Bass.
- Reinhardt, E. (1938). Reasons given by freshmen for their choice of a college. *School and Society*, 47, 511-512.

- Reynolds, G. L., & Cain, D. (2006). *Final report on the impact of facilities on the recruitment and retention of students*. Alexandria, VA: Center for Facilities Research, APPA.
- Ripperger, H. S. (1933). When you choose your daughters college: Are you practical or sentimental. *Good Housekeeping*, 97, 44-45.
- Roberts, D., & Higgins, T. (1992). *Higher education: The student experience*. Leeds: Heist Publications.
- Rocco, T., Bliss, L., Gallagher, S., & Perez-Prado, A. (2003). Mixed methods research in organisational systems. *Information Technology: Learning and Performance Journal*, 21(1), 19-40.
- Rudolph, F. (1990). *The American college & university: A history*. Athens, GA: University of Georgia Press.
- Runckel, C. (2009). *Education in Thailand*. Retrieved June 24, 2010, from [http://www.business-in-asia.com/thailand/education\\_in\\_thailand.html](http://www.business-in-asia.com/thailand/education_in_thailand.html)
- Saengpassa, C. (2010). *Effective solution needed to set admission system right*. Retrieved June 15, 2011, from <http://www.nationmultimedia.com/home/2010/05/17/national/EFFECTIVE-SOLUTION-NEEDED-TO-SET-ADMISSION-SYSTEM--30129536.html>
- Sangnapaboworn, W. (2003). *Higher education reform in Thailand: Towards quality improvement and university autonomy*. Paper presented at the Shizuoka Forum on Approaches to Higher Education, Intellectual Creativity, Cultivation of Human Resources Seen in Asian Countries, December 12-14, 2003, Bangkok.
- Schmit, J. (1991). *An empirical look at the search stage of student college choice process*. Paper presented at the Annual Meeting of the Association for the Study of Higher Education, October 31 - November 3, 1991, Boston, MA.
- Schoenherr, H. J. (2009). *Beyond academic reputation: Factors that influence the college of first choice for high achieving students* (Doctoral dissertation). University of South Florida, Florida.

- Schultz, G. D. (1991). *Factors of influence on high school graduates of northwest Kansas in selecting postsecondary educational institutions* (Doctoral dissertation). Kansas State University, Kansas.
- Scott, J. (2000). Rational choice theory. In G. Browning, H. Halcli & F. Webster (Eds.), *Understanding contemporary society: Theories of the present* (pp. 126-138). Thousand Oaks, CA: Sage.
- SEAMEO. (2005). *Thailand higher education system*. Retrieved November 15, 2009, from [http://www.rihed.seameo.org/mambo/index.php?option=com\\_content&task=view&id=31&Itemid=41](http://www.rihed.seameo.org/mambo/index.php?option=com_content&task=view&id=31&Itemid=41)
- Shepherd, J. R. (1985). *An assessment of factors that influence enrollment at the University of Kansas* (Doctoral dissertation). University of Kansas, Kansas.
- Sogunro, O. A. (2002). Selecting a quantitative or qualitative research methodology: An experience. *Educational Research Quarterly*, 26(1), 3-10.
- Soutar, G. N., & Turner, J. P. (2002). Students' preferences for university: A conjoint analysis. *The International Journal of Educational Management*, 16(1), 40-45.
- Smyth, J. (2012). Doing research on student voice in Australia. *Management in Education The Journal of Professional Practice*, 26 3, 153-154.
- St. John, E. P. (1991). The impact of student financial aid: A review of the recent research. *Journal of Student Financial Aid*, 22(1), 18-32.
- Stafford, L. (2008). Social exchange theories. In L. A. Baxter & D. O. Braithwaite (Eds.), *Engaging theories in interpersonal communication: Multiple perspectives* (pp. 377-389). Thousand Oaks, CA: Sage.
- Steiner, V., & Wrohlich, K. (2012). Financial student aid and enrollment in higher education: New evidence from Germany. *The Scandinavian Journal of Economics*, 114(1), 124-147.

- Stewart, N. R., Johnson, R. G., & Eberly, C. G. (1987). *Counselor impact upon college choice*. Paper presented at the Annual Meeting of the American Educational Research Association, April 20-24, 1987, Washington, DC.
- Stordahl, K. E. (1970). Student perceptions of influences on college choice. *Journal of Educational Research*, 63(5), 209-212.
- Sukhawattanakun, K., Muangkot, T., Wongpangson, K., Kultangwattana, W., & Promnanuritte, K. (2010). Factors influencing university selection of grade 12 students in the Upper Northeastern region of Thailand. *Kasetsart Journal: Social Sciences*, 31(3), 307-318.
- Suwankiri, D. (2007). The factors influencing the decision of 12<sup>th</sup> grade students to study at the university level. *Social Development Journal*, 9(1), 157-174.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in the social & behavioral sciences*. Thousand Oaks, CA: Sage.
- Thawornchot, B., Napha-Aruk, P., Kaewsiripong, V., & Ankarungrattana, A. (2006). *Attitude and need toward the Thai students for post graduate study is international curriculum*. Bangkok: King Mongkut's Institute of Technology Ladkrabang.
- Tierney, M. S. (1980). The impact of financial aid on student demand for public/private higher education. *Journal of Higher Education*, 51(5), 527-545.
- Trading Economics. (2011). *Thailand GDP growth rate*. Retrieved November 15, 2011, from <http://www.tradingeconomics.com/thailand/gdp-growth>
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211(4481), 453-458.
- UNESCO. (2008). *Improving the quality of mother tongue-based literacy and learning: Case studies from Asia, Africa and South America*. Bangkok: Author.

- UNESCO. (2010). *World social science report: Knowledge divides*. Paris: United Nations Educational, Scientific and Cultural Organization.
- UNESCO. (2011a). *Education system profiles*. Retrieved June 30, 2012, from <http://www.unescobkk.org/education/resources/country-profiles/thailand/country-background/>
- UNESCO. (2011b). *UNESCO National Education Support Strategy (UNESS): Thailand 2010-2015*. Bangkok: Author.
- Urbanski, R. A. (2000). *Factors influencing student college choice at a Northeastern Minnesota Tribal College* (Doctoral dissertation). University of Minnesota, Minnesota.
- Vossensteyn, H. (2005). *Perceptions of student price-responsiveness; A behavioural economics exploration of the relationships between socio-economic status, perceptions of financial incentives and student choice*. Oxford: Center for Higher Education and Policy Studies.
- Wagner, K., & Fard, P.-Y. (2009). *Factors influencing Malaysian students' intention to study at a higher educational institution*. Retrieved August 21, 2011, from <http://eprints.oum.edu.my/365/1/Wagner-Fard.pdf>
- Welki, A. M., & Novratil, F. M. (1987). The role of applicants' perceptions in the choice of college. *College and University*, 62(2), 147-160.
- Wellman, J. V. (1999). *Contributing to the civic good: Assessing and accounting for the civic contributions of higher education*. Washington, DC: Institute for Higher Education Policy.
- West, R. L., & Turner, L. H. (2007). *Introducing communication theory: Analysis and application* (3<sup>rd</sup> ed.). Boston, MA: McGraw Hill.
- Wiersma, W. (1995). *Research methods in education: An introduction*. Boston, MA: Allyn and Bacon.

- Wisker, G. (2008). *The postgraduate research handbook* (2<sup>nd</sup> ed.). New York: Palgrave Macmillan.
- The World Bank Group. (2008). *Thailand social monitor: Towards a competitive higher education system in a global economy*. Retrieved November 20, 2011, from [http://siteresources.worldbank.org/EASTASIAPACIFICEXT/Resources/226300-1279680449418/HigherEd\\_ThailandSocialMonitor.pdf](http://siteresources.worldbank.org/EASTASIAPACIFICEXT/Resources/226300-1279680449418/HigherEd_ThailandSocialMonitor.pdf)
- World Economic Forum. (2000). *The global competitiveness report 2000*. Oxford: Oxford University Press.
- Yamamoto, G. T. (2006). University evaluation-selection: A Turkish case. *International Journal of Educational Management*, 20(7), 559-569.
- Yamchuti, N. (2002). *Factors influencing college choice by students at newly opened private colleges in Thailand* (Doctoral dissertation). Illinois State University, Illinois.
- Yost, M., & Tucker, S. L. (1995). Tangible evidence in marketing a service: The value of a campus visit in choosing a college. *Journal of Marketing for Higher Education*, 6(1), 47-67.
- Zemsky, R., & Oedel, P. (1983). *The structure of college choice*. New York: College Entrance Examination Board.
- Zikmund, W. G. (2003). *Business research method* (7<sup>th</sup> ed.). Mason, OH: South-Western.



## Appendix A



## **National Education Act, B.E. 2542 (1999)**

BHUMIBOL ADULYADEJ, REX

Enacted on the 14th Day of August B.E. 2542

Being the 54th Year of the Present Reign.

Phrabat Somdet Phra Paramintharamaha Bhumibol Adulyadej is graciously pleased to proclaim that the promulgation of a National Education Act is deemed necessary.

This Act includes certain provisions having implications on restriction of a person's rights and liberties. Sections 29 and 50 of the Constitution of the Kingdom of Thailand authorize such restriction by virtue of the provisions of specific laws.

His Majesty, therefore, granted His Royal assent for the promulgation of the National Education Act in accord with the recommendation and consent of the National Assembly as follows:

**Section 1** This Act shall be called the "National Education Act B.E.2542"

**Section 2** This Act shall be in force as of the day after its promulgation in the Government Gazette.

**Section 3** All existing statutory provisions, rules, regulations, codes of practice, announcements, and orders relating to those promulgated in this Act or contrary to or inconsistent with the provisions in this Act shall be annulled and henceforth replaced by those in this Act.

#### **Section 4** In this Act,

"Education" means the learning process for personal and social development through imparting of knowledge; practice; training; transmission of culture; enhancement of academic progress; building a body of knowledge by creating a learning environment and society with factors available conducive to continuous lifelong learning.

"Basic education" means education provided before the level of higher education.

"Lifelong education" means education resulting from integration of formal, non-formal, and informal education so as to create ability for continuous lifelong development of quality of life.

"Educational institutions" means early childhood development institutions, schools, learning centres, colleges, institutes, universities, educational agencies, or other state or private bodies with powers and duties or aims of providing education.

"Basic education institutions" means those providing basic education.

"Educational standards" means specifications of educational characteristics, quality desired, and proficiency required of all educational institutions. They serve as means for equivalency for purposes of enhancement and monitoring, checking, evaluation, and quality assurance in the field of education.

"Internal quality assurance" means assessment and monitoring of the educational quality and standards of the institutions from within. Such assessment and monitoring are carried out by personnel of the institutions concerned or by parent bodies with jurisdiction over these institutions.

"External quality assurance" means assessment and monitoring of the educational quality and standards of the institutions from outside. Such assessment and monitoring are to be carried out by the Office for National Education Standards and Quality Assessment or by persons or external agencies certified by the Office. Such measures ensure the quality desired and further development of educational quality and standards of these institutions.

"Instructors" means teachers and faculty staff of educational institutions at different levels.

"Teachers" means professional personnel with major responsibilities for learning and teaching and encouragement of learning among learners through various methods in both state and private educational institutions.

"Faculty staff" means personnel with major responsibilities for teaching and

research in state and private educational institutions at the degree level.

"Educational institution administrators" means professional personnel responsible for administering each state and private educational institution.

"Educational administrators" means professional personnel responsible for educational administration outside educational institutions. Their responsibilities cover the level of educational service area and above.

"Educational personnel" means educational institution administrators, educational administrators as well as supporting personnel providing services or whose responsibilities relate to teaching-learning process, supervision, and educational administration in the different institutions.

"Ministry" means the Ministry of Education, Religion and Culture.

"Minister" means the Minister who shall oversee the application of this Act.

**Section 5** The Minister of Education, Religion, and Culture shall oversee the application of this Act and shall be authorized to formulate ministerial rules, regulations, and announcements related to its application.

Following their proclamation in the Government Gazette, the ministerial rules, regulations, and announcements shall enter into force.

# **Chapter 1**

## **General Provisions:**

### **Objectives and Principles**

**Section 6** Education shall aim at the full development of the Thai people in all aspects: physical and mental health; intellect; knowledge; morality; integrity; and desirable way of life so as to be able to live in harmony with other people.

**Section 7** The learning process shall aim at inculcating sound awareness of politics and democratic system of government under a constitutional monarchy; ability to protect and promote their rights, responsibilities, freedom, respect of the rule of law, equality, and human dignity; pride in Thai identity; ability to protect public and national interests; promotion of religion, art, national culture, sports, local wisdom, Thai wisdom and universal knowledge; inculcating ability to preserve natural resources and the environment; ability to earn a living; self-reliance; creativity; and acquiring thirst for knowledge and capability of self-learning on a continuous basis.

**Section 8** Educational provision shall be based on the following principles:

- (1) Lifelong education for all;
- (2) All segments of society participating in the provision of education;
- (3) Continuous development of the bodies of knowledge and learning processes.

**Section 9** In organizing the system, structure, and process of education, the following principles shall be observed:

- (1) Unity in policy and diversity in implementation;
- (2) Decentralization of authority to educational service areas, educational institutions, and local administration organizations;
- (3) Setting of educational standards and implementing system of quality assurance for all levels and all types of education;
- (4) Raising the professional standards of teachers, faculty staff, and educational personnel, who shall be developed on a continuous basis;
- (5) Mobilization of resources from different sources for provision of education;
- (6) Partnerships with individuals, families, communities, community organizations, local administration organizations, private persons, private organizations, professional bodies, religious institutions, enterprises, and other social institutions.

## **Chapter 2**

### **Educational Rights and Duties**

**Section 10** In the provision of education, all individuals shall have equal rights and opportunities to receive basic education provided by the State for the duration of at least 12 years. Such education, provided on a nationwide basis, shall be of quality and free of charge.

Persons with physical, mental, intellectual, emotional, social, communication, and learning deficiencies; those with physical disabilities; or the cripples; or those unable to support themselves; or those destitute or disadvantaged; shall have the rights and opportunities to receive basic education specially provided.

Education for the disabled in the second paragraph shall be provided free of charge at birth or at first diagnosis. These persons shall have the right to access the facilities, media, services, and other forms of educational aid in conformity with the criteria and procedures stipulated in the ministerial regulations.

Education for specially gifted persons shall be provided in appropriate forms in accord with their competencies.

**Section 11** Parents or guardians shall arrange for their children or those under their care to receive compulsory education as provided by section 17 and as provided by relevant laws, as well as further education according to the families' capabilities.

**Section 12** Other than the State, private persons and local administration organizations, individuals, families, community organizations, private organizations, professional bodies, religious institutions, enterprises, and other social institutions shall have the right to provide basic education as prescribed in the ministerial regulations.

**Section 13** Parents or guardians shall be entitled to the following benefits:

- (1) State support for knowledge and competencies in bringing up and providing education for their children or those under their care;
- (2) State grants for the provision of basic education by the families for the children or those under their care as provided by the law;
- (3) Tax rebates or exemptions for educational expenditures as provided by the law.

**Section 14** Individuals, families, communities, community organizations, private organizations, professional bodies, enterprises, and other social institutions, which support or provide basic education, shall be entitled to the following benefits as appropriate:

- (1) State support for knowledge and competencies in bringing up those under their care;
- (2) State support for the provision of basic education as provided by the law;
- (3) Tax rebates or exemptions for educational expenditures as provided by the law.

## Chapter 3

### Educational System

**Section 15** There shall be three types of education: formal, non-formal, and informal.

- (1) Formal education shall specify the aims, methods, curricula, duration, assessment, and evaluation conditional to its completion.
- (2) Non-formal education shall have flexibility in determining the aims, modalities, management procedures, duration, assessment and evaluation conditional to its completion. The contents and curricula for non-formal education shall be appropriate, respond to the requirements, and meet the needs of individual groups of learners.
- (3) Informal education shall enable learners to learn by themselves according to their interests, potentialities, readiness and opportunities available from individuals, society, environment, media, or other sources of knowledge.

Educational institutions are authorized to provide anyone or all of the three types of education.

Credits accumulated by learners shall be transferable within the same type or between different types of education, regardless of whether the credits have been accumulated from the same or different educational institutions, including learning from non-formal or informal education, vocational training, or from work experience.

**Section 16** Formal education is divided into two levels: basic education and higher education.

Basic education is that provided for the 12 years before higher education. Differentiation of the levels and types of basic education shall be as prescribed in the ministerial regulations.

Higher education is divided into two levels: lower than-degree level and degree level.

Differentiation or equivalence of the various levels of non-formal or informal education shall be as stipulated in the ministerial regulations.

**Section 17** Compulsory education shall be for nine years, requiring children aged seven to enroll in basic education institutions until the age of 16 with the exception of those who have already completed grade 9. Criteria and methods of calculating children's age shall be as stipulated in the ministerial regulations.



**Section 18** Early childhood and basic education shall be provided in the following institutions:

- (1) Early childhood development institutions, namely: childcare centres; child development centres; pre-school child development centres of religious institutions; initial care centres for disabled children or those with special needs, or early childhood development centres under other names.
- (2) Schools, namely: state schools, private schools, and those under jurisdiction of Buddhist, or other religious institutions.
- (3) Learning centres, namely: those organized by nonformal education agencies; individuals; families; communities; community organizations; local administration organizations; private organizations; professional bodies; religious institutions; enterprises; hospitals; medical institutions; welfare institutes; and other social institutions.

**Section 19** Higher education shall be provided in universities, institutes, colleges, or those under other names in accord with the laws on higher education institutions, those on the establishment of such institutions and other relevant laws.

**Section 20** Vocational education and occupational training shall be provided in educational institutions belonging to the State or the private sector, enterprises, or those organized through co-operation of educational institutions and enterprises, in accord with the Vocational Education Act and relevant laws.

**Section 21** Ministries, bureaus, departments, state enterprises, and other state agencies shall be authorized to provide specialized education in accord with their needs and expertise, bearing in mind the national education policy and standards. The criteria, methods, and conditions as stipulated in the ministerial regulations shall be observed.

## Chapter 4

### National Education Guidelines

**Section 22** Education shall be based on the principle that all learners" are capable of learning and self-development, and are regarded as being most important. The teaching-learning process shall aim at enabling the learners to develop themselves at their own pace and to the best of their potentiality.

**Section 23** Education through formal, non-formal, and informal approaches shall give emphases to knowledge, morality, learning process, and integration of the following, depending on the appropriateness of each level of education:

- (1) Knowledge about oneself and the relationship between oneself and society, namely: family, community, nation, and world community; as well as knowledge about the historical development of the Thai society and matters relating to politics and democratic system of government under a constitutional monarchy;
- (2) Scientific and technological knowledge and skills, as well as knowledge, understanding and experience in management, conservation, and utilization of natural resources and the environment in a balanced and sustainable manner;
- (3) Knowledge about religion, art, culture, sports, Thai wisdom, and the application of wisdom;
- (4) Knowledge and skills in mathematics and languages, with emphasis on proper use of the Thai language;
- (5) Knowledge and skills in pursuing one's career and capability of leading a happy life.

**Section 24** In organizing the learning process, educational institutions and agencies concerned shall:

- (1) provide substance and arrange activities in line with the learners' interests and aptitudes, bearing in mind individual differences;
- (2) provide training in thinking process, management, how to face various situations and application of knowledge for obviating and solving problems;
- (3) organize activities for learners to draw from authentic experience; drill in practical work for complete mastery; enable learners to think critically and acquire the reading habit and continuous thirst for knowledge;

- (4) achieve, in all subjects, a balanced integration of subject matter, integrity, values, and desirable attributes;
- (5) enable instructors to create the ambiance, environment, instructional media, and facilities for learners to learn and be all-round persons, able to benefit from research as part of the learning process. In so doing, both learners and teachers may learn together from different types of teaching-learning media and other sources of knowledge;
- (6) enable individuals to learn at all times and in all places. Co-operation with parents, guardians, and all parties concerned in the community shall be sought to develop jointly the learners in accord with their potentiality.

**Section 25** The State shall promote the running and establishment, in sufficient number and with efficient functioning, of all types of lifelong learning sources, namely: public libraries; museums; art galleries; zoological gardens; public parks; botanical gardens; science and technology parks; sport and recreation centres; data bases; and other sources of learning.

**Section 26** Educational institutions shall assess learners' performance through observation of their development; personal conduct; learning behavior; participation in activities and results of the tests accompanying the teaching-learning process commensurate with the different levels and types of education.

Educational institutions shall use a variety of methods for providing opportunities for further education and shall also take into consideration results of the assessment of the learners' performance referred to in the first paragraph.

**Section 27** The Basic Education Commission shall prescribe core curricula for basic education for purposes of preserving Thai identity; good citizenship; desirable way of life; livelihood; as well as for further education.

In accord with the objectives in the first paragraph, basic education institutions shall be responsible for prescribing curricular substance relating to needs of the community and the society, local wisdom and attributes of desirable members of the family, community, society, and nation.

**Section 28** Curricula at all levels of education and those for the persons referred to in the second, third, and fourth paragraphs of section 10 shall be diversified and commensurate with each level, with the aim of improving the quality of life suitable for each individuals age and potentiality.

The substance of the curricula, both academic and professional, shall aim at human development with desirable balance regarding knowledge, critical thinking, capability, virtue and social responsibility.

Apart from the characteristics referred to in the first and second paragraphs, higher education curricula shall emphasize academic development, with priority given to higher professions and research for development of the bodies of knowledge and society.

**Section 29** Educational institutions in co-operation with individuals, families, communities, community organizations, local administration organizations, private persons, private organizations, professional bodies, religious institutions, enterprises, and other social institutions shall contribute to strengthening the communities by encouraging learning in the communities themselves. Thus communities will be capable of providing education and training; searching for knowledge, data, and information; and be able to benefit from local wisdom and other sources of learning for community development in keeping with their requirements and needs; and identification of ways of promoting exchanges of development experience among communities.

**Section 30** Educational institutions shall develop effective learning processes. In so doing, they shall also encourage instructors to carry out research for developing suitable learning for learners at different levels of education

## **Chapter 5**

### **Educational Administration and Management**

---

#### **Part 1**

#### **Educational Administration and Management by the State**

---

**Section 31** The Ministry shall have the powers and duties for overseeing all levels and types of education, religion, art and culture; formulation of education policies, plans and standards; mobilization of resources for education, religion, art and culture; as well as monitoring and evaluation of results in the fields of education, religion, art and culture.

**Section 32** The Ministry shall have four main pillars in the form of groups of individuals called a "council" or a "commission" as the case may be. These are: National Council of Education, Religion and Culture; Commission of Basic Education; Commission of Higher Education; and Commission of Religion and Culture. They shall be responsible for providing views or advice to the Minister or the Council of Ministers and shall have other powers and duties as provided by the law.

**Section 33** The National Council of Education, Religion and Culture shall be responsible for proposing national education policies, plans and standards; policies and plans for religious, artistic and cultural affairs; mobilization of resources; evaluation of provision of education; assessment of management of religious, artistic and cultural affairs; as well as scrutinizing various laws and ministerial regulations as stipulated in this Act.

The National Council of Education, Religion and Culture shall be comprised of the Minister as Chairman; ex officio members from the various agencies concerned; representatives of private, local administration, professional organizations; and scholars whose total number shall not be less than that of all other categories combined.

The Secretariat of the National Council of Education, Religion and Culture shall be a legal entity with its Secretary General serving as member and secretary.

The number of members of the National Council, their qualifications, criteria, nomination procedures, selection method, term and termination of office shall be as prescribed by the law.

**Section 34** The Commission of Basic Education shall be responsible for proposing policies, development plans, standards, and core curricula for basic education in line with the National Scheme of Education, Religion, Art and Culture; mobilization of resources; monitoring; inspection; and evaluation of the provision of basic education.

The Commission of Higher Education shall be responsible for proposing policies, development plans, and standards for higher education in line with the National Scheme of Education, Religion, Art and Culture; mobilization of resources; monitoring; inspection; and evaluation of the provision of higher education, taking into consideration academic freedom and excellence of degree-level institutions in accord with the laws on the establishment of such institutions and other relevant laws.

The Commission of Religion and Culture shall be responsible" for proposing policies and development plans for religion, art and culture in accord with the National Scheme of Education, Religion, Art and Culture; mobilization of resources; monitoring; inspection; and evaluation of work in the fields of religion, art, and culture.

**Section 35** The Commissions referred to in section 33 shall be comprised of: ex-officio members from various agencies concerned; representatives of private, local administration, professional organizations; and scholars whose total number shall not be less than that of all other categories combined.

The number of members of the Commissions, their qualifications, criteria, nomination procedures, method of selecting chairpersons and members, terms and termination of office of each Commission shall be as provided by the law with due consideration to different functions under the responsibilities of each Commission.

The Secretariats of the Commissions referred to in section 33 shall be legal entities and the Secretary-General of each Commission shall serve -as member and secretary of the Commission.

**Section 36** The state educational institutions providing education at the degree level shall be legal entities and enjoy the status of government or state-supervised agencies with the exception of those providing specialized education referred to in section 21.

The above institutions shall enjoy autonomy; be able to develop their own system of administration and management; have flexibility, academic freedom and be under supervision of the councils of the institutions in accord with the foundation acts of the respective institutions.

**Section 37** The administration and management of basic education and higher education at lower-than-degree level shall be based on the educational service areas, taking into consideration the number of educational institutions and the number of population as the main criteria as well as other appropriate conditions.

The Minister, on the advice of the National Council of Education, Religion and Culture, shall be authorized to announce designation of educational service areas in the Government Gazette.

**Section 38** In each educational service area, there shall be an Area Committee for Education, Religion and Culture and its Office. The Area Committee and its Office shall have the powers and duties for overseeing educational institutions at the basic and lower-than-degree levels; establishment, dissolution, amalgamation or discontinuance of educational institutions; promotion and support for private educational institutions in the educational service area; promotion and support for local administration organizations so as to be able to provide education in accord with the educational policies and standards; promotion and support for education provided by individuals, families, community organizations, private organizations, professional bodies, religious institutions, enterprises, and other social institutions offering a variety of training; including overseeing the units responsible for religious, artistic, and cultural affairs in the area.

The Area Committee for Education, Religion and Culture shall be comprised of representatives of community, private, and local administration organizations; teacher associations; educational administrator associations; parent-teacher associations; religious leaders; and scholars in education, religion, art, and culture.

The number of the committee members, their qualifications, criteria, nomination procedures, selection of the chairperson and members, and terms and termination of office shall be as stipulated in the ministerial regulations.

The Director of the Office for Education, Religion and Culture of the educational service area shall serve as member and secretary of the Committee for Education, Religion and Culture of the area.

**Section 39** The Ministry shall decentralize powers in educational administration and management regarding academic matters, budget, personnel and general affairs administration directly to the Committees' and Offices for Education, Religion and Culture of the educational service areas and the educational institutions in the areas.

Criteria and procedures for such decentralization shall be as stipulated in the ministerial regulations.

**Section 40** In each institution providing basic education and that at lower-than-degree level, there shall be a board supervising and supporting the management of the institution. The board shall be comprised of representatives of parents; those of teachers, community and local administration organizations, alumni of the institution, and scholars.

The number of board members, their qualifications, criteria, nomination procedure, selection of chairperson and members of the board, term and termination of office shall be as stipulated in the ministerial regulations.

The director of the educational institution shall serve as member and secretary of its board.

Provisions in this section shall not be applicable to the educational institutions referred to in section 18 (1) and (3).



## **Part 2**

### **Educational Administration and Management by Local Administration Organizations**

---

**Section 41** Local administration organizations shall have the right to provide education at any or all levels of education in accord with readiness, suitability and requirements of the local areas.

**Section 42** The Ministry shall prescribe the criteria and procedures for assessing the readiness of the local administration organizations to provide education. The Ministry shall be responsible for co-ordination and promotion of the local administration organizations' capability to provide education in line with the policies and standards required. It shall also advise on the budgetary allocations for education provided by local administration organizations.

## **Part 3**

### **Educational Administration and Management by the Private Sector**

---

**Section 43** The administration and management of education by the private sector shall enjoy independence with the State being responsible for overseeing, monitoring, and assessing educational quality and standards. Private educational institutions shall follow the same rules for assessment of educational quality and standards as those for state educational institutions.

. **Section 44** Private education institutions referred to in section 18 (2) shall be legal entities and shall establish their own boards comprising private education administrators; authorized persons; representatives of parents; those of community organizations; those of teachers and alumni; and scholars.

The number of board members, their qualifications, criteria, nomination procedures, selection of chairperson and members, term and termination of office shall be as stipulated in the ministerial regulations.

**Section 45** Private education institutions shall be authorized to provide education at all levels and of all types as stipulated by the law. Clear-cut policies and measures shall be defined by the State regarding participation of the private sector in the provision of education.

In formulating policies and implementing plans of education provided by the State, educational service areas or local administration organizations, due consideration shall be given to effects on provision of private education. The Minister or the Area Committees for Education, Religion and Culture or the local administration organizations shall accordingly take into account views of the private sector and the public.

Private institutions providing education at the degree level shall be allowed to function with autonomy, develop their own system of administration and management, flexibility, and academic freedom and shall be under supervision of their own council in accord with the Act on Private Higher Education Institutions.

**Section 46** The State shall provide support in terms of grants, tax rebates or exemptions, and other benefits to private education institutions as appropriate. It shall also provide academic support to private education institutions to reach the standards required and attain self-reliance.

## **Chapter 6**

### **Educational Standards and Quality Assurance**

**Section 47** There shall be a system of educational quality assurance to ensure improvement of educational quality and standards at all levels. Such a system shall be comprised of both internal and external quality assurance.

The system, criteria, and methods for quality assurance shall be as stipulated in the ministerial regulations.

**Section 48** Parent organizations with jurisdiction over educational institutions and the institutions themselves shall establish a quality assurance system in the institutions. Internal quality assurance shall be regarded as part of educational administration which must be a continuous process. This requires preparation of annual reports to be submitted to parent organizations, agencies concerned and made available to the public for purposes of improving the educational quality and standards and providing the basis for external quality assurance.

**Section 49** An Office for National Education Standards and Quality Assessment shall be established as a public organization, responsible for development of criteria and methods of external evaluation, conducting evaluation of educational achievements in order to assess the quality of institutions, bearing in mind the objectives and principles and guidelines for each level of education as stipulated in this Act.

All educational institutions shall receive external quality evaluation at least once every five years since the last exercise and the results of the evaluation shall be submitted to the relevant agencies and made available to the general public.

**Section 50** The educational institutions shall lend co-operation in preparation of documents and evidence providing relevant information on institutions. They shall also arrange for their personnel, institutions' boards, including parents and those associated with the institutions to provide additional information considered relevant to their functioning, on the request of the Office for National Education Standards and Quality Assessment, or persons, or external agencies certified by the Office and entrusted with the task of conducting external evaluation of these institutions.

**Section 51** In cases where the results of the external evaluation show that an educational institution has not reached the standards required, the Office for National Education Standards and Quality Assessment shall submit to the parent organizations recommendations on corrective measures for that institution to improve its functioning within a specific period of time. In cases where corrective measures are not implemented, the Office for National Education Standards and Quality Assessment shall

submit reports to the Commission of Basic Education or the Commission of Higher Education so as to take the necessary remedial action.

## **Chapter 7**

### **Teachers, Faculty Staff and Educational Personnel**

**Section 52** The Ministry shall promote development of a system for teachers and educational personnel, including production and further refinement of this category of personnel, so that teaching will be further enhanced and become a highly respected profession. The Ministry shall, in this regard, take a supervisory and coordinating role so that the institutions responsible for production and development of teachers, faculty staff and educational personnel shall be ready and capable of preparing new staff and continually developing in-service personnel.

Sufficient funds shall be allocated by the State for the budget required and for establishing the Fund for Development of Teachers, Faculty Staff and Educational Personnel.

**Section 53** There shall be an Organization for Teachers, Educational Institution Administrators and Educational Administrators. The Organization shall enjoy the status of an independent body administered by a professional council under supervision of the Ministry. The Organization shall have the powers and duties for setting professional standards; issuing and withdrawal of licenses; overseeing maintenance of professional standards and ethics; and developing of the profession of teachers, educational institution administrators and educational administrators.

Teachers, administrators of educational institutions, educational administrators and other educational personnel of both the state and private sectors shall have professional licenses as provided by the law.

In establishing the Organization for Teachers, Educational Institution Administrators and Educational Administrators and other educational personnel, determination of qualifications required, criteria and procedures for issuing and withdrawal of licenses shall be as stipulated by the law.

The provision in the second paragraph shall not apply to educational personnel providing informal education, educational institutions referred to in section 18 (3), administrators at the educational levels above education service areas, and specialized educational resource persons.

The provisions in this section shall not apply to the faculty staff, educational institution administrators and educational administrators of higher education at the degree level.

**Section 54** There shall be a central organization responsible for administering personnel affairs of teachers. All teachers and educational personnel of agencies at both state educational institution level and educational service area level

shall enjoy the status of civil servants under jurisdiction of a central teacher civil service organization. The personnel affairs administration shall be based on the principle of decentralization to educational service areas and educational institutions as stipulated by the law.

**Section 55** There shall be a law on salaries, remuneration, welfare and other benefits allowing teachers and educational personnel sufficient incomes commensurate with their social status and profession.

A Fund for Promotion and Development of Teachers, Faculty Staff and Educational Personnel shall be established to be used as grants for innovations, outstanding achievements and rewards in honour of teachers, faculty staff and teaching personnel as stipulated in the ministerial regulations.

**Section 56** The production and development of faculty staff and educational personnel; development of professional standards and ethics; and personnel administration for civil servants or officials in degree-level educational institutions enjoying legal entities shall be as provided by the foundation laws of the respective institutions or other relevant laws.

**Section 57** Educational agencies shall mobilize human resources in the community to participate in educational provision by contributing their experience, knowledge, expertise, and local wisdom for educational benefits. Contributions from those who promote and support educational provision shall be duly recognized.

## Chapter 8

### Resources and Investment for Education

**Section 58** There shall be mobilization of resources and investment in terms of budgetary allocations, financial support and properties from the State; local administration organizations; individuals; families; communities; community organizations; private persons; private organizations; professional bodies; religious institutions; enterprises; other social institutions; and foreign countries, for use in the provision of education as follows:

- (1) The State and local administration organizations capable of providing education shall mobilize resources for education. In so doing, they shall be authorized to levy educational taxes as appropriate, in accord with provisions in the law.
- (2) As providers and partners in educational provision, individuals; families; communities; local administration organizations; private persons; private organizations; professional bodies; religious institutions enterprises; and other social institutions shall mobilize resources for education, donate properties and other resources to educational institutions and share educational expenditures as appropriate and necessary.

The State and local administration organizations shall encourage and provide incentives for mobilization of these resources by promoting, providing support and applying tax rebate or tax exemption measures as appropriate and necessary, in accord with provisions in the law.

**Section 59** State educational institutions which are legal entities shall be empowered to take charge of, oversee, maintain, utilize and earn interest from their properties, both state land as provided by the State Land Act and other properties; earn income from their services; and charge tuition fees neither contrary to nor inconsistent with their policies, objectives, and main missions.

Immovable properties of state educational institutions which are legal entities acquired through donation or purchase or in exchange for their income shall not be regarded as state land, and the institutions shall have the right of ownership.

Income and interest of educational institutions which are legal entities; interest from the state land; indemnities from violation of study leave; and those from violation of contracts for purchasing properties or hiring of work using budgetary allocations shall not be income to be submitted to the Ministry of Finance as stipulated by the Treasury Reserve Act and the Budgetary Procedure Act.

Income and interest of educational institutions which are not legal entities, interest from state land, indemnities from violation of study leave, and those from violation of contracts for purchasing properties or hiring of work using budgetary allocations shall be utilized by educational institutions in their educational provision as stipulated by the rules of the Ministry of Finance.

**Section 60** The State shall be responsible for the following:

- (1) Distribution of general subsidies for per head expenditure commensurate with the needs of those receiving compulsory and basic education provided by the State and the private sector. These grants shall be distributed on an equal basis.
- (2) Distribution of grants in terms of loans for those from low-income families, as appropriate and necessary.
- (3) Distribution of budgetary allocations and other special educational resources suitable and in line with the requirements for educational provision for each group of persons with special needs referred to in the second, third and fourth paragraphs of section 10. In so doing, consideration shall be given to equality of educational opportunity and justice in accord with the criteria and procedures stipulated in the ministerial regulations.
- (4) Distribution of budgetary allocations for operating and capital costs of educational institutions in accord with the policies, the National Education Development Plan, and the missions of the respective institutions, which shall be allowed freedom in utilization of the allocations and educational resources. In so doing, consideration shall be given to quality and equality of educational opportunity.
- (5) Distribution of budgetary allocations as general subsidies for state degree-level institutions which are legal entities and are state-supervised or public organizations.
- (6) Distribution of low-interest loans to private educational institutions for eventual self-reliance.
- (7) Establishment of the State and Private Education Development Fund.

**Section 61** The State shall distribute subsidies for education provided by individuals, families, communities, community organizations, private organizations, professional bodies, religious institutions, enterprises, and other social institutions as appropriate and necessary.



**Section 62** There shall be a system for auditing, following-up and evaluation, by internal units and state agencies responsible for external auditing, of efficiency and effectiveness. in utilization of educational budgetary allocations in line with the Principles of Education, National Educational Guidelines and the educational quality and standards required.

The criteria and procedures for the auditing, follow up, and evaluation as prescribed in the ministerial regulations shall be observed.

**Section 63** The State shall distribute frequencies, signal transmission devices, and other infrastructure necessary for radio broadcasting, television, telecommunication radio, and other media of communication for use in provision of formal, non-formal, and informal education and enhancement of religious, artistic, and cultural affairs as necessary.

**Section 64** The State shall promote and support the production and refinement of textbooks, reference books, academic books, publications, materials, and other technologies for education through acceleration of production capacity; provision of financial subsidy for production and incentives for producers; and development of technologies for education. In so doing, fair competition shall be ensured.

**Section 65** Steps shall be taken for personnel development for both producers and users of technologies for education so that they shall have the knowledge, capabilities, and skills required for the production and utilization of appropriate, high-quality, and efficient technologies.

**Section 66** Learners shall have the right to develop their capabilities for utilization of technologies for education as soon as feasible so that they shall have sufficient knowledge and skills in using these technologies for acquiring knowledge themselves on a continual lifelong basis.

**Section 67** The State shall promote research and development; production and refinement of technologies for education; as well as following-up, checking, and evaluating their use to ensure cost-effective and appropriate application to the learning process of the Thai people.

**Section 68** Financial resources shall be mobilized for the establishment of the Technology for Education Development Fund. These resources shall include state subsidies, concession fees and profits from enterprises relating to mass media and information, and communication technologies from all sectors concerned, namely, state sector, private sector, and other public organizations. Special fees shall be charged for the application of these technologies for human and social development.

The criteria and procedures for distribution of the Fund for the production, research and development of technologies for education shall be as prescribed in the ministerial regulations.

**Section 69** The State shall establish a central unit responsible for proposing policies, plans, promotion and coordination of research, development and utilization of technologies for education, including matters relating to evaluation of the quality and efficiency of the production and application of the technologies for education.

## **Transitory Provisions**

**Section 70** All legislation, rules, regulations, statutes, announcements, and orders pertaining to education, religion, art, and culture applicable on the enactment date of this Act shall continue to be in force until the necessary amendments in line with this Act have been made, which shall not exceed five years after the enactment date.

**Section 71** The ministries, bureaus, departments, educational agencies, and institutions in existence on the enactment date of this Act shall enjoy the same status and shall have the same powers and duties until the educational administration and management as provided by this Act have been in place, which shall not exceed three years after the enactment date of this Act.

**Section 72** At the initial stage, the provisions in the first paragraph of section 10 and section 17 shall not apply until the necessary actions in line with these provisions have been taken, which shall not exceed five years after the promulgation date of the Constitution of the Kingdom of Thailand.

Within one year of the enactment date of this Act, the ministerial regulations referred to in the second and fourth paragraphs of section 16 shall be in force.

Within six years of the enactment date of this Act, the Ministry shall have completed the first round of external evaluation of all educational institutions.

**Section 73** At the initial stage, provisions in Chapter 5: Educational Administration and Management and Chapter 7: Teachers, Faculty Staff and Educational Personnel shall not apply until the necessary actions in line with these provisions have been taken. These actions include amendment of the Teachers' Act of 1945 and the Teacher Civil Service Act of 1980, which shall not exceed three years after the enactment date of this Act.

**Section 74** At the initial stage pending the establishment of the Ministry, the Prime Minister, the Minister of Education, and the Minister of University Affairs shall oversee the application of this Act; and shall have the powers to issue ministerial rules, regulations and announcements as provided by this Act, as related to their respective powers and duties.

Necessary actions shall be required regarding provisions in Chapter 5 of this Act relating to educational administration. Before the necessary actions are completed, the Ministry of Education, the Ministry of University Affairs and the National Education Commission shall act as the Ministry of Education, Religion and Culture as provided by this Act, each carrying out the tasks in their respective responsibilities.

**Section 75** An Education Reform Office shall be established as an ad hoc public organization by virtue of a royal decree as provided by the Public Organizations Act. Taking public views into consideration, the Office shall:

- (1) propose the structures, organs and division of responsibilities as provided in Chapter 5 of this Act,
- (2) propose systems of teachers, faculty staff, and educational personnel as provided in Chapter 7 of this Act;
- (3) propose mobilization of educational resources and investment as provided in Chapter 8 of this Act;
- (4) submit proposals to the Council of Ministers regarding the necessary bills for actions required in (1), (2) and (3);
- (5) submit to the Council of Ministers proposals regarding amendments to legislations, rules, regulations, statutes and orders in force to meet the requirements in (1), (2) and (3) in accord with this Act;
- (6) carry out other functions as provided by the Public Organizations Act.

**Section 76** There shall be established a nine-member Executive Committee of the Education Reform Office, comprised of a chairperson and members, appointed by the Council of Ministers from among those with knowledge, capability, experience and expertise in educational administration; state affairs administration; personnel administration; budgetary, monetary, and financial systems; public laws; and educational laws. The Executive Committee shall include not less than three scholars who are neither civil servants nor officials of state agencies.

The Executive Committee shall be authorized to appoint scholars as its advisers and appoint sub-committees to carry out the tasks it has assigned.

The Secretary-General of the Education Reform Office shall serve as member and secretary of the Executive Committee, which shall supervise the Secretary-General in the administration of the Office. The Executive Committee and the Secretary-General shall have a single term of office of three years, at the end of which their tenures shall be terminated and the Education Reform Office shall be dissolved.

**Section 77** There shall be established a fifteen member Nominations Committee for the Executive Committee of the Education Reform Office. The Nominations Committee shall propose twice the number of the chairperson and members of the Executive Committee from among those qualified for submission to the Council of Ministers for appointment. The Nominations Committee shall comprise:

- (1) Five representatives of the agencies concerned, namely: Permanent Secretary for Education, Permanent Secretary for University Affairs, Secretary-General of the Council of State, Secretary-General of the National Education Commission and Director of the Budget Bureau.

- (2) Two members elected among rectors of state or private higher education institutions which are legal entities; three members elected among deans of faculties of pedagogy, educational science, or education of both state and private universities offering masters degree courses in pedagogy, education science, or education. The three members shall include at least a dean of the faculty of pedagogy, education science, or education of a state university.
- (3) Five members elected among representatives of academic or professional associations in the field of education which are legal entities.

The Nominations Committee shall elect one of its members as chairperson and another as secretary of the Committee.

**Section 78** The Prime Minister shall oversee the enactment of the royal decree establishing the Education Reform Office and shall have the powers to oversee the functioning of the Office as provided by the Public Organizations Act.

Other than the provisions in this Act, the royal decree establishing the Education Reform Office shall include at least the following:

- (1) Composition, powers, and duties and term of office of the Executive Committee referred to in sections 75 and 76.
- (2) Composition, powers, and duties of the Nominations Committee, criteria, nomination procedures, and proposal for appointment of the Executive Committee referred to in section 77.
- (3) Qualifications and restrictions including termination of office of the Executive Committee, the Secretary-General and staff.
- (4) Capital fund, income, budget, and properties.
- (5) Personnel administration, welfare, and other benefits.
- (6) Supervision, inspection, and evaluation of achievements.
- (7) Dissolution.
- (8) Other provisions necessary for the smooth and efficient functioning of the Office.

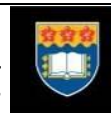
**Countersigned by :**

**Chuan Leekpai**

**Prime Minister**

**Note:** The rationale for the promulgation of this Act is the stipulation in the Constitution of the Kingdom of Thailand that the State shall provide education and training for creation of knowledge and morality. The private sector shall also be encouraged to participate in the provision of education and training. The Constitution thus demands that the enactment of the National Education Act is imperative. It requires improvement in the provision of education consistent with economic and social changes; providing knowledge and inculcating sound awareness of politics and a democratic system of government under a constitutional monarchy; promoting research in various disciplines; accelerating the application of education, science, and technology for national development; promoting the teaching profession; and encouraging the revival of wisdom, art and culture of the nation. In the provision of education, due consideration shall be given by the State to the participation of local administration organizations and the private sector as provided by the law and the protection of providing education and training by professional bodies and the private sector under state supervision. There should therefore be a National Education Act to serve as the fundamental law for the administration and provision of education and training in accord with the provisions in the Constitution. It has, thus, become necessary to promulgate this Act.

## Appendix B



September 2012

Dear : Principal

Re : Request for your approval and kind assistance in data gathering

My name is Mr. Kamol Kitsawad, Director, the University Registrar of Assumption University and a Ph.D. candidate in the Faculty of Education, University of Wollongong, NSW, Australia. I am carrying out a study on the factors which influence tertiary applicants' choices of higher education institutions in Thailand. This study is a requirement for the Doctor of Philosophy degree program at the Faculty of Education, University of Wollongong. The outcomes of the study will be the increased knowledge of what influences the choice of universities, thus guide the higher education institutions in their future planning and policy making.

As this study will involve collecting data directly from the students, I therefore am writing to you to get permission to allow some of your selected students to voluntarily participate in the data collection process during November 2004 to January 2005. We ensure that the following measures will be adopted to protect the identities of participants in the study:

- Data collected will be stored securely and will only be accessed by the researcher;
- Identifying details, such as names and student identity, will be removed from files prior to data analysis; and
- Identifying details will be removed from any data used in publications arising from this study.

Should you have any inquiries regarding this research project, please do not hesitate to contact us at email address [kk09@uow.edu.au](mailto:kk09@uow.edu.au) or 02 719 1537.

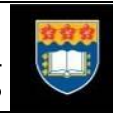
Thank you very much for your kind consideration on this matter.

Sincerely yours,

Kamol Kitsawad  
Ph.D. Candidate, Faculty of Education  
University of Wollongong, NSW, Australia

Enclosure : A set of the survey questionnaire and the interview questions





วันที่ 6 กันยายน 2555

เรื่อง ขอความอนุเคราะห์ในการเก็บรวบรวมข้อมูล

เรียน ผู้อำนวยการโรงเรียน

สิ่งที่ส่งมาด้วย แบบสอบถามจำนวน 1 ชุด และคำถามในการสัมภาษณ์ 1 ชุด

ข้าพเจ้านายกมล กิจสวัสดิ์ นายทะเบียน มหาวิทยาลัยอัสสัมชัญ นักศึกษาระดับปริญญาเอก คณะศึกษาศาสตร์ มหาวิทยาลัยวลลองกอง ประเทศออสเตรเลีย กำลังจัดทำวิทยานิพนธ์ในเรื่อง “การหางค์ประกอบที่มีผลกระทบต่อทางเลือกเข้าศึกษาต่อในมหาวิทยาลัยในประเทศไทย” โดยวิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรคุณวุฒิบัณฑิต คณะศึกษาศาสตร์ มหาวิทยาลัยวลลองกอง ผลของการศึกษาค้นคว้าครั้งนี้จะทำให้ได้ข้อมูลเกี่ยวกับปัจจัยที่มีผลต่อการเลือกเข้าศึกษาในมหาวิทยาลัย ซึ่งจะช่วยให้สถาบันอุดมศึกษาได้วางแผนและกำหนดนโยบายการศึกษาต่อไป

เนื่องจากผู้จัดทำวิทยานิพนธ์ฉบับนี้มีความประสงค์ที่จะเก็บข้อมูลจากนักเรียนโดยตรง จึงใคร่ขอความอนุเคราะห์จากสถาบันของท่านในการอนุญาตให้นักเรียนที่มีความสมัครใจในการตอบคำถาม เข้าร่วมในกระบวนการเก็บข้อมูลครั้งนี้ ซึ่งจะมีขึ้นในช่วงเดือนพฤศจิกายน พ.ศ. 2547 ถึงเดือน มกราคม พ.ศ.2548 ทางมหาวิทยาลัยขอรับรองว่ามาตรการดังต่อไปนี้จะถูกนำมาใช้เพื่อป้องกันความเป็นส่วนตัวของผู้ให้ข้อมูลในการศึกษาค้นคว้า

-ข้อมูลที่ได้จากการศึกษาค้นคว้านี้ จะได้รับการเก็บอย่างปลอดภัย และสามารถเข้าถึงได้โดยผู้วิจัยเท่านั้น  
-ข้อมูลส่วนตัว เช่น ชื่อ หรือ รหัสประจำตัวนักเรียนจะถูกแยกออกจากฐานข้อมูล ก่อนที่จะนำข้อมูลไปวิเคราะห์

-ข้อมูลส่วนตัวต่างๆจะไม่ถูกเปิดเผยต่อสาธารณะชน อันเนื่องมาจากการเผยแพร่วิทยานิพนธ์ฉบับนี้

หากท่านมีข้อสงสัยใด เกี่ยวข้องกับการวิจัยครั้งนี้ กรุณาติดต่อทางอีเมลล์ [kk09@uow.edu.au](mailto:kk09@uow.edu.au) หรือทางหมายเลขโทรศัพท์ 02 719 1537

จึงเรียนมาเพื่อโปรดพิจารณา และขอขอบคุณในความอนุเคราะห์มา ณ โอกาสนี้ด้วย

ขอแสดงความนับถือ

(นายกมล กิจสวัสดิ์)

นักศึกษาระดับปริญญาเอก คณะศึกษาศาสตร์  
มหาวิทยาลัยวลลองกอง ประเทศออสเตรเลีย



### Information Sheet

An Investigation of Factors Affecting High School Students' Choices of Universities in Thailand

Kamol Kitsawad

Faculty of Education, University of Wollongong, Australia

Dear student,

We would like to invite you to be a part of a study conducted by a PhD student of the University of Wollongong. The aim of this study is to investigate into and to understand the information on factors which influence tertiary applicants' selection of their preferred universities and courses in Thailand. The outcome of the study will be the increased knowledge of what influence the choice of universities and courses, thus guide the higher education institutions in their future planning and policy making.

If you consent to participate in the data collection process you will be asked to join the focus group discussion. The discussion will be audio recorded by the researcher will not be identifiable from the tape. Data will be collected and analysed by the researcher. You will not be required to undertake any other activities beyond this discussion.

The following measures will be adopted to protect the identities of participants in the study:

- Data collected will be stored securely and will only be accessed by the researcher;
- Identifying details, such a names and student identity, will be removed from files prior to data analysis; and
- Identifying details will be removed from any data used in publications arising from this study.

Your participation in this study is entirely voluntary. The discussion will last approximately one hour. If you feel that they study is intrusive or you are reluctant to answer or discuss, you may withdraw at any stage of the discussion. Your refusal to participate or withdrawal of consent will in no way affect your relationship with the Faculty of Education or the University of Wollongong.

The following questions will be asked of the focus group:

1. Why did you want to go to university?
2. What influenced your choice of university?
3. What influenced your choice of course selection?
4. What other universities did you consider?
5. Was you choice of university left to you to decide?
6. Where did your friends from school go?
7. What do you hope your university degree will provide for you?

If you have any enquiries about the research, you can contact the researcher by email at [kk09@uow.edu.au](mailto:kk09@uow.edu.au) If you have any concerns or complaints regarding the way the research is or has been conducted, you can contact the Ethics Officer, Human Research Ethics Committee, Office of Research, University of Wollongong on (02) 4221 4457.



วิทยานิพนธ์เรื่อง “การหาลงค์ประกอบที่มีผลกระทบต่อการเลือกเข้าศึกษาต่อในมหาวิทยาลัยในประเทศไทย”

นายกมล กิจสวัสดิ์

คณะศึกษาศาสตร์ มหาวิทยาลัยวลลองกอง ประเทศออสเตรเลีย

เรียน นักเรียนผู้ให้ข้อมูลทุกท่าน

มหาวิทยาลัยวลลองกองใคร่ขอเชิญท่านร่วมเป็นส่วนหนึ่งในการจัดทำวิทยานิพนธ์ของนักศึกษาระดับปริญญาเอกของมหาวิทยาลัยวลลองกอง ซึ่งการวิจัยครั้งนี้จัดทำขึ้นเพื่อศึกษาและทำความเข้าใจเกี่ยวกับองค์ประกอบที่มีผลต่อนักเรียนในชั้นมัธยมศึกษาตอนปลาย ในการเลือกเข้าศึกษาต่อในมหาวิทยาลัยในประเทศไทย ซึ่งพวกเราหวังเป็นอย่างยิ่งว่าผลของการศึกษานี้จะสามารถเพิ่มพูนความรู้ทางด้านปัจจัยที่มีผลต่อการเลือกเข้าศึกษาในมหาวิทยาลัย และจะเป็นประโยชน์แก่สถาบันอุดมศึกษาในการวางแผนและกำหนดนโยบายการศึกษาต่อไป

หากผู้ให้ข้อมูลยินดีร่วมเป็นส่วนหนึ่งในการให้ข้อมูลครั้งนี้ ผู้ให้ข้อมูลจะเข้าร่วมสนทนากลุ่มซึ่งจัดขึ้นโดยนักวิจัย ซึ่งอาจมีการบันทึกเสียง โดยจะไม่เปิดเผยชื่อผู้ให้ข้อมูลในภายหลัง ข้อมูลที่ได้ทั้งหมดจะถูกรวบรวมและวิเคราะห์โดยนักวิจัย ในการนี้ผู้ให้ข้อมูลจะไม่ถูกร้องขอให้ทำสิ่งอื่นใดนอกเหนือจากการสนทนากลุ่ม

ข้อมูลทั้งหมด ที่ได้รับจากผู้ให้ข้อมูลจะไม่ได้รับการเปิดเผย โดยมีมาตรการ การเก็บรักษาดังนี้

- ข้อมูลที่ได้จากการศึกษาครั้งนี้ จะได้รับการเก็บอย่างปลอดภัย และสามารถเข้าถึงได้โดยผู้วิจัยเท่านั้น
- ข้อมูลส่วนตัว เช่น ชื่อ หรือ รหัสประจำตัวนักเรียนจะแยกออกจากฐานข้อมูล ก่อนที่จะนำข้อมูล ไปวิเคราะห์
- ข้อมูลส่วนตัวต่างๆ จะไม่ถูกเปิดเผยต่อสาธารณะชน อันเนื่องมาจากการเผยแพร่วิทยานิพนธ์ฉบับนี้

การเข้าร่วมในการวิจัยครั้งนี้เป็นไปด้วยความสมัครใจของผู้ให้ข้อมูล การตอบแบบสอบถามครั้งนี้จะใช้เวลาประมาณครึ่งชั่วโมง ถ้าผู้ให้ข้อมูลรู้สึกว่าการถามล่วงเกินสิทธิส่วนบุคคล หรือไม่สะดวกที่จะตอบ ผู้ให้ข้อมูลมีสิทธิ์ที่จะถอนตัวจากการตอบแบบสอบถามได้ตลอดเวลา ซึ่งการปฏิเสธการเข้าร่วมหรือการถอนตัวจากกิจกรรมนี้จะไม่มีผลใดๆกับความสัมพันธ์ของผู้ให้ข้อมูลกับคณะศึกษาศาสตร์หรือมหาวิทยาลัยวลลองกอง

ผู้ให้ข้อมูลจะต้องร่วมตอบคำถามดังต่อไปนี้

- 1.ทำไมคุณถึงต้องการศึกษาต่อในระดับมหาวิทยาลัย
- 2.ปัจจัยใดที่มีผลต่อการเลือกเข้ามหาวิทยาลัย
- 3.ปัจจัยใดที่มีผลต่อการเลือกวิชาที่จะศึกษา
- 4.คุณมีความสนใจที่จะศึกษาต่อมหาวิทยาลัยใดบ้าง ในประเทศไทย
- 5.คุณตัดสินใจเลือกมหาวิทยาลัยด้วยตัวเองใช่หรือไม่
6. เพื่อนๆจากโรงเรียนเดียวกับคุณไปศึกษาต่อที่ไหน
7. คุณคาดหวังอะไรต่อการศึกษาระดับปริญญาตรี

ถ้าผู้ให้ข้อมูลมีคำถามเพิ่มเติม สามารถติดต่อผู้วิจัยโดยทาง E-mail ที่ [kk09@uow.edu.au](mailto:kk09@uow.edu.au) ถ้าผู้ให้ข้อมูลมีเหตุอย่างอื่นหรือข้อร้องเรียนเกี่ยวกับการวิจัยหรือวิธีดำเนินการวิจัย ผู้ให้ข้อมูลสามารถติดต่อเจ้าหน้าที่มหาวิทยาลัยวลลองกองได้ที่หมายเลขโทรศัพท์ (02) 4221-4457



## Information Sheet for Student

### An Investigation of Factors Affecting High School Students' Choices of Universities in Thailand

Kamol Kitsawad

Faculty of Education, University of Wollongong, Australia

Dear student,

We would like to invite you to be a part of a study conducted by a PhD student of the University of Wollongong. The aim of this study is to investigate into and to understand the information on factors which influence high school students' selection of their preferred universities in Thailand. The outcome of the study will be the increased knowledge of what influence the choice of universities, thus guide the higher education institutions in their future planning and policy making.

If you consent to participate in the data collection process you will be asked to answer the survey questionnaire. Data will be collected and analysed by the researcher. You will not be required to undertake any other activities beyond this.

The following measures will be adopted to protect the identities of participants in the study:

- Data collected will be stored securely and will only be accessed by the researcher;
- Identifying details, such as names and student identification, will be removed from files prior to data analysis; and
- Identifying details will be removed from any data used in publications arising from this study.

Your participation in this study is entirely voluntary. The survey will last approximately half an hour. If you feel that the study is intrusive or you are reluctant to answer, you may withdraw at any stage. Your refusal to participate or withdrawal of consent will in no way affect your relationship with the Faculty of Education or the University of Wollongong.

If you have any enquiries about the research, you can contact the researcher by email at [kk09@uow.edu.au](mailto:kk09@uow.edu.au). If you have any concerns or complaints regarding the way the research is or has been conducted, you can contact the Complaints Officer, Human Research Ethics Committee, Office of Research, University of Wollongong at (02) 4221 4457.



ใบชี้แจงข้อมูลสำหรับนักเรียน

วิทยานิพนธ์เรื่อง “การหาลงค์ประกอบที่มีผลกระทบต่อการเลือกเข้าศึกษาต่อในมหาวิทยาลัยในประเทศไทย”

นายคมล กิจสวัสดิ์

คณะศึกษาศาสตร์ มหาวิทยาลัยวลลองกอง ประเทศออสเตรเลีย

เรียน นักเรียนผู้ให้ข้อมูลทุกท่าน

มหาวิทยาลัยวลลองกองใคร่ขอเชิญท่านร่วมเป็นส่วนหนึ่งในการจัดทำวิทยานิพนธ์ของนักศึกษาระดับปริญญาเอกของมหาวิทยาลัยวลลองกอง ซึ่งการวิจัยครั้งนี้จัดทำขึ้นเพื่อศึกษาและทำความเข้าใจเกี่ยวกับองค์ประกอบที่มีผลต่อนักเรียนในชั้นมัธยมศึกษาตอนปลาย ในการเลือกเข้าศึกษาต่อในมหาวิทยาลัยในประเทศไทย ซึ่งพวกเราหวังเป็นอย่างยิ่งว่าผลของการศึกษานี้จะสามารถเพิ่มพูนความรู้ทางด้านปัจจัยที่มีผลต่อการเลือกเข้าศึกษาในมหาวิทยาลัย และจะเป็นประโยชน์แก่สถาบันอุดมศึกษาในการวางแผนและกำหนดนโยบายการศึกษาต่อไป

หากผู้ให้ข้อมูลยินดีย่อมเป็นส่วนหนึ่งในการให้ข้อมูลครั้งนี้ ผู้ให้ข้อมูลจะต้องดำเนินการตอบแบบสอบถามซึ่งจัดทำขึ้นโดยนักวิจัย ซึ่งข้อมูลที่ได้ทั้งหมดจะถูกรวบรวมและวิเคราะห์โดยนักวิจัย ในการนี้ผู้ให้ข้อมูลจะไม่ถูกร้องขอให้ทำสิ่งอื่นใด นอกเหนือจากการตอบแบบสอบถาม

ข้อมูลทั้งหมดที่ได้รับจากผู้ให้ข้อมูลจะไม่ได้รับการเปิดเผย โดยมีมาตรการ การเก็บรักษาดังนี้

- ข้อมูลที่ได้จากการศึกษาครั้งนี้ จะได้รับการเก็บอย่างปลอดภัยและสามารถเข้าถึงได้โดยผู้วิจัยเท่านั้น
- ข้อมูลส่วนตัวเช่นชื่อ หรือรหัสประจำตัวนักเรียนจะแยกออกจากฐานข้อมูลก่อนที่จะนำข้อมูลไปวิเคราะห์
- ข้อมูลส่วนตัวต่างๆจะไม่ถูกเปิดเผยต่อสาธารณะชน อันเนื่องมาจากการเผยแพร่วิทยานิพนธ์ฉบับนี้

การเข้าร่วมในการวิจัยครั้งนี้เป็นไปด้วยความสมัครใจของผู้ให้ข้อมูล การตอบแบบสอบถามครั้งนี้จะใช้เวลาประมาณครึ่งชั่วโมง ถ้าผู้ให้ข้อมูลรู้สึกว่าการถามล่วงเกินสิทธิส่วนบุคคล หรือไม่สะดวกที่จะตอบ ผู้ให้ข้อมูลมีสิทธิ์ที่จะถอนตัวจากการตอบแบบสอบถามได้ตลอดเวลา ซึ่งการปฏิเสธการเข้าร่วมหรือการถอนตัวจากกิจกรรมนี้จะไม่มีผลใดๆกับความสัมพันธ์ของผู้ให้ข้อมูลกับคณะศึกษาศาสตร์หรือมหาวิทยาลัยวลลองกอง

ถ้าผู้ให้ข้อมูลมีคำถามเพิ่มเติม สามารถติดต่อผู้วิจัยโดยทาง E-mail ที่ [kk09@uow.edu.au](mailto:kk09@uow.edu.au) ทั้งนี้ถ้าผู้ให้ข้อมูลมีข้อร้องเรียนและข้อสงสัยอย่างอื่นเกี่ยวกับการวิจัยหรือวิธิดำเนินการวิจัย ผู้ให้ข้อมูลสามารถติดต่อเจ้าหน้าที่ฝ่ายที่วิจัยมหาวิทยาลัยวลลองกองได้ที่หมายเลขโทรศัพท์ (02) 4221-4457



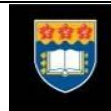
## Consent form of Student

Research Title: An Investigation of Factors Affecting High School Students' Choices of Universities in Thailand

I, ..... Identification number .....  
consent to participate in the research conducted by Kamol Kitsawad as it has been described to me in the information sheet. I understand that the data collected will be used for the study's purpose only and I consent for the data to be used in that manner.

Signed.....

Date     /     /



ใบยินยอมให้ข้อมูลของนักเรียน

หัวข้อวิจัย: การหาลูกประกอบที่มีผลกระทบต่อการเลือกเข้าศึกษาต่อในมหาวิทยาลัยในประเทศไทย

ข้าพเจ้า \_\_\_\_\_ เลขประจำตัวนักเรียน \_\_\_\_\_

มีความยินดีที่จะเข้าร่วมให้ข้อมูลพร้อมตอบข้อซักถามในการทำวิจัย ซึ่งจัดทำโดย นายกมล กิจสวัสดิ์ ตามที่ได้ระบุ

ไว้ในจดหมายชี้แจง ทั้งนี้ข้าพเจ้ารับทราบและเข้าใจถึงจุดประสงค์ของผู้ทำวิจัย ซึ่งจะนำข้อมูลที่ได้ ไปใช้

ประโยชน์เพื่อการศึกษาเท่านั้น ในการนี้ข้าพเจ้ายินยอมให้ผู้วิจัยนำข้อมูลของข้าพเจ้าไปใช้เพื่อจุดประสงค์ที่กำหนดไว้ข้างต้น

ลงชื่อ.....

วันที่     /     /

## Appendix C



## Survey Questionnaire [Pilot]

*Instructions: Please complete the following questions to reflect your opinions as accurately as possible and to answer factual questions to the best of your knowledge. Your information will be kept strictly confidential.*

### Profiling Questions:

1. Gender ☐ Male ☐ Female
2. Age ☐ under 17 ☐ 17  
☐ 18 ☐ over 18
3. High School Background  
☐ Private ☐ Public  
Location  
☐ Bangkok ☐ Other region  
☐ North ☐ Northeast  
☐ West ☐ South
4. High School Program  
☐ Art ☐ Science
5. High School Cumulative GPA  
☐ under 2.00 ☐ 2.00 – 2.50  
☐ 2.51 – 3.00 ☐ 3.01 – 3.50  
☐ over 3.50
6. Activities participated  
☐ Academic clubs ☐ None  
☐ Sports clubs  
☐ Student Committee  
☐ Other, please specify .....

## Family Questions

7. You are now living with

- |                                       |                                 |
|---------------------------------------|---------------------------------|
| <input type="checkbox"/> Both parents | <input type="checkbox"/> Father |
| <input type="checkbox"/> Relatives    | <input type="checkbox"/> Mother |
| <input type="checkbox"/> By yourself  |                                 |

8. Parents' Occupation

- |        |   |  |
|--------|---|--|
| Father | <input type="checkbox"/> Civil servant                      | <input type="checkbox"/> Self-employed |
|        | <input type="checkbox"/> Business                           | <input type="checkbox"/> Employee      |
|        | <input type="checkbox"/> Professional, please specify ..... |  |

- |        |   |  |
|--------|---|--|
| Mother | <input type="checkbox"/> Civil servant                      | <input type="checkbox"/> Self-employed |
|        | <input type="checkbox"/> Business                           | <input type="checkbox"/> Employee      |
|        | <input type="checkbox"/> Professional, please specify ..... |  |
|        | <input type="checkbox"/> Housewife                          |  |

9. Household income per month (in baht)

- |  |   |
|--|---|
| <input type="checkbox"/> under 25,000      | <input type="checkbox"/> 25,000 – 50,000  |
| <input type="checkbox"/> 50,001 – 75,000   | <input type="checkbox"/> 75,001 – 100,000 |
| <input type="checkbox"/> 100,000 – 200,000 |   |
| <input type="checkbox"/> over 200,000      |   |

10. Father's Education

- ☐ Some High school
- ☐ High School / Vocational School
- ☐ Some College
- ☐ Bachelor's Degree
- ☐ Master's Degree or above

11. Mother's Education

- ☐ Some High school
- ☐ High School / Vocational School
- ☐ Some College
- ☐ Bachelor's Degree
- ☐ Master's Degree or above

12. Your parents are:

- ☐ married
- ☐ separated
- ☐ divorced

## Opinions and Perception Questions

*Instructions: On a scale of 1 to 5, with 5 indicating the highest importance, please circle the number that indicates the importance to you of the following issues.*

		<div> <div>Not important</div> <div>Very important</div> </div>				
		<div> <div></div> <div></div> </div>				
1.	The university is a private institution.	1	2	3	4	5
2.	The university is a public institution.	1	2	3	4	5
3.	The university is affiliated to a religious organization.	1	2	3	4	5
4.	The university is an international institution with English as medium of instruction.	1	2	3	4	5
5.	The university offers some English programs.	1	2	3	4	5
6.	The university is comprehensive, offering a variety of academic programs in humanities and science.	1	2	3	4	5
7.	There are foreign students and faculty members, making the university a truly international community.	1	2	3	4	5
8.	The university offers various extracurricular activities on regular basis.	1	2	3	4	5
9.	The university provides the environments and atmosphere which are conducive to learning.	1	2	3	4	5
10.	The university has clear rules and regulations.	1	2	3	4	5
11.	The university has its own admission examination and selection procedures.	1	2	3	4	5
12.	It required preparation and personal efforts to pass the exam and get accepted to the university.	1	2	3	4	5
13.	The university admission system is highly competitive.	1	2	3	4	5
14.	The university has a good reputation for academic excellence.	1	2	3	4	5
15.	The university has a good reputation for qualified lecturers.	1	2	3	4	5



### Decision-Making Questions

*Instructions: From the list below, please indicate how you make decisions or choices in regards to your study. Put an ✕ in the box which best describes your response.*

		Always	Often	Sometimes	Rarely	Never
1.	You consult with your parents.					
2.	You consult with your teachers.					
3.	You consult with your school counselors.					
4.	You consult with your family relatives.					
5.	You consult with your friends.					
6.	You acquire information from the school counselors or teachers before making choices.					
7.	You get the approval or permission from your parent(s) before making any decisions.					
8.	You listen to your friends and follow their advice or choices.					
9.	You search for the information from various sources and make your own decision based on that.					
10.	You seek advice from university students who already enrolled in the program/the university you are interested in.					
11.	You get advice and information from the alumni of the university you are interested in.					
12.	You obtain information from the university through the media and website before making any decisions.					

		<b>Always</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>
13.	You participate in the counseling activities organized at your school by different universities before making any decisions.					
14.	You visit the university and see for yourself before making any decisions.					
15.	You attend education fairs, exhibitions etc. to learn more about the choices before making your decisions.					

*Thank you for your assistance.*

## แบบสอบถาม

**คำแนะนำ:** กรุณาตอบแบบสอบถามนี้ตามความคิดเห็นของท่านและความเป็นจริงที่ท่านรู้มากที่สุด ข้อมูลที่ท่านให้จะถูกเก็บรักษาไว้เป็นความลับอย่างที่สุด และจะไม่มีการเปิดเผยถึงผู้ให้ข้อมูล

### ตอนที่ 1: ข้อมูลส่วนบุคคล

1. เพศ ☐ ชาย ☐ หญิง
2. อายุ ☐ ต่ำกว่า 17 ☐ 17  
☐ 18 ☐ สูงกว่า 18
3. สังกัดของโรงเรียน / สถานศึกษาที่ตั้ง ☐ เอกชน ☐ รัฐบาล  
☐ กรุงเทพฯ ☐ ภูมิภาคอื่น  
☐ เหนือ ☐ ตะวันออกเฉียงเหนือ  
☐ ตะวันตก ☐ ใต้
4. หลักสูตรที่เรียนในชั้นมัธยมศึกษา ☐ สายศิลป์ ☐ สายวิทย์
5. คะแนนเฉลี่ยสะสมในชั้นมัธยมศึกษา ☐ ต่ำกว่า 2.00 ☐ 2.00 – 2.50  
☐ 2.51 – 3.00 ☐ 3.01 – 3.50  
☐ สูงกว่า 3.50
6. กิจกรรมในโรงเรียนที่เข้าร่วม ☐ ชมรมทางวิชาการ  
☐ ชมรมกีฬา  
☐ สโมสรนักเรียน  
☐ อื่นๆ โปรดระบุ .....

### ข้อมูลเกี่ยวกับครอบครัว

7. ปัจจุบันอาศัยอยู่กับ ☐ บิดา-มารดา ☐ บิดา  
☐ ญาติ ☐ มารดา  
☐ พักอาศัยอยู่คนเดียว



8. ข้อมูลอาชีพของบิดาและ มารดา

บิดา ☐ รับราชการ ☐ เป็นเจ้าของกิจการ  
☐ ทำธุรกิจ ☐ รับจ้าง  
☐ อื่นๆ โปรดระบุ.....

มารดา ☐ รับราชการ ☐ เป็นเจ้าของกิจการ  
☐ ทำธุรกิจ ☐ รับจ้าง  
☐ อื่นๆ โปรดระบุ.....  
☐ แม่บ้าน

9. รายได้ของครอบครัวต่อเดือน (บาท)

☐ ต่ำกว่า 25,000 ☐ 25,000 – 50,000  
☐ 50,001 – 75,000 ☐ 75,001 – 100,000  
☐ 100,001 – 200,000  
☐ สูงกว่า 200,000

10. ระดับการศึกษาสูงสุดของบิดา

☐ ต่ำกว่ามัธยมศึกษาตอนปลาย  
☐ มัธยมศึกษาตอนปลาย / ประกาศนียบัตรวิชาชีพ  
☐ อนุปริญญา / ประกาศนียบัตรวิชาชีพชั้นสูง  
☐ ปริญญาตรี  
☐ ปริญญาโทหรือสูงกว่า

11. ระดับการศึกษาสูงสุดของมารดา

☐ ต่ำกว่ามัธยมศึกษาตอนปลาย  
☐ มัธยมศึกษาตอนปลาย / ปวช.  
☐ ต่ำกว่าปริญญาตรี  
☐ ปริญญาตรี  
☐ ปริญญาโทหรือสูงกว่า

12. สถานะสมรสของบิดามารดา

☐ สมรส  
☐ แยกกันอยู่  
☐ หย่า  
☐ เป็นหม้าย

## ตอนที่ 2: ความคิดเห็นเกี่ยวกับมหาวิทยาลัยในการตัดสินใจเลือกเรียน

นักศึกษาตัดสินใจเลือกมหาวิทยาลัย โดยคำนึงถึง ของปัจจัยต่าง ๆ ต่อไปนี้นี้น้อยเพียงใด		ไม่สำคัญ <span style="float: right;">สำคัญมาก</span>				
		←————→				
1.	มหาวิทยาลัยเป็นสถาบันอุดมศึกษาเอกชน	1	2	3	4	5
2.	มหาวิทยาลัยเป็นสถาบันอุดมศึกษาของรัฐบาล	1	2	3	4	5
3.	เป็นมหาวิทยาลัยที่สังกัดองค์กรศาสนา	1	2	3	4	5
4.	เป็นมหาวิทยาลัยนานาชาติที่ใช้ภาษาอังกฤษเป็นสื่อในการเรียนการสอน	1	2	3	4	5
5.	เป็นมหาวิทยาลัยที่ใช้ภาษาอังกฤษเป็นสื่อในการเรียนการสอนในบางหลักสูตร	1	2	3	4	5
6.	เป็นมหาวิทยาลัยที่มีทั้งหลักสูตรทางสังคมศาสตร์และวิทยาศาสตร์	1	2	3	4	5
7.	มีทั้งนักศึกษาและอาจารย์ต่างชาติทำให้มหาวิทยาลัยมีความเป็นนานาชาติ	1	2	3	4	5
8.	เป็นมหาวิทยาลัยที่มีกิจกรรมนอกหลักสูตรหลากหลาย	1	2	3	4	5
9.	มหาวิทยาลัยมีสภาพแวดล้อมและบรรยากาศเอื้อต่อการศึกษาล่าเรียน	1	2	3	4	5
10.	มีกฎระเบียบที่ชัดเจน	1	2	3	4	5
11.	มหาวิทยาลัยมีวิธีระบบรับตรงในการสมัครและคัดเลือกเองโดยตรง	1	2	3	4	5
12.	ต้องใช้การเตรียมตัวและความพยายามเพื่อผ่านการคัดเลือก	1	2	3	4	5
13.	ระบบการคัดเลือกเข้าศึกษามีการแข่งขันสูง	1	2	3	4	5
14.	มหาวิทยาลัยมีชื่อเสียงความเป็นเลิศทางวิชาการ	1	2	3	4	5



**ตอนที่ 3: ข้อมูลในการตัดสินใจเลือกเรียนมหาวิทยาลัย**

ในการตัดสินใจเลือกมหาวิทยาลัย นักศึกษาได้ข้อมูลจากแหล่งต่าง ๆ ต่อไปนี้มาน้อยเพียงใด		เสมอ	บ่อย	บางครั้ง	นาน ๆ ครั้ง	ไม่เคย
1.	ปรึกษากับผู้ปกครอง					
2.	ปรึกษากับครู					
3.	ปรึกษากับอาจารย์ที่ปรึกษา					
4.	ปรึกษากับญาติ					
5.	ปรึกษากับเพื่อน					
6.	ได้ข้อมูลจากอาจารย์ที่ปรึกษาหรือครูก่อนการตัดสินใจ					
7.	ได้รับการอนุญาตหรือยินยอมจากผู้ปกครองก่อนการตัดสินใจ					
8.	ฟังคำแนะนำจากเพื่อน					
9.	หาข้อมูลจากแหล่งต่าง ๆ และตัดสินใจตามข้อมูลที่ได้รับเหล่านั้น					
10.	หาคำแนะนำจากนักศึกษาที่เรียนอยู่ในหลักสูตร/ มหาวิทยาลัยที่ตั้งใจเลือก ที่สนใจ					
11.	หาคำแนะนำและข้อมูลจากศิษย์เก่าของมหาวิทยาลัยที่มีอยู่ในใจ					
12.	ได้ข้อมูลข่าวสารจากสื่อและ website ก่อนการตัดสินใจ					
13.	เข้าร่วมในกิจกรรมแนะแนวการศึกษาต่อที่มหาวิทยาลัยต่างๆ จัดในโรงเรียนก่อนการตัดสินใจ					
14.	เข้าเยี่ยมชมมหาวิทยาลัยเพื่อให้ประจักษ์ก่อนการตัดสินใจ					
15.	เข้าดูนิทรรศการการศึกษาต่างๆ เพื่อหาตัวเลือกก่อนการ ตัดสินใจ					

ขอขอบคุณที่ให้ความร่วมมือตอบแบบสอบถาม

## Survey Questionnaire

*Instructions: Please complete the following questions to reflect your opinions as accurately as possible and to answer factual questions to the best of your knowledge. Your information will be kept strictly confidential*

### Profiling Questions:

1. Gender ☐ Male ☐ Female
2. Age ☐ under 17 ☐ 17  
☐ 18 ☐ over 18
3. High School Background  
☐ Private ☐ Public  
Location ☐ Bangkok ☐ Other region  
☐ North ☐ Northeast  
☐ West ☐ South
4. High School Program  
☐ Art ☐ Science
5. High School Cumulative GPA  
☐ under 2.00 ☐ 2.00 – 2.50  
☐ 2.51 – 3.00 ☐ 3.01 – 3.50  
☐ over 3.50
6. Activities participated  
☐ Academic clubs ☐ None  
☐ Sports clubs  
☐ Student Committee  
☐ Other, please specify .....

## Family Questions

7. You are now living with

- |                                       |                                 |
|---------------------------------------|---------------------------------|
| <input type="checkbox"/> Both parents | <input type="checkbox"/> Father |
| <input type="checkbox"/> Relatives    | <input type="checkbox"/> Mother |
| <input type="checkbox"/> By yourself  |                                 |

8. Parents' Occupation

- |        |   |  |
|--------|---|--|
| Father | <input type="checkbox"/> Civil servant                      | <input type="checkbox"/> Self-employed |
|        | <input type="checkbox"/> Business                           | <input type="checkbox"/> Employee      |
|        | <input type="checkbox"/> Professional, please specify ..... |  |
| Mother | <input type="checkbox"/> Civil servant                      | <input type="checkbox"/> Self-employed |
|        | <input type="checkbox"/> Business                           | <input type="checkbox"/> Employee      |
|        | <input type="checkbox"/> Professional, please specify ..... |  |
|        | <input type="checkbox"/> Housewife                          |  |

9. Household income per month (in baht)

- |  |   |
|--|---|
| <input type="checkbox"/> under 25,000      | <input type="checkbox"/> 25,000 – 50,000  |
| <input type="checkbox"/> 50,001 – 75,000   | <input type="checkbox"/> 75,001 – 100,000 |
| <input type="checkbox"/> 100,000 – 200,000 |   |
| <input type="checkbox"/> over 200,000      |   |

10. Father's Education

- ☐ Some High school
- ☐ High School / Vocational School
- ☐ Some College
- ☐ Bachelor's Degree
- ☐ Master's Degree or above

11. Mother's Education

- ☐ Some High school
- ☐ High School / Vocational School
- ☐ Some College
- ☐ Bachelor's Degree
- ☐ Master's Degree or above

12. Your parents are:

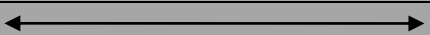
- ☐ married
- ☐ separated
- ☐ divorced
- ☐ Widowed

### Opinions and Perception Questions

*Instructions: On a scale of 1 to 5, with 5 indicating the highest importance, please circle the number that indicates the importance to you of the following issues.*

		<div> <div>Not important</div> <div>Very important</div> </div>				
		<div> <div></div> <div></div> </div>				
1.	The university is a private institution.	1	2	3	4	5
2.	The university is a public institution.	1	2	3	4	5
3.	The university is affiliated to a religious organization.	1	2	3	4	5
4.	The university is an international institution with English as medium of	1	2	3	4	5
5.	The university offers some English programs.	1	2	3	4	5
6.	The university is comprehensive, offering a variety of academic programs in humanities and science.	1	2	3	4	5
7.	There are foreign students and faculty members, making the university a truly international community.	1	2	3	4	5
8.	The university offers various extracurricular activities on regular basis.	1	2	3	4	5
9.	The university provides the environments and atmosphere which are conducive to learning.	1	2	3	4	5
10.	The university has clear rules and regulations.	1	2	3	4	5
11.	The university has its own admission examination and selection procedures.	1	2	3	4	5
12.	It required preparation and personal efforts to pass the exam and get accepted to the university.	1	2	3	4	5
13.	The university admission system is highly competitive.	1	2	3	4	5
14.	The university has a good reputation for academic excellence.	1	2	3	4	5
15.	The university has a good reputation for qualified lecturers.	1	2	3	4	5
16.	The university has a good reputation for quality graduates.	1	2	3	4	5



		<div> <div>Not important</div> <div>Very important</div> <div>  </div> </div>				
17.	The university has a good reputation for high technology in all its infrastructure and teaching & learning facilities.	1	2	3	4	5
18.	The university offers adequate and quality library resources and services.	1	2	3	4	5
19.	The university is in a convenient location.	1	2	3	4	5
20.	The university is not far from your residence.	1	2	3	4	5
21.	There are student dormitories and apartments near the university.	1	2	3	4	5
22.	The living expenses (food, transport, accommodation etc.) on campus are reasonable.	1	2	3	4	5
23.	The tuition fees are average compared to other institutions of the same type.	1	2	3	4	5
24.	There are possibilities to apply for a scholarship.	1	2	3	4	5
25.	It is possible to apply for a loan for tuition.	1	2	3	4	5
26.	It is possible to apply for a loan for accommodation expenses.	1	2	3	4	5
27.	It is possible to get a part time job on campus.	1	2	3	4	5
28.	It is possible to join an exchange program or study abroad.	1	2	3	4	5
29.	The university has the academic advising system.	1	2	3	4	5
30.	The university provides career guidance and job placement counseling.	1	2	3	4	5

### Decision-Making Questions

*Instructions: From the list below, please indicate how you make decisions or choices in regards to your study. Put an **X** in the box which best describes your response.*

		Always	Often	Sometimes	Rarely	Never
1.	You made the decisions by yourself					
2.	You consult with your parents.					
3.	You consult with your teachers.					
4.	You consult with your school counselors.					
5.	You consult with your family relatives.					
6.	You consult with your friends.					
7.	You acquire information from the school counselors or teachers before making choices.					
8.	You get the approval or permission from your parent(s) before making any decisions.					
9.	You listen to your friends and follow their advice or choices.					
10.	You search for the information from various sources and make your own decision based on that.					
11.	You seek advice from university students who already enrolled in the program/the university you are interested in.					
12.	You get advice and information from the alumni of the university you are interested in.					
13.	You obtain information from the university through the media and website before making any decisions.					

		Always	Often	Sometimes	Rarely	Never
14.	You participate in the counseling activities organized at your school by different universities before making any decisions.					
15.	You visit the university and see for yourself before making any decisions.					
16.	You attend education fairs, exhibitions etc. to learn more about the choices before making your decisions.					

*Thank you for your assistance.*

## แบบสอบถาม

**คำแนะนำ:** กรุณาตอบแบบสอบถามนี้ตามความคิดเห็นของท่านและความเป็นจริงที่ท่านรู้มากที่สุด ข้อมูลที่ท่านให้จะถูกเก็บรักษาไว้เป็นความลับอย่างที่สุด และจะไม่มีการเปิดเผยถึงผู้ให้ข้อมูล

### ตอนที่ 1: ข้อมูลส่วนบุคคล

1. เพศ ☐ ชาย ☐ หญิง
2. อายุ ☐ ต่ำกว่า 17 ☐ 17  
☐ 18 ☐ สูงกว่า 18
3. สังกัดของโรงเรียน / สถานศึกษา  
ที่ตั้ง ☐ เอกชน ☐ รัฐบาล  
☐ กรุงเทพฯ ☐ ภูมิภาคอื่น  
☐ เหนือ ☐ ตะวันออกเฉียงเหนือ  
☐ ตะวันตก ☐ ใต้
4. หลักสูตรที่เรียนในชั้นมัธยมปลาย ☐ สายศิลป์ ☐ สายวิทย์
5. คะแนนเฉลี่ยสะสมในชั้นมัธยมปลาย ☐ ต่ำกว่า 2.00 ☐ 2.00 – 2.50  
☐ 2.51 – 3.00 ☐ 3.01 – 3.50  
☐ สูงกว่า 3.50
6. กิจกรรมในโรงเรียนที่เข้าร่วม  
☐ ชมรมทางวิชาการ  
☐ ชมรมกีฬา  
☐ สโมสรนักเรียน  
☐ อื่นๆ โปรดระบุ .....

### ข้อมูลเกี่ยวกับครอบครัว

7. ปัจจุบันอาศัยอยู่กับ ☐ บิดา-มารดา ☐ บิดา  
☐ มารดา ☐ พักอาศัยอยู่คนเดียว

8. ข้อมูลอาชีพของบิดาและ มารดา

- บิดา
- |  |  |
|--|--|
| <input type="checkbox"/> รับราชการ           | <input type="checkbox"/> เป็นเจ้าของกิจการ |
| <input type="checkbox"/> ทำธุรกิจ            | <input type="checkbox"/> รับจ้าง           |
| <input type="checkbox"/> อื่นๆ โปรดระบุ..... |  |
- มารดา
- |  |  |
|--|--|
| <input type="checkbox"/> รับราชการ           | <input type="checkbox"/> เป็นเจ้าของกิจการ |
| <input type="checkbox"/> ทำธุรกิจ            | <input type="checkbox"/> รับจ้าง           |
| <input type="checkbox"/> อื่นๆ โปรดระบุ..... |  |
| <input type="checkbox"/> แม่บ้าน             |  |

9. รายได้ของครอบครัวต่อเดือน (บาท)

- |  |   |
|--|---|
| <input type="checkbox"/> ต่ำกว่า 25,000    | <input type="checkbox"/> 25,000 – 50,000  |
| <input type="checkbox"/> 50,001 – 75,000   | <input type="checkbox"/> 75,001 – 100,000 |
| <input type="checkbox"/> 100,001 – 200,000 |   |
| <input type="checkbox"/> สูงกว่า 200,000   |   |

10. ระดับการศึกษาสูงสุดของบิดา

- ☐ ต่ำกว่ามัธยมศึกษาตอนปลาย
- ☐ มัธยมศึกษาตอนปลาย / ประกาศนียบัตรวิชาชีพ
- ☐ อนุปริญญา / ประกาศนียบัตรวิชาชีพชั้นสูง
- ☐ ปริญญาตรี
- ☐ ปริญญาโทหรือสูงกว่า

11. ระดับการศึกษาสูงสุดของมารดา

- ☐ ต่ำกว่ามัธยมศึกษาตอนปลาย
- ☐ มัธยมศึกษาตอนปลาย / ประกาศนียบัตรวิชาชีพ
- ☐ อนุปริญญา / ประกาศนียบัตรวิชาชีพชั้นสูง
- ☐ ปริญญาตรี
- ☐ ปริญญาโทหรือสูงกว่า

12. สถานะสมรสของบิดามารดา

- ☐ สมรส
- ☐ แยกกันอยู่
- ☐ หย่า
- ☐ เป็นหม้าย

**ตอนที่ 2: ความคิดเห็นเกี่ยวกับมหาวิทยาลัยในการตัดสินใจเลือกเรียน**

นักศึกษาตัดสินใจเลือกมหาวิทยาลัย โดยคำนึงถึงความสำคัญ ของปัจจัยต่าง ๆ ต่อไปนี้มากน้อยเพียงใด		←————→				
		ไม่สำคัญ		สำคัญมาก		
1.	มหาวิทยาลัยเป็นสถาบันอุดมศึกษาเอกชน	1	2	3	4	5
2.	มหาวิทยาลัยเป็นสถาบันอุดมศึกษาของรัฐบาล	1	2	3	4	5
3.	เป็นมหาวิทยาลัยที่สังกัดองค์กรศาสนา	1	2	3	4	5
4.	เป็นมหาวิทยาลัยนานาชาติที่ใช้ภาษาอังกฤษเป็นสื่อในการเรียนการสอน	1	2	3	4	5
5.	เป็นมหาวิทยาลัยที่ ใช้ภาษาอังกฤษเป็นสื่อในการเรียนการสอนในบางหลักสูตร	1	2	3	4	5
6.	เป็นมหาวิทยาลัยที่มีหลักสูตรครอบคลุมทั้งด้านทางสังคมศาสตร์และวิทยาศาสตร์	1	2	3	4	5
7.	มีทั้งนักศึกษาและอาจารย์ต่างชาติทำให้มหาวิทยาลัยมีความเป็นนานาชาติ	1	2	3	4	5
8.	มหาวิทยาลัยที่มีกิจกรรมนอกหลักสูตรหลากหลาย	1	2	3	4	5
9.	มหาวิทยาลัยมีสภาพแวดล้อมและบรรยากาศเอื้อต่อการศึกษเล่าเรียน	1	2	3	4	5
10.	มหาวิทยาลัยที่มีกฎระเบียบที่ชัดเจน	1	2	3	4	5
11.	มหาวิทยาลัยมีวิธีระบบปรับปรุงในการสมัครและคัดเลือกเองโดยตรง	1	2	3	4	5
12.	ต้องใช้การเตรียมตัวและความพยายามเพื่อผ่านการคัดเลือก	1	2	3	4	5
13.	ระบบการคัดเลือกเข้าศึกษามีการแข่งขันสูง	1	2	3	4	5
14.	มหาวิทยาลัยมีชื่อเสียงความเป็นเลิศทางวิชาการ	1	2	3	4	5
15.	มหาวิทยาลัยมีชื่อเสียงในคุณภาพของอาจารย์	1	2	3	4	5
16.	มหาวิทยาลัยมีชื่อเสียงในคุณภาพของบัณฑิต	1	2	3	4	5



### ตอนที่ 3: ข้อมูลในการตัดสินใจเลือกเรียนมหาวิทยาลัย

ในการตัดสินใจเลือกมหาวิทยาลัย นักศึกษาได้ข้อมูลจากแหล่งต่าง ๆ ต่อไปนี้มาน้อยเพียงใด		เสมอ	บ่อย	บางครั้ง	นาน ๆ ครั้ง	ไม่เคย
1.	เลือกที่จะตัดสินใจด้วยตัวเอง					
2.	ปรึกษาผู้ปกครอง					
3.	ปรึกษากับครู					
4.	ปรึกษากับอาจารย์ที่ปรึกษา					
5.	ปรึกษากับญาติ					
6.	ปรึกษากับเพื่อน					
7.	ได้ข้อมูลจากอาจารย์ที่ปรึกษาหรือครูก่อนการตัดสินใจ					
8.	ได้รับการอนุญาตหรือยินยอมจากผู้ปกครองก่อนการตัดสินใจ					
9.	ฟังคำแนะนำจากเพื่อน					
10.	หาข้อมูลจากแหล่งต่าง ๆ และตัดสินใจตามข้อมูลที่ได้รับเหล่านั้น					
11.	หาคำแนะนำจากนักศึกษาที่เรียนอยู่ในหลักสูตร/ มหาวิทยาลัยที่สนใจ					
12.	หาคำแนะนำและข้อมูลจากศิษย์เก่าของมหาวิทยาลัยที่มีอยู่ในใจ					
13.	ได้ข้อมูลข่าวสารจากสื่อและ website ก่อนการตัดสินใจ					
14.	เข้าร่วมในกิจกรรมแนะแนวการศึกษาต่อที่มหาวิทยาลัยต่างๆ จัดในโรงเรียนก่อนการตัดสินใจ					
15.	เข้าเยี่ยมชมมหาวิทยาลัยเพื่อให้ประจักษ์ก่อนการตัดสินใจ					
16.	เข้าดูนิทรรศการการศึกษาต่างๆ เพื่อศึกษามหาวิทยาลัยที่มีอยู่ในใจก่อนตัดสินใจ					

ขอขอบคุณที่ให้ความร่วมมือตอบแบบสอบถามนี้



## Appendix D

Number of grade 12 students in Thailand by regions

	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>South</b>	46,442	51,545	53,766	53,682
<b>Central and Bangkok</b>	98,743	101,201	104,978	112,436
<b>North</b>	56,797	62,705	65,721	69,889
<b>Northeast</b>	112,716	118,259	125,925	132,217
<b>East</b>	11,533	12,789	13,434	14,074
<b>Total</b>	326,231	346,499	363,824	382,298

Source: Ministry of Education (2009b)