SOCIAL, CULTURAL AND VOCATIONAL ASPECTS
OF DEMAND FOR UNIVERSITY EDUCATION IN
THAILAND

by

Sansern Chareonphongse

Submitted in fulfilment of the requirements
for the degree of
Master of Arts

UNIVERSITY OF TASMANIA
HOBART
This thesis contains no material which has been accepted for the award of any other degree or diploma in any university and to the best of my knowledge and belief, the thesis contains no copy or paraphrase of material previously published or written by any other person, except when due reference is made in the text of the thesis.

Sansern Chareonphongse.
"There is a demand for a large number of qualified personnel of many categories to help develop the country. This demand will steadily increase in the future because we have to bring development and progress to the people and country — National development is a great task which requires cooperation and efforts of everyone concerned and at the same time depends in large measure upon knowledge and abilities of highly educated, well-qualified personnel ——"

"The building of another university as an institution for training such personnel is indeed a source of gratification for all. Once Chiangmai University has got off to a good start, I would wish that it continue to make progress in its activities in order to serve the purpose for which the University is established——."

The author's translation of an address delivered by H.M. King Bhumibhol Adulyadej of Thailand on the occasion of the official opening of Chiangmai University, on 24th January 1965.
ACKNOWLEDGMENTS

I wish to thank the government of the Commonwealth of Australia for granting me a Colombo Plan fellowship which enabled me to undertake a post-graduate study at the University of Tasmania and for financing a field research which I conducted in Chiangmai and Bangkok, Thailand, from January to April 1972. Thanks are also due to the Thai government for granting me a leave of absence from my official duties at Chiangmai University in order to accept the Colombo Plan awards for my post-graduate study.

In the conduct of my field research many persons have extended to me their cooperation and help. At Chiangmai and Chulalongkorn Universities where a questionnaire survey was administered, three hundred respondents kindly filled in and returned the written questionnaire forms. High-ranking university administrators and faculty members including the Rector of Chulalongkorn University, the Vice-Rectors of Chiangmai University and the Deans of some constituent faculties at both universities have given sessions of informal interviews which benefited me in both information and insights. The authorities at the National Education Council in Bangkok have provided me with certain statistical data and the government's official publications dealing with Thailand's university education system as could be made available to me. To all these individuals I wish to record my grateful thanks for their cooperation and help.

This thesis would not have been completed without considerable help and encouragement which I have received from
my supervisor, Dr. P.J. Eldridge. He has given very generously
of his time and attention not only to assist me in over-coming many
difficulties which have occurred in the preparation of the thesis
but also to consistently encourage me to endure through such a hard
and tedious work. I personally owe him a very great debt of
gratitude.

To Professor W.A. Townsley, Chairman of the Department
of Political Science at the University of Tasmania, I sincerely
wish to acknowledge my gratefulness for his approval of this
research project and for certain administrative arrangements he
has made to facilitate my work on this thesis.

I also wish to gratefully acknowledge the valuable
assistance which I have gained from Dr. S.V. Rao and Mr. B.W.
Davis, both of the Department of Political Science at the
University of Tasmania. Both have kindly offered me some useful
suggestions and comments in the course of writing up this thesis.

I am grateful to the examiners of this thesis for asking
me to make the necessary revisions in order to rectify the
weaknesses of the thesis.

Finally, I wish to apologize to readers of this thesis
for any mistakes that I may have made in the use of my English
since I have written this thesis in English without the help of
anyone.
This thesis is dedicated to my father
and also to the memory of my mother.
LIST OF ABBREVIATIONS

For the sake of brevity and convenience, the following two abbreviations are used, wherever necessary, throughout the thesis.

(1) CMU is an abbreviated form of Chiangmai University (in Chiangmai, Thailand).

(2) CU is an abbreviated form of Chulalongkorn University (in Bangkok, Thailand).

.............
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgments</td>
<td>iv</td>
</tr>
<tr>
<td>List of Abbreviations</td>
<td>vii</td>
</tr>
<tr>
<td>List of Tables</td>
<td>xi</td>
</tr>
<tr>
<td>List of Charts</td>
<td>xv</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Introductory Remarks</td>
<td>1</td>
</tr>
<tr>
<td>Objectives of the Study</td>
<td>4</td>
</tr>
<tr>
<td>Methods and Sources</td>
<td>7</td>
</tr>
<tr>
<td>Limitations</td>
<td>11</td>
</tr>
<tr>
<td>Definition of the Term &quot;University Education&quot;</td>
<td>13</td>
</tr>
<tr>
<td>Organization of the Thesis</td>
<td>15</td>
</tr>
<tr>
<td>Chapter I: The Setting for University Education</td>
<td>17</td>
</tr>
<tr>
<td>Thai University Education in Historical Perspective</td>
<td>17</td>
</tr>
<tr>
<td>Administration of the Thai University Education System</td>
<td>22</td>
</tr>
<tr>
<td>Structure of Courses and Course Contents of University Education in Thailand</td>
<td>41</td>
</tr>
<tr>
<td>Chapter II: Thai Social Values</td>
<td>101</td>
</tr>
<tr>
<td>The Values of Sanuk and Choei</td>
<td>103</td>
</tr>
<tr>
<td>The Value of Individualism</td>
<td>106</td>
</tr>
<tr>
<td>The Value of Status</td>
<td>107</td>
</tr>
<tr>
<td>The Value of Education</td>
<td>113</td>
</tr>
<tr>
<td>Secularization of Traditional Thai/Buddhist Values</td>
<td>117</td>
</tr>
<tr>
<td>Chapter III: Thai Society's Demand for University Education</td>
<td>140</td>
</tr>
<tr>
<td>Operational Definition of Demand of Thai Society</td>
<td>140</td>
</tr>
<tr>
<td>Factors Influencing the Demand for University Education</td>
<td>146</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1 : Government Subsidies to the Universities .......................... 32

"Analytical Sweat-Box" ...................................................................... 159

Table 2 : Breakdown of the Occupations of the Fathers of the Students Represented in the Questionnaire Sample ............................................... 166

Table 3 : Breakdown of the Occupations of the Fathers of the Students Enrolled at CMU in 1972 ................................................................. 167

Table 4 : The Demand of the Private Sector for the University Graduates of the Academic Year 1973 ................................................................. 176

Table 5 : Managerial and Administrative Personnel in the Total Labour Force in 1969 ....................................................................................... 183

Table 6 : The Government's Demand for Scientific and Technological Manpower Projected for the Period of 1972-1976 .................................. 191

Table 7 : The Demand of the Government for the University Graduates of the Academic Year 1973 ................................................................. 194

Table 8 : Faculty Distribution of Respondents in the CMU Sample ...................................................................................................................... 203

Table 9 : Faculty Distribution of Respondents in the CU Sample ...................................................................................................................... 204

Table 10 : The Numerical Values of Correlation Coefficients of Group 1 ........................................................................................................ 213

Table 11 : The Numerical Values of Correlation Coefficients of Group 2 ........................................................................................................ 214

Table 12 : The Numerical Values of Correlation Coefficients of Group 3 ........................................................................................................ 215

Table 13 : The Numerical Values of Correlation Coefficients of Group 4 ........................................................................................................ 216

Table 14 : The Numerical Values of Correlation Coefficients of Group 5 ........................................................................................................ 217

Table 15 : Percentage Distributions of Students by Social Backgrounds ........................................................................................................ 222
Table 16: Group 1 of Correlations .............................................. 227
Table 17: Group 2 of Correlations .............................................. 228
Table 18: Group 3 of Correlations .............................................. 228
Table 19: Group 4 of Correlations .............................................. 229
Table 20: Group 5 of Correlations .............................................. 230
Table 21: Responses to Question 3 ............................................ 231
Table 22: Responses to Question 4 ............................................ 232
Table 23: Responses to Question 5 ............................................ 233
Table 24: Responses to Question 6 ............................................ 234
Table 25: Responses to Question 7 ............................................ 235
Table 26: Responses to Question 8 ............................................ 236
Table 27: Responses to Question 9 ............................................ 237
Table 28: Responses to Question 10 ........................................... 238
Table 29: Responses to Question 11 .......................................... 239
Table 30: Responses to Question 12 .......................................... 240
Table 31: Responses to Question 13 .......................................... 241
Table 32: Responses to Question 14 .......................................... 242
Table 33: Responses to Question 15 .......................................... 243
Table 34: Responses to Question 16 .......................................... 244
Table 35: Responses to Question 17 .......................................... 245
Table 36: Responses to Question 18 .......................................... 246
Table 37: Responses to Question 19 .......................................... 247
Table 38: Responses to Question 20 .......................................... 248
Table 39: Responses to Question 21 .......................................... 249
Table 40: Responses to Question 22 .......................................... 250
Table 41: Responses to Question 23 .......................................... 254
Table 42: Responses to Question 24 ......................................................... 255
Table 43: Responses to Question 25 ......................................................... 256
Table 44: Responses to Question 26 ......................................................... 257
Table 45: Responses to Question 27 ......................................................... 258
Table 46: Responses to Question 28 ......................................................... 259
Table 47: Responses to Question 29 ......................................................... 260
Table 48: Responses to Question 30 ......................................................... 261
Table 49: Responses to Question 31 ......................................................... 262
Table 50: Responses to Question 32 ......................................................... 263
Table 51: Responses to Question 33 ......................................................... 264
Table 52: Responses to Question 34 ......................................................... 265
Table 53: Responses to Question 35 ......................................................... 266
Table 54: Chi-Square Results Showing Differences (or Lack of Differences) in Answers Between Vocational and Non-Vocational Students ......................................................... 290
Table 55: Chi-Square Results Showing Differences (or Lack of Differences) in Answers Between Vocational and Non-Vocational Students in the Amalgamated CMU-CU Sample ......................................................... 296
Table 56: Chi-Square Results Showing Significant Differences (or Lack of Significant Differences) in Answers Between the 1st, 2nd, 3rd, and 4th Year Students in the Amalgamated CMU-CU Sample ......................................................... 300
Table 57: Chi-Square Results Showing Significant Differences (or Lack of Significant Differences) in Answers Between 1st and 2nd, 1st and 3rd, 1st and 4th, 2nd and 3rd, 2nd and 4th, and 3rd and 4th Year Students in the Amalgamated Samples of CMU and CU ......................................................... 303

xii
<table>
<thead>
<tr>
<th>Chart 1 : The Government's Administration of the Universities</th>
<th>26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chart 2 : Administration of the Universities</td>
<td>29</td>
</tr>
</tbody>
</table>
INTRODUCTION

Introductory Remarks

University education in Thailand has now entered into a new era. This is the era in which never before since its inception in 1916, when Chulalongkorn University was established, unprecedented demands have been made upon the present system of university education. Since the 1960's the Thai university education system has been transformed in two major related aspects, namely, the ever-increasing demands being imposed upon university education and, as a result, a number of new universities that have been established. Such expansion of university education is evidenced by the fact that the 1960's and the early 1970's in particular have become a prolific period of establishment of new universities presumably in response to the ever-increasing demands for university education. Five new universities were established within these specific periods of time, thus bringing the total number of the existing universities to ten. The total number of university enrolments has also far more than doubled during these same periods. It has grown from about 30,000 students in 1964 when Chiangmai University was officially opened to about 85,100 students in 1971 when Ramkamhaeng University was founded and is expected to reach the hundred thousand mark or possibly even

1 The newly established universities are Chiangmai University, Khonkaen University, Prince of Songkhla University, Ramkamhaeng University, and the National Institute of Development Administration. Although the National Institute of Development Administration bears the name other than that of a university, it has by its charter a legal status equivalent to other fully-fledged universities in Thailand.
beyond it in a few years ahead.\textsuperscript{2} As we may realize, this phenomenon known as the "explosion of enrolments" of university students indicates that the Thai university education system has witnessed an unprecedented growth in demand within a relatively short span of time.

However, despite this enormous increase in the demand, a scholarly study which attempts to explore social, cultural and vocational aspects of demand for university education in Thailand has never before been seriously undertaken. This relatively unexplored area of investigation to which the present study has addressed itself may perhaps be considered as a terra incognita for a research 'conduc' in connection with this thesis. Moreover, while the well-known accusation that "universities study everything but themselves" cannot be easily refuted, it would not be too presumptuous to say that the investigation into those various aspects of demand with which this thesis is concerned may constitute at least part of the universities' study of themselves. And if demand is indeed a factor of great importance that has brought about such a tremendous expansion of the total enterprise of university education within the past decade or so, it is also hoped that the scholarly investigation into university education from the point of view of demand may be both an interesting and useful work that is worth undertaking. Conclusions which emerge

therefrom may have some far-reaching consequences which will hopefully benefit the many participants concerned with the university education system, regardless of whether they are the government, the university administrators, the teachers, the students or the parents of the students themselves. In addition, it is hoped that the present study, however limited in its scope, may somehow stimulate other scholars and interested students of university education to conduct a further study of other aspects of university education which may still remain unexplored. Those other areas of university education for research may include, for example, the administration of the Thai university education system, the functions of the Thai university education system, and perhaps the Thai university students as a newly emergent political force of growing importance as can be attested to by their leading role in the successful overthrow of Thailand's former military government on the 14th of October 1973. If the emergence of students as an actual political force bears some relationship to their demand for representation in the academic and administrative policy-making of the universities dealt with in the thesis, this thesis ultimately will also contribute in part to our understanding of the students' cherished aspirations for a more active role in a wider political arena.

Having noted that the general scope of the present thesis will be limited to the study of social, cultural and vocational aspects of demand for university education in Thailand, the basic objectives of the thesis may now be summarized.
Objectives of the Study

(a) General  The thesis aims to give an analytical account of a complex of Thai society's social values as well as of the secularization and change of the values which has taken place in the acculturated milieu of Thai society. Since social values may exercise a varying degree of influence upon demands for university education, this analysis of the social values is given with a view to providing a basic social context in which demands so influenced seem likely to be made.

Another general objective of the thesis is to analyze the Thai university education system in its historical, administrative and curricular settings so that we may see how these tend to structure the perceptions of the various demand groups about this university education and by implication about the demand they make upon it.

(b) Specific  The specific objectives of the thesis are threefold.

First, the thesis undertakes a scholarly investigation of Thai society's "demand" for university education. Specifically, this demand is generated chiefly by parents and their children who belong to the urban, middle-class group. The thesis explores in particular the demand for intellectual knowledge, for professional training and for higher social status which the parents/children group make presumably as a result of their being influenced by certain social values of Thai society.
Secondly, the thesis examines the Thai government's "manpower requirements" demand for economic and social development and the demand of the business labour market for certain categories of university-trained personnel. In making their demand, both the government and the business appear to be influenced by some utilitarian values considered as instrumental to an achievement of the government's purpose of economic and social development and the purpose of rational operation of business enterprises.

Thirdly, the thesis empirically studies by means of the written questionnaire demands which the samples of 200 undergraduate students at Chiangmai University and 100 undergraduate students at Chulalongkorn University have made upon the university education system. Based upon the findings of the questionnaire, the demands of the students appear, for example, to be for the following.

(1) Intellectual knowledge for its own sake.
(2) Professional training.
(3) Higher social status.
(4) University courses which can be helpful for advancing the students' future careers.
(5) Admission of students to the universities on the basis of their academic qualifications and achievements rather than on the basis of ascriptive criteria.
(6) Achievement-oriented view of knowledge from university education which can influence students' future career life.
(7) University degrees as a means upon which success in students' future life actually depends.

(8) Academic and career achievements as a means upon which success in students' future life should depend.

(9) Social activities as equal in importance to academic studies during the university career of students.

(10) Representation of students in the universities' academic policy-making.

(11) Seminars as a more effective method of teaching and learning than lectures.

(12) Close personal teacher-student relations not at the expense of the discipline of students.

(13) Prestige of the university teaching profession in Thai society.

(14) Courses in the humanities as useful to students' professional careers and their inclusion in the universities' curricula.

(15) University courses geared more towards satisfying students' intellectual interests than towards meeting their career needs.

(16) Current problems and needs of Thai society as the main priority of university courses.

(17) Preservation of traditional Thai culture as the main priority of university courses.
In making those various demands, the students may presumably be influenced to a varying degree by certain social values of the society and by the social values which may influence the demands of the parents/children group, of the business community and the government — values that seem to come into conflict at the point of their interface.

Methods and Sources

In order to obtain required information and data for the present study, three principal methods of research are actually employed in conjunction with each other. These consist of a written questionnaire survey, informal personal interview and documentary research. The required information and data to be utilized in the writing of this thesis are thus derived specifically from the following three sources.

1) The written questionnaire The written questionnaire which constitutes a primary source of required information for the thesis is used to empirically investigate the demands of two samples of university students. The conduct of the questionnaire survey and the sampling techniques used will be discussed in some detail in Chapter V which deals with the analysis of the main findings of the questionnaire administered to the two selected samples of student respondents.

2) Personal interviews. In addition to the written questionnaire to the students, the personal interviews with university bureaucrats also constitute a primary source of required
information and data for the thesis. The purpose for which the interview techniques were used was to elicit some attitudes and facts pertaining to the various aspects of demand for university education dealt with in this thesis. Attitudes and facts thus elicited from the university bureaucrats may well serve as additional information helpful for further understanding and interpretation of the information and data that had been obtained from the written questionnaire to the students and from other documentary sources. The valuable first-hand information and data yielded by the interviews could not be found in other documentary sources and in some cases was more up-to-date than the information found in the documentary sources.

A series of informal interviews was conducted personally with a number of selected high-ranking university administrators and high-ranking faculty members. These senior university bureaucrats included a rector of Chulalongkorn University, three vice-rectors of Chiangmai University, the deans of the seven constituent faculties of Chiangmai University, the deans of the eleven constituent faculties of Chulalongkorn University, the Secretary-General of Chulalongkorn University, the deputy dean of the Faculty of the Humanities at Chiangmai University, and some heads of the academic departments at Chiangmai University. The informal interview schedules, based partly upon the questionnaire to the students, employed mostly unstructured or open-ended questions, the contents of which were in practice varied to a certain degree so as to suit the specific official capacity in
which each interview respondent was serving at the time. The interviews ranged in their duration from about 25 to 45 minutes or thereabouts, depending upon the amount of time allowed by each of the respondents concerned. A state of rapport (i.e., warmth and friendliness) was established and developed between the interviewer and the respondents while the interviews were being conducted.

3) **The documentary sources.** These constitute both primary and secondary sources of required information and data for the thesis. As primary sources of information and data, a number of useful and relevant official publications issued by the Thai government were extensively consulted and utilized. These publications deal either wholly or partly with many different aspects of the Thai university education system. They include, for example, the national economic and social development plans, the national education development plans, seminar reports, summary reports, bulletins, announcements and catalogues of various universities, statistical information manuals and so on. Such publications and documents were obtained directly from the Thai government agencies concerned with university education and the formal educational system in general. They are, in particular, the National Education Council, the National Economic Development Board, the Ministry of Education and several universities.

As secondary sources of information, we have relied chiefly upon a large number of books and scholarly journals dealing either generally or specifically with the themes of
university education, economic and social development, social values, high-level manpower and the like. Apart from providing useful and relevant information and data concerning demands for university education in Thailand, the books and scholarly journals dealing with these themes have also provided an essential theoretical context for this thesis. The books that have been used are those written and published mostly by Western scholars with the exception of some books written and published by Asian and Thai scholars. Books found to have been very useful are those published by the United Nations Educational Scientific and Cultural Organisation (UNESCO) and by the Association of Southeast Asian Institutions of Higher Learning (ASAIHL). The leading scholarly journals fall into two major categories. Those belonging to the first category are the journals published in Thailand by the Thai government agencies, some learned associations and scholarly organizations. Relevant Thai educational journals include the Journal of the National Education Council and the Social Science Review. Those belonging to the second category are the English-language journals which are published in Western countries and contain a number of interesting and informative articles written by Western scholars as well as Asian and Thai scholars. While these journals are too numerous to mention, some of them which have been found very helpful are Comparative Education Review and Teachers College Record. (The bibliography at the end of the thesis provides a detailed list of the documentary sources that have been utilized).
Limitations

Since university education encompasses so broad an area of scholarly investigation, it cannot be dealt with in its entirety within the scope of the small piece of research that has been undertaken for this thesis. Therefore, the present study obviously is not intended to present the entire spectrum of the Thai university education system. Given this limitation, the thesis then focuses upon an examination of the social, cultural and vocational aspects of demand for university education in Thailand while at the same time giving due attention to a discussion of the historical, administrative and curricular aspects of this education as well as of the complex of Thai social values, traditional as well as modernizing, as a social context in which demands may be made. Apart from such a broader limitation, some more specific limitations of the thesis can be noted.

First, whether or not the results from the two samples of the questionnaire survey may probably be used to represent the demands of the wider population of university students in Thailand cannot be determined with certainly. The external validity of the findings of the questionnaire to be discussed in Chapter V may at best be assumed due to the fact that a large majority of university students are drawn from the urban middle-class section of the population (see information on the occupations of the students' parents and on the source of their financial support provided in Appendix B at the end of the thesis). This research is merely an attempt to do what others have not done. It by no
means lays claim to being perfect but instead should be considered as experimental. It may also be generalized that the demands of the students may undergo some modification or change at other periods of time than when this survey was conducted.

Secondly, the demands of the students as examined and discussed in this thesis are by no means inclusive. There may be many more demands which the students may possibly generate upon the universities — demands which can also be qualitatively different from those already covered by the research for this thesis. The thesis thus leaves something to be desired insofar as the coverage of the demands of the students is concerned.

Thirdly, the paucity of required information concerning social values in Thai society has made it impossible for the thesis to probe more deeply into the complex of Thai social values not only in absolute terms but also in relation to the extent of the influence of those values upon the demands for university education. The amount of such information that was made available is insufficient and much of this information is derived from articles in scholarly journals and in books written and published by Western scholars. Information concerning social values that is written by Thai indigenous scholars who may claim to have more profound understanding of the values in their own society is found in a very small and inadequate amount. Even more true is the fact that apparently no attempt so far has ever been made by Thai or Western scholars to do academic research on the secularization of Thai social values and on how Thai and Western institutions have influenced the secularization of traditional
Thai/Buddhist values. This limitation has indeed beset our effort to describe with more penetration the secularization of traditional Thai/Buddhist values towards their reflection in university education.

Fourthly, actual figures of demand for university education from the public as well as private sectors of the Thai economy have been found to be grossly inadequate. A dearth of fragmentary national statistics on demand for university education to which we could gain access has hampered our measurement of demand for university education, let alone delving deeply into the study of such demands. Despite all possible attempts to collect the required statistics that were available while carrying out the field work in Thailand, we still have to make do with such a very limited quantity of those statistics, trying always to avoid using projections of figures stated in national plans.

**Definition of the Term 'University Education'**

In order to avoid unnecessary confusion which may arise in connection with the use of one important term and also to make its meaning clearly understood, there is a need to define this term which has to be used throughout the thesis.

The term "university education" as we use it in this thesis and as is well understood in Thailand's academic circles can be distinguished from the term "higher education". Although both terms are of wide currency, they are not meant to be synonymous with each other. In Thailand, while institutions in
the pattern of contemporary university education consist exclusively of the institutions called "universities" in the sense universally understood, other institutions in Thailand which provide vocational education at the "tertiary level" (better known in Thailand as "higher education") usually include the institutions in the categories of teachers' colleges and technical institutes which altogether number almost a hundred. To be more exact, these teachers' colleges and technical institutes are collectively known as the institutions of higher education. Within the foregoing context of the distinction between these two major types of educational institutions, the institutions in the pattern of university education in Thailand at present specifically include a total of ten universities. The Thai university education system is therefore made up of the following ten universities. (See also Footnote No.1 of this "Introduction" to the thesis).

(1) Chiangmai University
(2) Chulalongkorn University
(3) Kasetsart University
(4) Thammasat University
(5) Khonkaen University
(6) Prince of Songkhla University
(7) Mahidol University
(8) Silpakorn University
(9) Ramkamhaeng University
(10) The National Institute of Development Administration.
Organization of the Thesis

The thesis is divided into five major chapters, in addition to the Introduction and the Conclusion. The chapters which constitute the plan of the thesis are as follows.

Chapter I considers the historical, administrative and curricular aspects of the Thai university education system. These aspects may be viewed as a context in which that education takes place and in which some of the demands for that education may be implied and thus structured.

Chapter II discusses at some length the complex of Thai society's social values and also treats of the secularization and change of the traditional Thai/Buddhist values. Values of the society provide a basic frame of reference from which demands for university education tend to result.

Chapter III is devoted to an examination of the demand for university education that is generated by the parents/children group. The chapter attempts to consider how some Thai social values about what university education can do for this social group determine the demand itself.

Chapter IV concerns itself with an investigation of the demands which the business community and the government impose upon the university education system. After discussing the demand of the business for certain occupational categories of university graduates, the chapter presents an analysis of Thailand's national goals as a basic framework within which the government makes its
Chapter V, the longest of all the chapters, deals with the study of demands which the two samples totalling three hundred students have made upon the Thai university education system. The demands are based upon the findings of the questionnaire survey. In this chapter some statistical techniques are used to analyse data obtained from the questionnaire.
Chapter I

The Setting For University Education

This chapter discusses three major aspects of university education in Thailand, namely, the historical, administrative and curricular aspects. Each of these aspects will be dealt with in each separate section. In the section that follows we shall first describe the historical evolution of university education in Thailand.

Thai University Education in Historical Perspective

The historical development of university education in Thailand from its inception in 1917 has been inextricably linked with the pragmatic considerations of the monarchical regimes in the past. That is, the demands of the government had substantially influenced the organization of the instruction in the university, although only an exclusive restricted group of the Thai citizens gained direct access to that university education. At that time, the system of university education was primarily regarded by the government as a means of providing trained manpower for administration and some other specialized fields.¹ In actual fact, since the

last years of the 19th century the personnel requirements of the reconstructed bureaucracy were perhaps the most significant stimulus of the development of tertiary education in order to cope with the demands of the expanding bureaucracy. Therefore, well into the beginning of the twentieth century most of the facilities for higher education were preparatory to bureaucratic careers in the government. To serve this purpose, the then absolute monarchy established the Royal Pages School in 1902, to be later reorganized as the Civil Service School in 1911 and afterwards in 1917 was incorporated into a new edifice called Chulalongkorn University, the first institution of higher education ever established. Within the broader context of a fully-fledged university such as this one, the sharp focus of the earlier pre-service training tended to be somewhat blunted. Such has been the pragmatic beginning of university education in Thailand — an education geared primarily towards serving the needs for trained manpower of the Thai bureaucracy then under the pressure of modernization of the country along Western lines.

The exigencies of such a historical beginning of the Thai university education have perhaps played a major role in the dimension of the curricular content and formulation. Courses of study in the initial phase of the development were, needless

---

3 Ibid., pp.106-107.
to say, formulated with the pragmatic purposes of the government in mind. That is to say, those courses were all primarily geared towards fulfilling the needs of the bureaucracy by producing trained manpower for the civil service. When Chulalongkorn University was founded, courses of study that were offered included medicine, law, education, agriculture, commerce, foreign relations, engineering, public administration, political science, and arts and sciences. These courses were then considered necessary to help produce a new generation of leaders, bureaucrats and other qualified personnel so urgently needed for the modernization of the government and administration as well as of the country.

With this pragmatic origin of the Thai university education system in view, perhaps two patterns in the historical development of university education may be readily discerned.

1. The universities that came into being before 1960. These include, for example, Chulalongkorn University, Thammasat University, Kasetsart University and Silpakorn University.

2. The universities and other institutions of higher education that were founded during the 1960's and in the early 1970's. These include, for example, Chiangmai University (1964), Khon Kaen University (1964), Prince of Songkhla University (1968), the National Institute of Development Administration (NIDA), and Ramkamhaeng University established in 1971.

There is perhaps one important point to be noted regarding the establishment of these new universities. They have all been brought into being in response to the increased demands of the
society and of the government itself at a time when economic
development of the country is under way. Other additional reasons
that would probably account for the opening of these new
institutions may be that older universities have already reached
their optimum expansion.

The universities' single objective of producing
professional personnel for the civil bureaucracy has been maintained
for a long period of time. But beginning in the 1960's the
universities have adopted a role of supplier of specialized high-
level manpower in various fields for both public and private
sectors of the economy in response to the demands of the economic
and social development already set in motion.\(^4\) The adoption of
this expanded role of the universities has resulted, for example,
in the proliferation of course offerings, the upgrading of the
quality of the faculty members, the setting up of the post-
graduate programmes in many fields, and so on.\(^5\) One important
innovation introduced during this period is the universities'
offering of the courses in general education (which includes the
humanities, social sciences and sciences) to provide a "liberal

---

\(^4\) See Vinyu Vichit-Vadakan, "The Universities and the Government:
Some Comments on the Experience of Thailand" in Yip Yat Hoong
(ed.), Roles of Universities in Local and Regional Development in
Southeast Asia (Singapore: Regional Institute of Higher Education

\(^5\) Post-graduate courses are offered on a full-time basis in the
National Institute of Development Administration (NIDA) and on a
part-time basis in some other universities such as Chulalongkorn
and Kasetsart Universities.
arts" orientation and to help broaden the students' knowledge before they receive a specialized professional training of their choice.6

The concept of an "open" university was first made known in Thai university circle with the establishment in 1971 of Ramkamhaeng University. Initially, it was the demand for more places in the universities on the part of some section of the public and of some members of the legislature that brought the idea of establishing an "open" university out into the open. One of the primary professed aims of Ramkamhaeng University is to make university education available to the students who have no opportunity to pursue university education in the universities that require entrance examinations before admission. Usually financial, geographical, and academic reasons would account for such a lack of opportunity. It is also advocated that once an "open" university like this one has been established it might provide an ideal response to the existing demand for "second chance" university education. Working career men and women would thus be able to update their knowledge by taking courses that do

---

not conflict with their working hours.7

Enough has perhaps been said about the historical
development of the Thai university education system from the
beginning up to the present time. Although this section has
described this historical development in an outline form, it is
hoped that this would probably be sufficient to know how this
evolution of the university education has structured people's
perceptions of university education as it is known in Thailand.
Having taken a look at the historical aspect of the Thai university
education system, it is appropriate that we now consider some
aspects of the administration of that university education system.

Administration of the Thai University Education System

This section will be concerned with certain administrative
affairs of the university education system — those concerning
decision-making, finance, organizational structures, the way
in which the universities respond to some structures of demand,
and the like.

As far as the administration of the Thai university
education is concerned, universities for many years were closely
connected with the various government ministries. This is so


See also Amara Raksasataya, "Ramkamhaeng: The Open-Door University Reexamined," in Yip Yat Hoong (ed.), Roles of Universities in Local and Regional Development in Southeast Asia (Singapore: Regional Institute of Higher Education and Development, 1973), pp.142-159.
because the universities (except Chulalongkorn University then under the official jurisdiction of the Ministry of Education) that had been established before the 1960's were founded by the initiative of several government ministries in order to produce trained personnel to serve in the ministries concerned. For example, in the case of Kasetsart (agricultural) University and that of the University of Medical Sciences (now Mahidol University), the prime movers were the Ministries of Agriculture and of Public Health respectively. As a result, these two universities were administratively under the jurisdiction of the Ministries of Agriculture and of Public Health. However, after the 1958 coup d'etat which brought in its wake the era of economic and social development planning all the then existing universities (Chulalongkorn University, Thammasat University, Kasetsart University, the University of Medical Sciences, and Silpakorn University) were transferred from the ministries concerned to be placed under the centralized administrative jurisdiction of the Office of the Prime Minister. The stated purposes for doing this were that such a centralization of university administration would help facilitate an overall coordination of university functions and larger financial support from the government's budget allocations.

Thereafter in October 1972 the Bureau of the Universities was established as a central coordinating body charged with the
management of the university enterprises. Following the establishment of the Bureau of the Universities, the responsibilities formerly assigned to the two government agencies have therefore been transferred to the newly created Bureau of the Universities. This Bureau has now become the sole government agency charged with the responsibility for coordinating the affairs of all the universities in Thailand. This new administrative setup was created with the objective of forging a link between the universities and the government—a link that is intended to be both more direct and more flexible than formerly. Such a more direct and more flexible link would thus allow individual universities to enjoy more autonomy in the management of their internal affairs.

The Bureau of the Universities has the legal official status of a government ministry headed by a cabinet minister. Within the Bureau of the Universities is a fifteen-member State University Committee which comprises five ex-officio members and

---

8 Aroon Sorathesn and Wichit Srisa-an, "New Dimension in University Governance", in Prachoom Chomchai (ed.), Meeting the Challenges of the 70's: Managing the University (Bangkok: Association of Southeast Asian Institutions of Higher Learning, 1973), p.123.

9 Two separate government agencies had earlier shared the responsibilities for a coordination in the conduct of university affairs. The first agency was the Prime Minister's Office which functioned as a clearing-house in charge of administrative routine works. The second agency was the National Education Council charged with coordinating the university works in the spheres of academic standards and university personnel policy and practices.

10 Aroon Sorathesn and Wichit Srisa-an, op. cit., p.123.
the other ten members appointed from qualified persons by the King upon the recommendation of the government. *Ex-officio* members include:

1. The Minister of the Bureau of the Universities,
2. The Under-Secretary of State for the Bureau of the Universities,
3. The Director of the Budget Bureau,
4. The Secretary-General of the National Education Committee,
5. The Secretary-General of the Economic Development Committee.

This State University Committee is charged with advising the Bureau of the Universities in the following matters, *viz.*,

- minimum academic standards of university education;
- personnel policies and practices of the universities and financial needs of the universities.

The organizational chart below will give us an idea of what the government's system of university administration looks like.
Chart 1: The Government's Administration of the Universities.

Source: Aroon Sorathesn and Wichit Srisa-an, "New Dimension in University Governance", in Prachoom Chomchai (ed.), Meeting the Challenges of the 70's: Managing the University (Bangkok: ASAIHL, 1973), p.125.

Each university has the legal official status of a government department (krom) within the Bureau of the Universities. Universities are run by an official body called the University Council. The University Council usually has a broad power and authority to manage the affairs of the universities.

11 Beginning early in 1971, the Rectors' Conference provides a forum for the rectors of the universities to exchange ideas and discuss problems of common concern to the universities. This Rectors' Conference is seen as a potential influence upon university governance.

12 University teachers are civil bureaucrats entitled to salary scales and other fringe benefits equivalent in amount to those received by civil servants of the same grades who work in other government departments and ministries.
academic as well as administrative. Members of the University Council ordinarily fall into three categories, namely,

1. The Chairman of the Council, appointed by royal command upon the recommendation of the government.

2. **Ex-officio** members comprising the Rector, Deputy Rectors, Secretary-General and Deans of the constituent faculties of the universities concerned.

3. Nine other members, mainly from outside the universities, appointed by the royal command upon the recommendation of the government. The President of the Faculty Senate usually belongs to this category.

The Rector serves as the administrative head of the universities. He is appointed by the University Council for a four-year term and is eligible to stand for appointment for another term in office. In the University Council of each university the Rector serves as the Vice-Chairman of that University Council. The Council appoints a permanent Secretary-General to serve as Secretary to the Council and concurrently as Secretary-General of the University to assist the Rector in the management of the universities concerned.

Next to the University Council are various advisory bodies like the Council of the Deans, the Faculty Senate and a number of other standing committees. One of the main functions of the Council of the Deans is to advise the Rector about the performance of his administrative functions. Another administrative unit of the universities is a Faculty Board which is charged with
a responsibility for curriculum development and other matters concerning academic instructions within the scope of the Faculty. The Faculty Board is composed of two representatives from each academic department within the Faculty, normally one of them being the head of the department concerned while the other being a representative of the faculty members within the department. The Faculty Board is presided over by the Dean of the Faculty who is appointed for a four-year term. Finally, mention should also be made of the Faculty Senate which is an advisory body. The Senate consists essentially of about 45 members elected from among the university's faculty members. It serves as an advisory body to the Rector in matters pertaining, for example, to academic affairs, student discipline, professional qualifications and ethics of university teachers and the like. The following organizational chart will enable us to see what the system of university administration is like.
Chart 2: Administration of the Universities

Source: Aroon Sorathesen and Wichit Srisa-an, "New Dimension in University Governance", in Prachoom Chomchai (ed.), Meeting the Challenges of the 70's: Managing the University (Bangkok: ASAIHL, 1973), p.127.
Having dealt with the general administration of the university education system in Thailand, let us now take a look at the finance of the universities. The structure of the administration of the universities in Thailand is such that all the universities have to rely heavily upon the government for annual subsidies.\textsuperscript{13} Since each university is regarded as a government department, the only major source of income is the annual grants from the government's budget allocations.\textsuperscript{14} The other source of university income is tuition fees collected from the students but this generally constitutes less than one-fifth of the financial requirements of the universities for each year.\textsuperscript{15} Other additional source of income is almost non-existent except for Chulalongkorn University which has income from its Land Development Programme to add to the budget allocations from the government.\textsuperscript{16}

\begin{itemize}
  \item \textsuperscript{13} Vinyu Vichit-Vadakan, \textit{op.cit.}, p.83.
  \item \textsuperscript{14} On the average, the government grants account for about 85\% of the total amount of income of each university. The share of university education budgets represents about 15\% or so of the education budget of the country or about 2.8\% of the national budget, or about 0.48\% of the Gross Domestic Product. See Ministry of Education, \textit{A History of Thai Education} (Bangkok : Kurusapha Ladprao Press, 1976), p.119.
  \item \textsuperscript{15} \textit{Ibid.}, p.120.
  \item \textsuperscript{16} Universities usually receive from time to time donations from commercial banks, companies, private organizations and other benefactors. Proceeds from these donations are intended to be used as scholarship grants to the needy students and thus do not add to the university's income.
\end{itemize}
The amount of budget allocations that each university will receive depends in large measure upon the budget proposals prepared by the universities concerned for submission to the government. There appear to be no definite criteria that the government uses in allocating the budgets to the universities, be it the criteria of size of enrolments, size of the universities or other expenses to be incurred. The only major criterion that seems to help the government in deciding upon the amount of the allocations is the items of current expenditure listed in the budget proposals each university submits. After the budget proposals are screened by the National Economic and Social Development Board they will be finalized by an appropriate authority, the Bureau of the Budget which makes actual allocations. The Bureau of the Budget allocates the budgets in the form of annual itemized grants, with a stringent control exercised over the universities' expenditure by the Bureau itself and the Ministry of Finance. All accounts of the universities are subject to annual post-auditing by a special government auditing agency. The following table will indicate the government's budget allocations each university receive for a five-year period of 1967-1971.

17 Vinyu Vichit-Vadakan, op.cit., p.83.

18 Aroon Sorathesn and Wichit Srisa-an, op.cit., p.128.
### Table 1

Government Subsidies to the Universities

(in million baht)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kasetsart</td>
<td>44.4</td>
<td>61.9</td>
<td>67.8</td>
<td>71.5</td>
<td>79.1</td>
</tr>
<tr>
<td>Chulalongkorn</td>
<td>67.8</td>
<td>65.7</td>
<td>88.3</td>
<td>120.6</td>
<td>138.7</td>
</tr>
<tr>
<td>Thammasat</td>
<td>23.3</td>
<td>29.5</td>
<td>29.2</td>
<td>29.3</td>
<td>38.9</td>
</tr>
<tr>
<td>Mahidol</td>
<td>134.6</td>
<td>197.8</td>
<td>138.4</td>
<td>213.4</td>
<td>220.4</td>
</tr>
<tr>
<td>Silpakorn</td>
<td>12.7</td>
<td>11.2</td>
<td>20.7</td>
<td>19.0</td>
<td>25.6</td>
</tr>
<tr>
<td>Chiangmai</td>
<td>85.2</td>
<td>90.8</td>
<td>77.2</td>
<td>86.3</td>
<td>102.4</td>
</tr>
<tr>
<td>Khon Kaen</td>
<td>34.0</td>
<td>38.6</td>
<td>31.8</td>
<td>32.2</td>
<td>62.2</td>
</tr>
<tr>
<td>Songkhla</td>
<td>23.7</td>
<td>24.5</td>
<td>51.3</td>
<td>55.1</td>
<td>60.7</td>
</tr>
<tr>
<td>NIDA (National Institute of Development Administration)</td>
<td>18.8</td>
<td>18.2</td>
<td>18.5</td>
<td>11.1</td>
<td>13.1</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>444.5</strong></td>
<td><strong>538.2</strong></td>
<td><strong>523.2</strong></td>
<td><strong>638.5</strong></td>
<td><strong>741.1</strong></td>
</tr>
</tbody>
</table>

**Note:** US $ 1.00 = 20.80 Baht (approximately)

It is believed that the government's current use of itemized budgets does not give the universities enough leeway to formulate budgets according to their needs. Attempts are therefore being made to adopt a more flexible budgeting procedure by substituting the "block grants" for the itemized budgets. It is also believed that the universities should be granted more autonomy in the management of their internal affairs, especially in the matter of finances. A loosening of governmental control over the funding of universities is considered essential if the universities are to achieve progress in their functions. In actual fact the universities would prefer the government's role of support and coordination in their relations with the government. Whether or not this can be accomplished remains to be seen.

The foregoing is our description of how Thai universities are financially supported and how the universities have viewed that a weakness is inherent in such a system of financing. Up to this point it is also considered useful to touch upon how decisions are made, for example, concerning the structure of faculties, the structure of enrollments or concerning new universities and the like. Mention will also be made of the way in which the universities respond to some structures of demand.

19 Ibid., p.128.
In the decision-making process of the Thai universities, the Bureau of the Universities and the University Council of each university occupy a key role. Among the major responsibilities of the Bureau are top-level policy-making and planning, setting the standard of universities' curricula and university personnel administration. The University Councils are, as already mentioned elsewhere, the governing bodies of each individual university. The Councils have a great deal of power and authority in the areas, for example, of appointments of academic personnel, approval of courses and curricula, academic standards of the universities, establishment of faculties and departments, admission and enrolment of students, and the like. The rector, as the executive head of the university, will implement the decisions and the policies laid down by the University Council. There may appear to be an overlap in decisions made and policies laid down by the Bureau of the Universities and by the University Councils. This actually is not the case since the Bureau of the Universities serves as a single coordinating agency between the university education system as a whole and the government. The Bureau usually provides broad policy guidelines as approved and authorized by the cabinet and it is the university council which will see to it that policies and programmes based upon such guidelines are actually administered and implemented by the universities.

Decisions concerning, for example, the structure of faculties and the structure of student enrolments are usually
made by the University Council which is charged with the responsibility for the administration of these and other kinds of academic affairs. The division of the faculties into academic departments, curriculums and courses of study to be taught, the composition of each department, the appointment of faculty members and the like all require formal approval of the University Council before they are actually implemented. The same is of course true of the structure of student enrolments in each separate faculty. The admission of new students at the beginning of each academic year, the number of students to be enrolled in each department and faculty, and so forth have to be decided upon and approved by the University Council.

As regards decisions to establish new universities, these decisions seem to be structured differently, depending upon the different circumstances that prevailed before the new universities were created. Those considered to be new universities in Thailand are Ramkamhaeng University, National Institute of Development Administration (NIDA), Khonkaen University, Prince of Songkhla University and Chiangmai University. These institutions were all brought into existence during the 1960's and the early 1970's. Let us first say something about how decisions are made concerning the establishment of Ramkamhaeng University, the newest of all universities created in 1971. Insofar as information on the establishment of this university were available, it was a demand for more places in the universities that ultimately led
to the founding of Ramkamhaeng University.\textsuperscript{20} The idea of creating this new university initially got endorsed by some leading Thai educators, a number of MPs in the House of Representatives as well as a sector of the public comprising thousands who wanted university education but could not get admitted into the other existing universities. With political lobbying in the House of Representatives, the Bill was finally passed, authorizing the establishment of Ramkamhaeng University on an "open admission" model (i.e., admission of students is not restricted and no entrance examinations are required). To date this University offers university education in such fields as law, business administration, education, humanities, political science, economics and sciences. Judging from what we have said about how this University was ultimately created, it may be realized that decisions concerning the establishment of this University seem to be structured by distinctly non-functional, non-economic oriented demand generated by a sector of the population.

Decisions to establish the National Institute of Development Administration (NIDA) seem on the other hand to be structured by rather functional and economic-oriented demand of the government itself. The government established NIDA for the purpose of offering post-graduate instructions in such development-
oriented fields as public administration, business administration, development economics and applied statistics. It is believed that graduates trained in these fields of study could contribute to the progress of economic and social development presently underway in that they will be able to more efficiently run the government bureaucracy and the business enterprises. NIDA, an outgrowth of the Institute of Public Administration previously affiliated with Thammasat University, was established in 1966 and since then has been the only institution that offers post-graduate courses on a full-time basis.

Just as NIDA was established by the decisions based upon such a functional and economic-oriented demand, so also were the other three universities established by the government's decisions to meet the functional and economic-oriented demand generated by the on-going economic and social development of the country. These three universities are Chiangmai University established in 1964 in the north, Khon Kaen University also established in 1964 in the northeast and Prince of Songkhla University opened in 1968 in the South. The government established these universities with the objective of producing trained personnel to meet the increasing demand for high level manpower generated by economic development and with the objective of trying to achieve a more geographically balanced economic and social development by spreading the benefits thereof to the three
main regions of the country. Perhaps these three universities are also intended by the government to satisfy a demand for university education that has appeared to be on the increase since the government first tried to implement its economic development plan in the early 1960's. With respect to the academic disciplines the three universities have offered to their students, we see that not only courses in the scientific-technological fields of study are taught but also instructions in social sciences and humanities courses are imparted. Students can therefore be trained in engineering, medicine, agriculture, sciences, education, social sciences and the humanities. It is still premature to judge whether or not these universities will succeed in the objectives envisaged by the government in creating these universities. But as it is at present, it seems unlikely

21 It seems that the three universities are "regional" universities more in name and in theory than in practice. A major reason for this is that their students are actually drawn from every region of the country including the Bangkok-Thonburi metropolitan area where a large percentage of students come from. Graduates from these universities thus cannot be persuaded to make their contributions to the development of the regions and in fact want to find employments in places which suit them better. From one point of view it may be seen that student intake into these three universities help relieve the overconcentration of students in the universities located in the Bangkok-Thonburi metropolitan area.

22 See the Bureau of the Universities, Guides to University Education (Bangkok: Office of the Under-Secretary of State, Bureau of the Universities, 1976), p.2.

that the government will fulfil its objectives at least in the foreseeable future.

As to the way in which the Thai universities respond to some structures of demand, this will be mentioned in passing since information concerning this aspect of the university education system in Thailand is very difficult to find. So, what will be stated about the response to demand tends to be generalized statements on the basis of such a scanty information. It would seem that universities in developing countries such as Thailand will have to make their contribution to the development of the country. To do this, the universities have to respond to the demands not only of the government and along with it those of the private sector but also must serve the demands of the broader society. In this respect, a dilemma confronting Thai universities is that while they aim to be centers of scholarly learning, they must at the same time fulfil both the manpower and educational demands of the country. Generally speaking, there appear to be two major different structures of demand that the universities respond to, namely, the demand for high-level manpower of the government and of the private sector of the economy and the demand for university education of the parents/children group and students drawn largely from the urban middle-class section of the population.

In an attempt to respond to the demand for high-level manpower of the government and of the private sector consisting of business and industry, the universities have, for example, set up the programmes to provide training in certain professional areas and disciplines that will benefit both the government and the private sector. Production of graduates trained, for example, in engineering, medicine, agriculture, sciences as well as in some other fields of specialization tends to be acceptable at a time when national socio-economic development goals require an increase in high-level manpower that can be produced through the setting up of such programmes of training. In similarly trying to respond to the demand for university education of the parents/children group and students who mainly represent the middle-class section of the society, the universities have, for example, found it necessary to admit an increasing number of students to the classes at the beginning of each academic year, to initiate programmes of study that can be tailored to the needs and capacity of the students concerned, to arrange for training of students in the courses of study that could be useful to their future careers, and the like. With this we complete our brief and generalized description of how the universities have done something to respond to different structures of demand. We shall now proceed to consider the curricular aspect of the Thai universities.
Structure of Courses and Course Contents of University Education in Thailand

In this section we shall attempt to analyze the structure of courses and the contents of the courses as well as the extent to which those courses are oriented towards vocational and non-vocational interests. All this is attempted so that our subsequent discussion of the meaning of Thai university education (e.g., with respect to vocational vs. non-vocational students and expectations) will not remain disembodied from the reality of this education system. But since the whole gamut of courses' structure and contents encompass so broad a range of subject matter as to become manageable it cannot be discussed in its entirety. Selections have therefore to be made concerning the structure of courses and the contents of the courses to be included in this section of the chapter. In the case of Chiangmai University, we shall discuss the structure of courses and the contents of the courses that are offered in the Faculties of Social Sciences, the Humanities, Engineering and Agriculture. Courses in the first two Faculties are intended as examples of non-vocational courses while those in the other two Faculties will serve as examples of vocational courses. In the case of Chulalongkorn University, courses that are taught at the Bachelor's degree level in the Faculties of Sciences and Arts will be discussed. Courses in sciences are regarded as examples of vocational courses while those in arts will be examples of non-vocational courses.
Let us first consider the undergraduate courses of the four faculties of Chiangmai University. The contents of the courses and the extent to which these courses are oriented towards vocational and non-vocational interests of the students will also be described. The undergraduate curriculum of Chiangmai University consists essentially of four major components. These components are:

1. Basic requirements. (The basic requirements are subdivided into general basic requirements and basic requirements for major);

2. Major;

3. Minor; and

4. Electives.

To be awarded a Bachelor's degree the student is required to earn a certain amount of credits ranging from a minimum of 144 credits to a minimum of 150 credits, depending upon the faculties to which the student belongs. To complete the undergraduate curricular requirements by earning such a minimum of credits it usually takes the student about four academic years or about eight semesters. The credits are distributed as follows:

1. Basic requirements consisting essentially of courses in general education (i.e., social sciences, humanities and sciences) usually count about 60 to 65 credits or so.

2. Major usually counts about 55 to 57 credits or so.

3. Minor usually counts about 15 credits or so.
4. Electives usually count about 9 credits or so.

The following shows the specific curricular requirements of the Department of Economics in the Faculty of Social Sciences that we would like to take as an example. 25

1. Basic requirements equal 66 credits.

1.1 General basic requirements equal 39 credits

1.1.1 Humanities 12 credits
THAI 103, 104 6 credits
PSY 103 3 credits
L.S. 103 3 credits

1.1.2 Modern language 12 credits
ENGL. 101, 102, 201, 202

1.1.3 Sciences and Mathematics 15 credits
Any Science course 3 credits
MATH 111, 112, 291, 292 12 credits

1.2 Basic requirements for Major 27 credits
SOC 103 3 credits
GOV 103 3 credits
LAW 103 3 credits
B.A. 103 3 credits
ACC 103 3 credits
GEO 103 3 credits
Mathematics or English 9 credits

25 Curricular requirements and course contents that appear in this chapter are all taken from Chiangmai University, Bulletin 1975-1976 (Chiangmai: Office of the Registrar, 1975).
2. **Major** equals a minimum of 54 credits

2.1 **Required courses**: ECON 101, 102, 202, 209, 301, 302, 303, 304, 308, 309, 401, 405 (3 credits each) equal 36 credits.

2.2 **Electives**: Any courses offered by the Department of Economics. (a minimum of 18 credits).

3. **Minor** equals a minimum of 15 credits.

With the approval of the student's academic advisor, the student can choose as a minor any one of the major disciplines outside his major field of study.

4. **Electives** equal a minimum of 9 credits.

Total: a minimum of 144 credits.

A description of the contents of the courses in economics is given below:

**ECON 101 PRINCIPLES OF ECONOMICS I**

international payments. Economic and social development.

ECON 102 PRINCIPLES OF ECONOMICS II


ECON 201 ECONOMICS HISTORY

Development of European agriculture, industry, finance and international trade since 1750; growth of U.S. economy. A historical survey of the economic growth of some major Asian countries, and of Thailand, with emphasis upon the development of agriculture, industry, finance, and international trade.

ECON 202 HISTORY OF ECONOMIC THOUGHT

A Survey of economic thoughts from ancient days through contemporary economics: Biblical times, Greek and Roman, English-French-German Mercantilism, Physiocrats and their doctrine. Philosophers, disciples, influence and criticism of Classical Economics, Marginal utility Economics. Ideal and scientific of Socialism, Keynesian Economics, Business cycle theorist, price theorist, the old and new Welfare Economics.
ECON 209 INTRODUCTION TO MATHEMATICAL ECONOMICS

This course aims at furnishing the students to understand, as an introductory course, quantitative techniques of economics both in mathematical contexts and as an application to economic problems. It covers: The nature of mathematical economics, Economic models, Types of economic functions, Static (or equilibrium) analysis, Comparative statics analysis, Comparative statics analysis, Maxima and minima, Differentials, Dynamic analysis, Matrix algebra, Difference and Differential equations.

ECON 301 MICROECONOMIC THEORY I

Consumer behavior, Demand, supply, market price, price elasticities, classical utility and consumer demand, Indifference curve analysis and Modern utility theory.


ECON 302 MICROECONOMIC THEORY II


ECON 304 ECONOMIC STATISTICS

This course is intended to emphasize the application of statistics to economic analysis: index numbers, time series,
correlation and the method of least squares.

**ECON 308 MACROECONOMIC THEORY I**

National income concepts. Static and dynamic theories of determination of national income and employment and of business fluctuations.

**ECON 309 MACROECONOMIC THEORY II**


**ECON 330 MONEY AND BANKING**

The nature and function of money and finance; the role of money, kinds of money, monetary standards, debt, credit and finance instruments, finance intermediaries. Commercial banking system and policy. The role of central bank, Central banking system of the U.S.A, U.K. and Thailand. Instruments of monetary policy, monetary policy and fiscal policy. Money market and capital market, credit market in Thailand.

**ECON 332 MONETARY THEORY**

Meaning, changes, measurement and importance of changes of the value of money. The early and improved Quantity Theory, the equation of exchange and the demand for money. Rate of interest, loanable funds and liquidity preference theory. Keynes' Monetary
Theory, money market and IS LM curves, money and Industrial fluctuations, monetary policy and its practice.

ECON 340 INTRODUCTION TO AGRICULTURAL ECONOMICS


ECON 342: LAND ECONOMICS

Study of man and land, the supply of land for economic use, population pressure and demand for land. Land resource requirement, input-output relationships affecting land use and economic returns to land resource.

Land resource development decisions, conservation and values of land resource and the real estate market. Impact of institutional factors on land use. Planning and public measures for directing land use.

ECON 345: TRANSPORTATION ECONOMICS

Transportation and economy, scope of transportation economy, transport location, transportation efficiency, land rent and transportation, importance of transportation.

ECON 347: COOPERATIVE ECONOMICS

Historical development, idea and definition of cooperatives. Rechdale principles and principles of different
types of cooperative organizations. Comparison of cooperative to other economic systems and to other types of business organizations. Development and case study in cooperative problems in Thailand. Cooperative and the economic development of Thailand.

ECON 401 : INTERNATIONAL ECONOMICS


ECON 405 : THEORY OF ECONOMIC DEVELOPMENT

Concepts and theories related to the problems of economic growth in both developed and developing countries. A general survey of economic development theories from the classical era up to the present and comparison and evaluation of those theories.

ECON 410 : INTRODUCTION TO ECONOMETRICS

Concepts and understanding econometric models and methods Deductive and inductive methods as applied in econometrics, Economic vs. econometric models, Microeconometric and macroeconometric models. The ideas and principles of the quantitative analysis of economic phenomena. The relation between
economic theory and the organization and evaluation of statistic. Static and dynamic models, empirical methods in econometrics; identification of econometric parameters, statistical estimation and testing.

**ECON 413 INTRODUCTION TO INPUT-OUTPUT ANALYSIS**

Concepts of Input-Output analysis and the applications of this technique to national economy. Methods and problems of constructing an Input-Output table.

**ECON 416 MATHEMATICAL ECONOMICS**

This course approaches macroeconomic and microeconomic theories mathematically beyond the introductory course (ECON 306). It covers how economists think and how they approach some of the analytical problems by resorting to the model building approach using mathematical tools, emphasis on method of analysis.

**ECON 418 BUSINESS CYCLE THEORY**

Theories and concepts of business cycle, including an analytical survey of the history and nature of cyclical economic fluctuations; policies of economic stabilization. Relationship between business cycle theories and economic growth theory.

**ECON 420 INTERNATIONAL FINANCE**

To study financial policies which to maintain a monetary equilibrium in its foreign transactions. Choice among exchange rate regimes as the first step in making international
policy. Free exchange rate and fixed exchange rate will be explored, also the present dollar exchange system will be closely studied. The comparison study of internal equilibrium and external equilibrium; full employment at home or payments equilibrium.

**ECON 424 ECONOMIC DEVELOPMENT OF DEVELOPING COUNTRIES**

Basic characteristics of poor countries; obstacles to development; general requirements for development; domestic policy issues; prospect for development and some topics for case studies.

**ECON 427 ECONOMIC PLANNING**

Types, methods and applications of planning. Concepts and significance of economic planning as relevant to economic development. Economic planning of Thailand. A survey of different approaches to economic planning in some other countries.

**ECON 429 : COMPARATIVE ECONOMIC SYSTEM**

Characteristics and functions of economic system. Analysis of alternative patterns of economic control, planning and market structure. Experiences under capitalism, socialism and mixed economy. Considerations of their theories and philosophies.
ECON 434: COMMERCIAL BANKING

Banking practice and policy. Evaluation of Thai banking institutions, banking organization and management: deposits, loans, discounts, investments, and negotiable instruments. Branch banking, special aspects of bank accounting, role of commercial bank financing in foreign trade, foreign exchange transactions, interbank transaction and clearing system.

ECON 437: TAX SYSTEM


ECON 440: LABOUR ECONOMICS

Views and concepts of labour economics and industrial relations. Supply of labour, demand for labour, and labour market, manpower and economic growth, trade unionism, collective bargaining and productivity bargaining, collective bargaining in Thailand.

ECON 441: RESEARCH METHODS IN ECONOMICS

Basic procedures and methods of research in economics are considered from the standpoint of their applicability to
problem solving and discovering of new scientific facts and generalizations in economics. Definition of the problem, statement of hypotheses, research design, data collection methods and data analysis constitute the major topics. Proper style and preparation of research reports in economics.

**ECON 443  INDUSTRIAL ECONOMICS**

Nature and scope of the process of industrialization, the patterns of industrial growth, the structure and functioning of industries and industrial relation; location of industries.

**ECON 447 SEMINAR IN CURRENT ECONOMIC PROBLEMS**

A general survey of economic problems affecting economic progress and stability with special emphasis on Thailand.

The undergraduate curricular requirements of the Department of English in the Faculty of the Humanities may well serve as an example of courses in the humanities. The requirements are as follows.

1. **Basic requirements** 60 credits
   
   1.1 General basic requirements 54 credits
   
   1.1.1 Social sciences 6-9 credits
   
   1.1.2 Humanities 24-27 credits
   
   THAI 103, 104 and any other 2 or 3 courses 12-15 credits
   
   HIST 103, 104 6 credits
   
   L.S. 103 3 credits
   
   PSY 103 3 credits
1.1.3 Modern language  
ENGL 101, 102, 201, 202, 210  

1.1.4 Science and Mathematics  
MATH 100 and BIOL 100 or CHEM 100 or 
GEOL 100 or PHYS 100  

1.2 Basic requirements for major  
ENGL 230, 231.  

2. Major  a minimum of  
Required courses: ENGL 311, 312, 330, 350 
and 351 or 356 and 357, 412, 489  
Electives: ENGL 3.. or 4.., 4.., 4.., 4..,  
4.., and any other four English courses.  

3. Minor  (if any)  
1. Student are urged to take any course in the  
   Faculties of Social Sciences, Humanities or  
   Education as their minor.  
2. Students may choose not to take a minor, in  
   which case they must take a minimum of 66  
   credits for their major.  

4. Electives  a minimum of  
Total: a minimum of  

144 credits
Following is a description of the contents of the courses in English.

**ENGL 101 FUNDAMENTAL ENGLISH I**

A thorough revision and practice of the basic language skills with an emphasis on reading comprehension.

**ENGL 102 FUNDAMENTAL ENGLISH II**

Continuation of English 101

**ENGL 201 FUNDAMENTAL ENGLISH III**

Continuation of ENGL 102

**ENGL 202 FUNDAMENTAL ENGLISH IV**

Continuation of ENGL 201

**ENGL 210 ORAL EXPRESSION I**

Practice in guided conversation with emphasis on pronunciation, intonation, and basic conversational patterns.

**ENGL 211 READING AND LISTENING DEVELOPMENT I**

A planned reading and listening comprehension course, to develop speed and accuracy in reading and note-taking. Students will be given practice in independent reading and in listening to extended passages of orally presented prose, taking notes and answering questions on the passages.

**ENGL 212 READING AND LISTENING DEVELOPMENT II**

A continuation of ENGL 211 to a higher level
ENGL 230 INTRODUCTION TO LANGUAGE
An elementary introduction to the features, systems, and origins which all human languages share in common.

ENGL 231 ARTICULATORY PHONETICS
Introduction to the articulatory basis of English pronunciation with the practice of pronunciation and phonetic transcription.

ENGL 232 ENGLISH PHONOLOGY
A more advanced study of phonetics and an introduction to phonemics, mainly of English.

ENGL 291 ENGLISH FOR SCIENCE STUDENTS I
Continuation of English 102 with an emphasis on scientific texts.

ENGL 292 ENGLISH FOR SCIENCE STUDENTS II
Continuation of English 291

ENGL 310 ORAL EXPRESSION II
Practice in oral public presentation including skits, plays, short speeches, and interviews.

ENGL 311 READING AND WRITING I
A combination of reading comprehension and guided composition to develop the students' grammatical correctness and his ability to organize coherent paragraphs. Passages are of general interest or from fields relevant to the special interests of the students.
ENGL 312 READING AND WRITING II

A continuation of ENGL 311 with emphasis on more complex grammatical forms, and the methods of organizing longer essays.

ENGL 320 READINGS IN THE HISTORY AND PHILOSOPHY OF SCIENCE

Reading and discussion of texts connected with science and technology, with emphasis on contemporary themes in science and on the work of great British and American scientists and its place in the development of modern ideas.

ENGL 321 BRITISH AND AMERICAN LIFE AND INSTITUTIONS

Reading and discussion of texts concerned with education, politics, law, current affairs and social customs in Britain or America, with special emphasis on the pattern of everyday life and the language associated with it.

ENGL 322 MODERN VIEWS OF MAN

Reading and discussion of texts connected with recent views of human civilization and theories about its present and future development.

ENGL 323 LANGUAGE AND COMMUNICATION

Practice in understanding different types of English, as found for example in newspapers, advertising and other sources of written information.
ENGL 330  ENGLISH SYNTAX I
General introduction to the grammatical patterns of English words and sentences.

ENGL 331  ENGLISH SYNTAX II
A more advanced study of English grammar, with discussion of various approaches to the grammatical analysis of English.

ENGL 350  SURVEY OF ENGLISH LITERATURE I
A survey of English Literature from the Anglo-Saxon period to the Augustans. Representative works and passages will be read and discussed with attention to genre, style and historical context. Students will be introduce to the language and techniques of literary analysis.

ENGL 351  SURVEY OF ENGLISH LITERATURE II
A continuation of Engl 350 covering the period from the Romantic Age to the present.

ENGL 356  SURVEY OF AMERICAN LITERATURE I
A survey of representative works of American literature from the Puritans to Emily Dickinson with attention given both to their intrinsic literary merit and the ways in which they reflect literary movements and periods.

ENGL 357  SURVEY OF AMERICAN LITERATURE II
A continuation of Engl 356 from Realism to the present.
ENGL 358 MYTHOLOGY AND FOLKLORE
A survey of myths and folklore in western civilization, with reference to their continuity in western literature.

ENGL 395 INTERMEDIATE ENGLISH FOR AGRICULTURE STUDENTS
Practice in comprehension of passages, reports, and articles in the field of agriculture, and the introduction to writing simple and short reports in the same field.

ENGL 396 ADVANCED ENGLISH FOR AGRICULTURE STUDENTS
More practice in oral and written reports in the field of Agriculture. Practice in speaking about different topics in this study and in writing short articles and reports on the results of experiments using correct grammar, vocabulary and technical terms.

ENGL 410 ORAL EXPRESSION III
Discussion and debate.

ENGL 411 READING AND WRITING III
A review of material presented in Engl 311 and Engl 312 for those students who have not adequately mastered the content of those courses.

ENGL 412 READING AND WRITING IV
A continuation of Engl 312 and/or Engl 411 with emphasis on the techniques of logical organization, and the rudiments of style.

Students with A or B+ in Engl 311 and Engl 312 may bypass Engl 411 and take Engl 412
ENGL 423  CORRESPONDENCE AND REPORTS
Practice in the techniques of writing formal letters and reports, with emphasis on clarity and logical layout.

ENGL 424  ADVANCED WRITTEN EXPRESSION
Practice in original writing

ENGL 425  TRANSLATION
Written translation from English to Thai and from Thai to English, with special attention to correct structures in English versions and to appropriate equivalence in Thai versions.

ENGL 430  CONTRASTIVE ANALYSIS OF THAI AND ENGLISH I
A study of language as a linguistic discipline through a comparison of English and Thai sounds and grammar.

ENGL 431  CONTRASTIVE ANALYSIS OF THAI AND ENGLISH II
A continuation of Engl 430.

ENGL 448  SEMINAR IN APPLIED LINGUISTICS
An introduction to the theories, methodology and materials used in teaching English as a foreign language.

ENGL 450  THE ELEMENTS OF POETRY
An intensive study of the elements of poetry (including figurative language, allusion, tone, musical devices, rhythm) with the aim of introducing the student to poetry as an art form.
ENGL 452 PSYCHOLOGICAL ANALYSIS OF LITERATURE

Analysis of literature from psychological, philosophical and sociological points of view; rhetorics; analysis of humorous and tragic experiences; audio-visualists and communications.

ENGL 458 LITERARY CRITICISM

A course in textual analysis to create an awareness of literature from the point of view of language and style.

ENGL 460 POETRY I

A study of poetry of various styles and periods, with particular emphasis on the poets' communication of message and mood through such means as sound patterns, diction and imagery. Special emphasis is on the sixteenth, seventeenth, eighteenth and early nineteenth century poetic writings.

ENGL 462 POETRY II

A study of poetry of various styles and periods. Special emphasis is on British and/or American poetry in the latter part of the nineteenth century and the modern era.

ENGL 465 DRAMA I

The reading of plays of various styles and periods up to the nineteenth century, with some attention paid to the ways dramatic effects may be achieved on stage.

ENGL 466 DRAMA II

The reading of plays of various styles and periods with emphasis on British and/or American dramatic writings in the twentieth century.
ENGL 468 FICTION I: RISE OF THE NOVEL

A study of novels and stories of various periods. The principal emphasis will be placed on such elements of the novelist's craft as plot structure, character development, point of view and imagery of the novels up to the nineteenth century.

ENGL 469 FICTION II

This course will concentrate on British and/or American novels and short stories written in the modern period.

ENGL 471 INTRODUCTION TO SHAKESPEARE I

Study of 3 plays by Shakespeare.

ENGL 472 INTRODUCTION TO SHAKESPEARE II

Study of 3 plays by Shakespeare, excluding those studied in ENGL 471.

ENGL 478 CLASSICS IN ENGLISH LITERATURE I

Major works of the Middle Ages, the Renaissance, the Restoration, and the Age of Pope and Swift.

ENGL 479 CLASSICS IN ENGLISH LITERATURE II

Major works of the Age of Johnson, Romanticism, the Victorian, and the Twentieth Century.

ENGL 489 INDIVIDUAL READING AND RESEARCH

Weekly meetings with a supervisor to report on and discuss books of papers read during the term in connection with any courses in either linguistics or literature (not both), with the aim of student's insights into fields that interest him.
Another example of courses in the humanities can be seen from the undergraduate curricular requirements of the Department of History in the Faculty of the Humanities. The requirements are:

1. Basic Requirements 60 credits

1.1 General Basic Requirements

1.1.1 Social Sciences 6 credits

(Any basic course in the Social Sciences field)

1.1.2 Humanities 24 credits

THAI 103, 104, 204 and any other one course 12 credits

HIST. 103, 104 9 credits

L.S. 103 3 credits

PSY 103 or MASS COMM 123 3 credits

1.1.3 Modern Language 24 credits

ENGL 101, 102, 201, 202, 311, 312, 411 or 424 or 425

1.1.4 Sciences and Mathematics 6 credits

MATH 100, CHEM 100 or BIOL 100 or GEOL 100 or PHYS 100

1.2 Basic Requirements for Major

None
2. **Major**
   
   a minimum of 48 credits

   **Core Program**: HIST 235, 271, 303, 304, 331, 202 or 341 or 381, 483, 499

   **Eastern**: HIST 334, 373, 374, 443, 445, 473, 479
   333 or 372 or 384

   **Western**: HIST 311, 312, 313, 411, 412, 321 or 384
   or 415, 419, 427

3. **Minor**
   
   a minimum of 15 credits

   As approved by the adviser

4. **Elective**
   
   a minimum of 12 credits

   **Total**: a minimum of 144 credits

A description of the contents of the courses in history is as follows:

**HIST 103 A SURVEY OF WORLD CIVILIZATION I**

Greek-Roman Civilization, Europe since A.D. 500, Renaissance, Reformation, Europe before the French Revolution, the unification of Germany and Italy, World War I and its aftermath, World War II, twentieth century and its heritage (United Nations Organization, political changes, the progress of technology etc.)

**HIST 104 A SURVEY OF WORLD CIVILIZATION II**

A brief description of various countries in Asia, sources of Asian civilization, the expansion of civilization in Asia and its impact, Arts, literature, society, religion, belief are emphasised, impact of the West, evaluation of Asian Civilization.
HIST 202 GREEK AND ROMAN CIVILIZATION

A study of Minoan and Mycenae civilizations, dark age and Homer. The Greek World: Athenian democracy, Spartan oligarchy, administrative forms, Hellenistic Age. The Roman World: education, politics, the early stages of Roman history, Republic and Empire.

HIST 235 CHINESE CIVILIZATION

A general study of Chinese civilization; its influence in Eastern Asia and Asia in general; the impact on the development of Chinese politics, society and economics; External impact and Chinese response.

HIST 271 A SURVEY OF THAI HISTORY

A brief survey of Thai history, Thai society from the early times of Sukhothai, Ayudhya, to Phonburi, and Rattanakosin. A study of historical sources, economic, society, politics, culture. This course is a supplement to Hist 373 and Hist 374.

HIST 303 HISTORICAL METHOD I

Dealing in the essence with the historical philosophy of the Western School as well as the historiography of Thai History. For the western historical philosophy, the course covers from Herodutus down to the present day Idealist School. For Thai Historiography, the focus is on the writing of Thai "history" before the arrival of western historical methodology i.e. the writing in the form of chronicles, mythology and records, and the western influence and techniques on the 20th Century, Thai
historical writing i.e. the Damrangrajanubhap School to the
to-day "Modern" School.

**HIST 304 HISTORICAL METHOD II**

The follow-up of Hist 303, dealing solely with the
"practical" side of historical methodology i.e. the evaluation,
and assessment of documents, the method and practice of writing
book criticisms, and the Standard Style of writing a historical
article, etc.

**HIST 311 EUROPE I : MEDIEVAL HISTORY**

The rise and fall of the Roman Empire, barbarian
invasion; Medieval Europe; Moslem Empire and trade in the
Mediterranean; the Investiture Struggle and Crusade Wars; impact
of wars on Europe and the birth of national states.

**HIST 312 EUROPE II 1492-1789**

Renaissance and Reformation, the religious wars,
Spanish Empire and its decline, the Age of Absolutism, the
Intellectual Revolution of the seventeenth and eighteen centuries,
the French Revolution.

**HIST 313 EUROPE III 1789-1914**

Napoleon and Europe, the Revolution of 1820, 1830, 1848
and the end of Metternich age; the unification of Germany and
Italy; Industrial Revolution and various ideologies of "ism" in
European history; Europe since 1870; newcomers on the World stage
(U.S.A., Japan); World War I and its aftermath, the road to World
War II.
HIST 321  HISTORY OF LATIN AMERICA

The history of South America and the West Indies, its relationship with U.S.A., the direct and indirect reaction towards American influence, the role of Latin America in World Affairs.

HIST 331  HISTORY OF THE MIDDLE EAST

The development of political and cultural consciousness of the Arab, resulting from the growth of Islamic civilization; history of Hebrews, the Jews and their relations to the Middle East; problems and prospect in the Middle East; conditions during World War II.

HIST 333  HISTORY OF SOUTHEAST ASIA I

A survey of southeast-Asian history from the early period, the migrating flow of various races; impact of Indian and Chinese civilizations. A detailed study of various countries: the ancient empires and various aspects of society, economic and beliefs, external impact and the results of imperialist invasion are evaluated.

HIST 334  HISTORY OF SOUTHEAST ASIA II

Evaluation of various countries under the western domination. A study of nationalist growth and the struggle for independence after World War II. Social condition after gaining independence, problems in economic, social, and political fields.

HIST 341  HISTORY OF IMPERIALISM IN ASIA

The Western influence in Asia since 18th Century. The impact of the rising imperialism in Europe concerning the expansion
of colonialism and sphere of influence in Asia; Reaction against western domination, politically, economically and socially, especially during the two World Wars; the rise of nationalist movements, new nation-states and Japanese Expansionism. Contemporary political ideology of imperialism.

HIST 372 HISTORY OF THAILAND I
A detailed study of Lan-∞na: its evidence, economics, society and administration, external contact and its impact.

HIST 373 HISTORY OF THAILAND II
A detailed study of Thai history since the foundation of Sukhothai until the fall of Ayudhya in A.D. 1767. Important events are mentioned chronologically.

HIST 374 HISTORY OF THAILAND III
A detailed study of Thai history since Dhonburi to Modern Thai periods. A study of important events in each reign, an emphasis on economies, society and politics.

HIST 381 HISTORY OF IDEOLOGICAL DEVELOPMENT
The growth and reaction to socialist-Communist thoughts in the West after World War II. Polarisation of the political community into the free World and socialist-communist groups. Case study: Korean War, regional organization i.e. NAO WARSAW PACT, etc. Conflicts in both camps. The third group of nonalignment countries.
HIST 384  HISTORY OF INTERNATIONAL ORGANIZATIONS

Survey of early foreign relations which develop into a sophisticated system of international organization. From the congress of Vienna to the regional cooperations such as SEATO, NATO, ASEAN, O.A.S. etc.

HIST 411  HISTORY OF POLITICAL THOUGHTS I

The study of the historical approach to the development of political ideas from the Greek and Roman eras to the thoughts and political theory of Niccolo Machiavelli at the close of the Medieval period. The stress is on the reciprocal relations between the circumstances and times on the one hand and the thoughts of the political philosophies on the other. It simultaneously aims to illustrate the influence and power of these thoughts i.e. various political theories on the evolution of Europe, mentally and physically.

HIST 412  HISTORY OF POLITICAL THOUGHTS II

The study of the outstanding political minds from the Renaissance to Marxism-Leninism and Maoism as are known to the world to-day. It hopes to create a better understanding as to the European development, and the worldwide influence of western political thinkings in connection with the present-day world situations and crises.

HIST 415  HISTORY OF RUSSIA

A brief survey of Russian history, beginning in the 9th Century under the Kievan Russia, the rise of the muscovite state
and the Romanov dynasty. The road to revolution form the Decembrist Movement to the Bolshevik revolution. The birth of the Soviet Union. The struggle under Stalin's ear. Survey of socialist literatures in accordance with the conflict of ideological interpretations.

HIST 419 SEMINAR IN EUROPEAN HISTORY
A Seminar in modern Europe (18th to 20th centuries). Research papers done by students with emphasis on methodology and historical interpretation.

HIST 427 HISTORY OF THE U.S.A.
The study of the birth of the nation the U.S. right through its 200 years history. The emphasis is on the foreign policy of the U.S. concerning Europe during the 18th to 19th centuries; the civil war; the westwards movement and the end of the frontier; the U.S. role in Europe and Asia in the two World Wars; and the U.S. in the aftermath etc.

HIST 443 HISTORY OF SOUTH ASIA
A study of its culture, economics, society, administration from the early time; period of colonialism; main events during World War II; period of independence; the rise of Bengaladesh and its aftermath etc.

HIST 464 HISTORY OF EAST ASIA
A study of modern East Asian history since 19th century to the present. The coming of the western powers and its reaction; internal development and its present roll.
HIST 473 HISTORY OF THE ADMINISTRATION IN THAILAND

Beginning with the type of city-state administration in 14th century: political aspects in Ayudhya, Dhonburi and Rattanakosin; the expansion of Ayudhya; administrative reformation in the reign of Pra Bromatrilokanarth and King Rama 5th; the revolution of 1932 to the present time.

HIST 479 SEMINAR IN THAI HISTORY

Small researches done by students according to topics given by advisors. Criticism, participation, methodology, analysis and historical interpretation are required in presentation. Detail is limited to 3 periods; Sukhothai, Ayudhya and Rattanakosin.

HIST 483 CONTEMPORARY WORLD AFFAIRS

Historical detail from the end of World II to the present time: Europe, America, Middle East, Far East and Asia (Southeast Asia is emphasised). Fundamental and effective events are pointed out.

HIST 499 SESSIONAL PAPER

Research is done by students with necessary assistance from advisors. Selected topics by students; understanding in historical method and evaluation is required.

After describing the curricular requirements and the contents of the courses of the Faculties of Social Sciences and the Humanities, we now turn to take a look at these same things of the Faculties of Engineering and Agriculture that we have selected to take as an example of course requirements and course
contents of the vocational faculties. The Faculties of Social Sciences and the Humanities are both regarded as non-vocational faculties. Following are the curricular requirements of the undergraduates of the Department of Civil Engineering in the Faculty of Engineering.

1. Basic Requirements: a minimum of 79 credits

1.1 General Basic Requirements: a minimum of 56 credits

1.1.1 Social Sciences: a minimum of 6 credits

- ECON 101 (or approved equivalent) 3 credits
- LAW 103 (or approved equivalent) 3 credits

1.1.2 Humanities: a minimum of 6 credits

- PSY 103 (or approved equivalent) 3 credits
- MASS COMM 123 (or approved equivalent) 3 credits

1.1.3 Modern Language: a minimum of 9 credits

- ENGL 101, 102, 291

1.1.4 SCIENCE AND MATHEMATICS: a minimum of 35 credits

- CHEM 101, 102 8 credits
- PHYS 104, 203, 204 12 credits
- MATH 103, 104, 203, 351 or 361, 362 15 credits

1.2 Basic Requirements for Major: a minimum of 23 credits

- IE 100, ME 101, ME 102, ME 105, ME 106,
- ME 202, ME 203, ME 282, ME 331, EE 383, GE 301
2. **Major**: a minimum of 65 credits

CE 202, CE 203, CE 204, CE 301, CE 303, CE 304,
CE 305, CE 306, CE 307, CE 308, CE 401, CE 405,
CE 406, CE 407, CE 411, CE 413, CE 414, CE 415,
CE 416 56 credits

Civil Engineering Electives  6 credits

Engineering Elective  3 credits

**Note**: 1. Civil Engineering Electives will be selected from a group of major courses of Civil Engineering; with approval from student's advisor.

2. Engineering Elective will be selected from a group of Engineering courses offered; with approval from student's advisor.

3. **Minor**: None

4. **Elective**: a minimum of 6 credits

**Total** a minimum of 150 credits

The contents of civil engineering courses are described below.

**CE 202 ELEMENTARY SURVEY**

Use and adjustment of instruments; chain survey;
Differential and profile leveling; calculation of bearing,
latitudes, departures and area; accuracy and errors.
CE 203 HYDROLOGY AND GROUND WATER

Hydrologic cycle; precipitation; infiltration; evaporation and transpiration; streamflow; collecting hydrologic data and relating instruments; hydrograph and flood routing; occurrence of ground water, ground water hydraulics, wells yield and management.

CE 204 STRENGTH OF MATERIALS I

Simple stresses and strains; thin - walled cylinders; stress-strain relation; statically indeterminate members; torsion of cylindrical and thin - walled members; shear and moment in beams; bending and shear stresses in beams; deflection of beams by double - integration, moment area and conjugate beam methods; application of deflection methods to restrained beams.

CE 281 ELEMENTARY SURVEY FOR NON-ENGINEERING MAJORS

Introduction to surveying; measurement of distance; chain surveying; levelling; measurement of angle; traversing; area and volume computation; topographic surveying; applications of surveying to non-engineering field.

CE 301 ENGINEERING SURVEY

Stadia and plane table surveying; topographic surveys and topographic mapping; elements of photogrammetry; land and construction surveys.

Field works lasting about 2 weeks are required.
CE 303  HYDRAULICS

Properties of fluid; hydrostatic force on submerged surfaces; buoyancy; fundamentals of fluid flow; energy and momentum equations in steady flow; fluid flow in pipes, pipe systems; flow in open channels; unsteady flow problems; fluid measurements; dimensional analysis, and hydraulic similitude.

CE 304  STRENGTH OF MATERIALS II

Combined stresses; stresses at a point, principal stresses; Mohr's circle; continuous beams, three moment equation; buckling of columns; composite beams; riveted and welled connections; unsymmetrical bending; inelastic action; repeated loads, fatigue of metals; introduction to vibration problems in engineering; two-material members and introduction to reinforced concrete theory.

CE 305  THEORY OF STRUCTURES

Analysis of statically determinate structural systems subjected to fixed and moving loads, reactions, shears, axial forces, moments, influence lines; graphical methods in structural analysis.

CE 306  SOIL MECHANICS

Basic soil principles and engineering properties of soils; soil classification; moisture density relation; compressibility; fluid flow through soils; effective stress principle; strength behavior; field and laboratory testing.
CE 307 SANITARY ENGINEERING

Basic of sanitary engineering, water supply, water quality, sanitary survey and water sampling, source and protection of water supply; artesian well, sanitary protection of wells; unit process of water treatment; screening, coagulation, filtration, water, softening, disinfection, distribution system; combined and separated sewerage system; introduction to waste water treatment.

CE 308 MATERIALS TESTING

Testing of engineering materials such as cast iron, steel, brick and timber; use of testing equipments.

CE 320 APPROACH TO ARCHITECTURE AND ENGINEERING CONSTRUCTION

An introductory course designed to provide insight into architecture and engineering construction. The course will be emphasized on architectural and engineering functions and design; social contact with the client; process of professional practice; and professional ethic.

CE 401 STRUCTURAL ANALYSIS

Energy methods; deflection analysis; moment distribution; influence lines for continuous structures; matrix analysis of structures.

CE 405 ROUTE SURVEY

Simple, compound, and reverse curves; spirals; earth work calculations and granding plans.

Field works lasting about 2 weeks are required.
CE 406 REINFORCED CONCRETE DESIGN

Theory and design of reinforced concrete beams; slabs, columns and footings; introduction to prestressed concrete and ultimate strength design.

CE 407 HIGHWAY ENGINEERING

Traffic characteristics; highway standards; drainage; geometric design; construction methods; highway administration and finance.

CE 411 CONCRETE TECHNOLOGY

Properties of concrete; principles and methods of mix design; quality control; concrete testing; laboratory work including aggregate grading and testing of control specimens.

CE 412 BRIDGE DESIGN

Design of simply supported bridges in reinforced concrete; steel, prestressed concrete, arch bridges; statically indeterminate bridges; ultimate load method.

CE 413 FOUNDATION ENGINEERING

Application of soil mechanics principles to foundation engineering problems, site investigation, systems of soil classification, stability of earth slopes, bearing capacity and settlement analysis; footings, piles; earth pressure and retaining walls.
CE 414 APPLIED HYDRAULICS

Review of descriptive and quantitative hydrology; probability concepts in design; planning for water - resources development; design of reservoirs, dams, spillways, gates, and development; design of reservoirs, dams, spillways, gates, and outlet works, open channels, pressure conduits; problems on irrigation, drainage, and flood control.

CE 415 STEEL AND TIMBER DESIGN

design of timber and steel structures; beams, girders, columns, beam - columns, members and connections of trusses in buildings and bridges.

CE 416 CONSTRUCTION PLANNING AND MANAGEMENT

Contracts and specifications; construction technology; introduction to the application of scientific principles to the planning of construction; quantity and cost estimation; introduction to engineering economics.

CE 420 CIVIL ENGINEERING PROJECT

Special investigation or studies of any phase of civil engineering to be carried out by individual student or a group of students under faculty direction and approved by the department.

CE 481 DESIGN OF DRAINAGE STRUCTURES

Study of hydraulic waterways; locations of drainage structures; analysis and design of small bridges, culverts and pipes; maintenance and cost estimate of drainage structures.
The curricular requirements for undergraduates enrolled in the Department of Soil Science and Conservation, Faculty of Agriculture of Chiangmai University have been chosen to serve as the other example of the curricular requirements in the vocational faculties. The requirements are as follows.

1. Basic Requirements
   1.1 General Basic Requirements 94 credits
      1.1.1 Social Sciences 6 credits
         ECON 101 and any one course from
         ECON 101, LAW 103, and SOC-ANTHRO 103
      1.1.2 Humanities 6 credits
         PSY 103 and any one course from
         HC 143, PHIL 251, and RE 173
      1.1.3 Modern Language 12 credits
         ENGL 101, 102, 291, 292
   1.2 Basic Requirements for Major 70 credits
      BIOL 103, 106, 107, 221, 231, 304 22 credits
      CHEM 101, 102, 205 12 credits
      MATH 103, 104 6 credits
      PHYS 111, 112 8 credits
      AET 311 3 credits
      AGRON 211 3 credits
      AH 201 3 credits
      AS 311 3 credits
      HORT 211 3 credits
      P·PATH 201 4 credits
2. Major

2.1 Required Courses 18 credits

SOIL 211, 321, 351, 442, 497, 498, 499

2.2 Approved Major Electives 30 credits

A minimum of 30 credit must be selected in consultation with and on approval of the student's advisor from the following courses:

2.2.1 SOIL 421, 431, 443, 452, 453, 461, 472
2.2.2 AEC 211
2.2.3 AGRON 313
2.2.4 AS 312
2.2.5 CE 281
2.2.6 CHEM 235
2.2.7 CONSERV 441
2.2.8 FM 301

3. Electives 6 credits

4. A minimum of 36 credits in the major field of study must be in courses in the 300 levels and at least 18 credits must be in courses numbered 400 series.

Total a minimum of 148 credits
The contents of the undergraduate courses in soil science and conservation are described as follows.

**SOIL 111 INTRODUCTION TO SOIL SCIENCE**

Fundamental of soil science with emphasis on soil as one of man's vital natural resources which need to understand; importance of key physical, chemical and biological properties of soils to nutrient availability and finally to crop production. The introduction of soil survey and classification and soil conservation are also included.

**SOIL 301 SOIL FERTILITY**

Factors affecting plant growth; role of essential elements in the plant nutrition; nature and chemical properties of essential elements in soil; basic soil-plant relationship; evaluation and correction soil fertility problems; fundamentals of lime and fertilizer application; fertilizers and fertilizer usage in crop production and soil management as related to soil fertility.

**SOIL 401 SOIL SURVEY AND CLASSIFICATION**

Properties and methods used in distinguishing soils. Characteristics and distribution of different soils particularly at Great Group level in northern Thailand and the cause of these soil differences in northern Thai soils upon their proper use and management. Laboratory work includes instruction in the use of soil maps, training in mapping soils, and field trips to examine representative northern Thai soils.
SOIL 411  SOIL PHYSICS

Physical properties of soil in relation to plant growth, e.g., particle-size distribution, soil structure, dynamic properties of soil. Some physical processes occurring in soils with emphasis on soil water movement and soil water-plant relationship and application of soil physics to soil systems.

SOIL 421  SOIL CHEMISTRY

Chemical, biological and mineralogical properties of soil. Colloidal system; properties, behavior and ion exchange reaction. Soil acidity and alkalinity. Introduction to chemistry of submerged soil.

SOIL 422  SOIL AND PLANT ANALYSIS

Principles and methods of chemical analysis of soils and plant materials, including those useful in evaluating the soil fertility status and fertilizer requirements of soils.

SOIL 431  SOIL MICROBIOLOGY

Soil microorganisms; their characteristics, ecology distribution and transformation of organic substrates. Microbiology of the rhizosphere and biological equilibrium.

SOIL 441  TROPICAL SOILS

Origin, nature, development, properties and management of tropical soils.
SOIL 451 FERTILIZERS
Tupe, properties and manufacturing processes of fertilizers. The evaluation and purchase of fertilizers. Factors affecting the use and method of fertilizer application.

SOIL 461 SOIL CONSERVATION
Nature and causes of soil erosion by wind and water, the physical characteristics and erosivity of rainfall. Some measures for erosion control on cultivated lands including the estimation of surface runoff, design of mechanical protection works, land and crop management and erosion research methods.

SOIL 471 SOILS AND PLANT NUTRITION
Mineral nutrition of plants in relation to mechanism of ion transport, salt absorption, plant metabolism Special emphasis on problems associated with tropical crops nutrition.

SOIL 496 RESEARCH EXERCISES
A research project under supervision of a staff member. The problem chosen should be related to the field of Soil Science and must be reported in proper written form.

SOIL 497 SEMINAR I
A presentation of well prepared papers from selected research topics related to Soil Science for weekly group discussions.
SOIL 498 SEMINAR II
The course is similar to SOIL 497 but advanced knowledge in the field of Soil Science is recommended for papers to be presented for the weekly seminar.

CONSERV 111 PRINCIPLES OF CONSERVATION
Relationship between the conservation of renewable natural resources and the welfare of human societies. Principles and methods of management and conservation of natural resources.

CONSERV 401 CONSERVATION OF LAND AND WATER RESOURCES

CONSERV 411 FORESTRY AND CONSERVATION
Types of forest with special references to Thailand. Management of forest for Conservation and industrial purposes.

CONSERV 421 FORESTRY REGULATIONS AND WILDLIFE

CONSERV 431 INTRODUCTION TO FISHERIES
Natural aquatic resources of Thailand. Development and conservation of the aquatic resources with special references to fresh water resources.
CONSERV 441 AGRICULTURAL METEOROLOGY

Basic concepts of weather and some meteorological elements, atmospheric circulations, cloud, precipitation, with emphasis on its effect on agriculture; instruments and observations.

Having described the undergraduate curricular requirements as well as the contents of the courses of the four faculties of Chiangmai University, we may now consider the curricular requirements and the course contents of the Faculties of Sciences and Arts at Chulalongkorn University. The undergraduate curriculum of Chulalongkorn University usually consists of three to five major components, depending upon the faculties. For example, the curriculum of the Faculty of Sciences consists essentially of only three major components, namely, general education, major subject and electives whereas the curriculum of the Faculty of Arts consists essentially of five major components, namely, general education, basic requirements, major, minor and electives.

As in the case of Chiangmai University, variations also occur in the amount of credits to be earned by the student before he is awarded a Bachelor's degree. The student enrolled in the Faculty of Sciences is required to complete a minimum of 144 credits while the student enrolled in the Faculty of Arts is required to earn a minimum of 130 credits before he can get his undergraduate degree in four academic years. The following are the curricular requirements for the B.Sc. degree in chemical
engineering in the Faculty of Sciences at Chulalongkorn University.26

<table>
<thead>
<tr>
<th>1. General Education</th>
<th>59 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Social Sciences</td>
<td>6 credits (4.2%)</td>
</tr>
<tr>
<td>1.2 Humanities</td>
<td>6 credits (4.2%)</td>
</tr>
<tr>
<td>1.3 English</td>
<td>15 credits (10.4%)</td>
</tr>
<tr>
<td>1.4 Basic science and mathematics</td>
<td>32 credits (22.2%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Major</th>
<th>76 credits (52.8%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Electives</td>
<td>9 credits (6.2%)</td>
</tr>
</tbody>
</table>

Total = 144 credits

A description of the contents of some of the courses in chemical engineering is as follows.

**Calculus I** Basic concepts of sets and number systems, functions, limits, continuity, differentiation, integration.

**Calculus II** Transcendental functions, technique of integration, improper integrals, vector algebra, introduction to analytic geometry.

**General Chemistry** Strichiometry and the basis of the atomic theory, the properties of gases, solids, liquids and solutions, chemical equilibrium, ionic equilibria in aqueous solutions, oxidation-reduction reactions and chemical

---

26 See Chulalongkorn University, Announcement of the Faculty of Sciences 1976-77. (Bangkok: Faculty of Sciences, 1976), p.50.
thermodynamics are presented.

**General Chemistry Laboratory** The experiments are designed to supplement and demonstrate principles in General Chemistry.

**General Chemistry II** The following topics are presented: chemical kinetics, the electronic structures of atoms, the chemical bonds, periodic properties, the representative elements group I - IV, organic chemistry and the nucleus.

**General Chemistry Laboratory II** The laboratory work is designed to acquaint students with the qualitative analysis techniques.

**General Biology I** An introductory course in biology. The unifying problem of life energy, environment and reproduction are examined at each fundamental level of biological organization: cell, organism and population. Principle of biology with special reference to the cell and its metabolism and to the anatomy, physiology, ecology, evolution and behavior of the major group of the animal kingdom.

**General Biology Laboratory I** A laboratory course in general biology to accompany General Biology I.

**General Physics I** Mechanics of particles and rigid bodies, properties of matter, fluid mechanics, heat, vibrations and waves, element of electromagnetism.
General Physics Laboratory I  Laboratory work to be done in connection with General Physics I.

General Physics II  A.C. circuits, fundamental electronics, optics, modern physics.

General Physics Laboratory II  Laboratory work to be done in connection with General Physics II.

General Biology II  An introductory course designed to acquaint students with the fundamental principles of biology utilizing plants as exemplary material. Principal topics include the anatomy, morphology, physiology, classification, heredity, and evolution of the major plant groups. Emphasis of the course is on the functional and genetical aspects of plant life.

General Biology Laboratory II  Demonstrations, experimentation and discussions designed in accordance with General Biology II.

Calculus III  Intermediate forms, sequence and series of real numbers, power series, expansion of functions, real valued functions of several variables, partial differentiation.

Physical Chemistry I  Gaseous properties, kinetic molecular theory of gases, mechanics of atoms and molecules, molecular energies, laws of thermodynamics, thermo-chemistry, entropy, free energy, chemical bonding.
Industrial Stoichiometry I  Basic principle in mathematics, chemistry and physics required in solving chemical industrial problems. Physical and chemical properties of fluids and solids, stoichiometric and composition relationships, behavior of ideal-gas, vapor pressure, humidity and saturation, solubility, and crystallization.

Industrial Stoichiometry II  Thermophysics and thermochemistry. Applications of the principles of material and energy balances to various types of physical and chemical processes.

Computer Methods in Chemical Technology  Analog and digital computer programming with application to chemical and technological problems.

Strength of Materials  Introduction to the machine design and structural design. Beams and columns design, methods of connections, combined stresses and eccentric loading.

Chemical Engineering Kinetics  Kinetics of homogeneous reactions. Introduction to catalysis. Interpretation of batch reactor data, fundamentals of reactor design, single ideal reactors, design for single reactions, and design for multiple reactions. Temperature and pressure effects on chemical kinetics.

Economics of Process Industries  Time-value of money, economic selection of equipment, consideration of costs, methods of financing, depreciation methods, and the economics of production estimating.
Momentum, Heat, and Mass Transfer III Molecular and eddy diffusions, Connective mass transfer, interphase mass transfer, and mass transfer with chemical reaction. Simultaneous momentum, heat, and mass transfer.

Senior Seminar The review of recent papers and reports of interest by students. The seminars are organized to give students practice in clear, precise and critical exposition on technical topics and to give training in public speaking.

Industrial Training Practical training in industries not less than eight weeks during summer vacation as arranged and supervised by the Department. A written report must be submitted to the department at the beginning of the new academic year.

Senior Project A required course for all major studies. Supervised library and/or experimental research and conferences with a written final report.

The curricular requirements of the Faculty of Arts at Chulalongkorn University are divided into five major components which are as follows. 27

27 See Faculty of Arts, Chulalongkorn University, Announcement of Courses in the Faculty of Arts 1975-76 (Bangkok: Chulalongkorn University, 1975).
<table>
<thead>
<tr>
<th>Subjects</th>
<th>Credits</th>
<th>Percentage of the Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 General Education</td>
<td>30</td>
<td>23.1</td>
</tr>
<tr>
<td>2 Basic Requirements</td>
<td>16</td>
<td>12.3</td>
</tr>
<tr>
<td>3 Major</td>
<td>42</td>
<td>32.3</td>
</tr>
<tr>
<td>4 Minor</td>
<td>24</td>
<td>18.5</td>
</tr>
<tr>
<td>5 Electives</td>
<td>18</td>
<td>13.8</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>130</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

1. **Courses in General Education**

1.1 **Humanities** (9 credits)

**Required course:** Civilization

**Options:** Choose one course from the following:
- Eastern Civilization
- Western Civilization
- Music Appreciation
- Visual Arts
- Art of Dramatic Review

1.2 **Social Sciences** (9 credits)

**Required course:** Man and Society

**Options:** Choose one course from the following:
- Introduction to Philosophy
- Man and Ideals
- Evolution of Religions
1.3 **Science and Mathematics** (6 credits)

Required course: Natural Studies

Options: Choose one course from the following.

- General Chemistry
- General Biology
- General Physics
- Calculus I

1.4 **Foreign Languages** (6 credits) Choose two of the following courses in foreign languages.

- English I
- English II
- Pali and Sanskrit I
- Pali and Sanskrit II
- Chinese I
- Chinese II
- Japanese I
- Japanese II
- Malaysian I
- Malaysian II
- French I
- French II
- German I
- German II
- Spanish I
- Spanish II
- Italian I
- Italian II

2. **Courses in Basic Requirements.**

Required courses:

- Techniques of Study in a University
- Evolution of Thai Civilization
- Use of the Thai Language
- Thai Literature
- Characteristics of the Thai Language
Options: Choose one course from the following.

Evolution of Eastern Literature
Evolution of Western Literature.

3. **Major**

Courses that can be taken as a major are as follows.

The Thai Language
English
History
Geography
Library science
Philosophy
Dramatic Art
Pali and Sanskrit Languages
Japanese
French
German
Spanish
Italian

4. **Minor**

Choose one of the following two patterns of minor.

4.1 One minor subject counting 24 credits.
4.2 Two minor subjects counting 12 credits each.

Courses that can be taken as a minor are: All the courses in a Major category plus Chinese, Malaysian and Linguistics.
5. **Electives**

5.1 All courses offered in the Faculty of Arts can be taken as electives.

5.2 Courses offered by other Faculties of Chulalongkorn University may be taken as electives only with approval of the academic adviser and the Dean of the Faculty of Arts.

The contents of some of the courses offered by the Faculty of Arts are described below.

**Civilization** History and progress of mankind in five eras: pre-history, ancient, medieval, modern and contemporary. References are made to the social, economic, political conditions which are in turn the products of religions, faith and ideals.

**Man and Society** Behavior patterns and relations of man in society. Culture, social structure, roles, groups, and social classes of mankind are discussed in addition to man's livelihood, economic systems, economic problems and relations between personality and behavior.

**Natural Studies** Things observed in nature, universe and atoms. A study of space, matter, power and scientific processes. Application of knowledge about nature by the use of technology.

**Music Appreciation** History and evolution of music from the earliest time to the present. Theories of music. Techniques for criticizing music in various forms and in many eras. Relations
between music and life and arts in other forms.

**Visual Art** Purposes of art, history and evolution of art (e.g., sculpture, painting, architecture. Relations between art and philosophy, society, religion, customs.

**Techniques of Study in University** Arguments, explanation, errors, justification, ambiguity in the use of language and solutions. Use of library, catalogue cards, index, references, pamphlets, research and note-taking, collection of data, bibliographies, foot-noting, report writing.

**Evolution of Thai Civilization**
Evolution and development in politics, economy, society and culture of Thailand from Sukhothat period to the present.

**Evolution of Eastern Literature** Literature and types of literature of various countries in Asia. Evolution of literature from the earliest time to the present. Study of the outstanding literature of each period. Influence of religion and society on literature.

**Evolution of Western Literature** Legacy of ideas in Western literature with emphasis on historical background, philosophy, and culture in studying important ideas.
Oriental Civilization  Political, economic, social and cultural development of the Oriental world from the ancient times to the present period.

Western Civilization  Analysis of political, economic, social and cultural development of the Western world from the ancient times to the present times.

The Use of Thai Language  Practice of skills in the use of the language: speaking, listening, reading, writing and use of words.

Thai Literature  Characters and values of books in Thai literature. Selected excerpts from books of importance in the literature in various eras.

Introduction to Philosophy  Problems in philosophy like reality, change, nature of man, epistemology, ethics, and so on. Problems of the world-views.

Man and Ideals  Problems in the ideals of life and the finest things of man. Theories pertaining to ethical criteria, basic problems in ethics, society, ethical problems in contemporary society with application of these theories.

Evolution of Religions  Theories of origins of religions, precepts of important religions. Influence of religions on society. Impact of social phenomena on religions.
Art of Dramatic Review  Meanings and purposes of drama.
Kinds of drama. Relations of drama to life, environment, philosophy,
and various kinds of art. Elements of drama and techniques of
commenting on drama.

We have so far described the undergraduate curricular
requirements as well as the contents of the courses being offered
in the various constituent faculties of Chiangmai and Chulalongkorn
Universities. Attempts will now be made to discuss the educational
contents of those courses including the humanities courses and
to point out, wherever possible, the extent to which the courses
are oriented towards vocational and non-vocational interests of
the students.

Taken as a whole it can be seen that the undergraduate
curricula of both Chiangmai and Chulalongkorn Universities contain
the dimensions of breadth and depth, electives for individualization
as well as a minor (except in the case of the vocational Faculties
of Engineering and Agriculture at Chiangmai University and the
vocational Faculty of Sciences at Chulalongkorn University where
a minor is not required of the student). It is intended that
the breadth requirements will serve to acquaint students with
the contents and methodology of the three major areas of human
learning, namely, the social sciences, the natural sciences and
the humanities. The depth requirements are actually a
departmental major that students are required to take in their
faculty-determined programmes of study. Electives presumably
provide for individualizing a programme by permitting students to
select on the basis of personal interests and goals or value for
them. By this required exposure to the dimensions of breadth and depth, coupled with some free choice and a minor (where required), the students are introduced to the basic elements of the culture of their country, are provided a sound basis for a vocation they expect to pursue after graduation or a basis for a post-graduate study, and are stimulated to acquire an enduring intellectual appetite.

On the whole, course contents in professional disciplines taught in the Faculties of Engineering and Agriculture at CMU and in the Faculty of Sciences at CU are oriented more towards vocational than non-vocational interests of the students. The course contents seem to be more specialized than general, more useful for the student's careers and more applied. And on the whole, course contents in non-professional disciplines being taught in the Faculties of Social Sciences and the Humanities at CMU and in the Faculty of Arts at CU are oriented more towards non-vocational than vocational interests of the students. The course contents seem to be more general than specialized, more useful for their own sake than for careers and more pure than applied.

This may be substantiated by the evidence that:

1. Vocational faculties like Engineering, Agriculture and Sciences require students to earn more credits in their majors and more credits in the basic requirements for major than is the case in non-vocational faculties like Social Sciences, Humanities and Arts.
2. Vocational faculties do not require minors so that students can concentrate more on their majors in terms of earning more credits for the majors and of the expenditure of time and efforts for the majors.

3. Vocational faculties require students to complete a larger amount of credits before they can graduate than is normally the case in non-vocational faculties.

4. Courses of study being offered by vocational faculties are of such a nature that their contents tend to be more realistic, more applicable to jobs and real-life situations and thus to better serve the vocational needs and interests of the students when they become engaged in their own practical careers. This does not seem to be the case in non-vocational faculties where the courses of study usually tend to be more academically-oriented in their contents, applicable in much lesser degree than the contents of courses in the vocational faculties, more intellectual and useful for their own sake than professional-utilitarian and thus the contents of the courses in the non-vocational faculties are inadequately oriented towards the vocational needs and interests of the students. The contents of the courses may not be directly applicable to jobs or real-life situations.

One of the cases in point to be mentioned here is the case of the contents of the courses in the Humanities. A look at the contents of the courses in English, History and Arts already described in this chapter would reveal that the contents of these courses are of such a nature that one cannot make practical
use of them in a direct manner but such courses are meant more
to establish a broad intellectual and academic background for
those who study them. The students who study the humanities,
however, may make a career of these courses by imparting such a
body of knowledge to others or by using the knowledge gained
from these courses as a background for pursuing further on-the-
job training. Courses in the humanities ordinarily cannot be
geared directly towards serving the professional-utilitarian
needs and interests of the students in the sense other vocational
courses can be. For example, graduates in the humanities are
likely to enter into the teaching or academic career or they may
undergo a further practical professional training or an in-service
training of some kind for a certain period of time to qualify
them to join the ranks of the managerial and administrative staff.

In this chapter we have discussed in some detail what
we have broadly termed the setting for university education in
Thailand. Three major aspects of university education are involved—
they are, broadly speaking, historical, administrative and
curricular aspects. All these aspects presumably may serve as a
sort of an environment in which perceptions of university education
or demand for this education tend to be structured. But apart
from these aspects of university education there may be yet another
factor which, it is argued, may exercise an influence upon how
demand for university education is likely to be generated. This
factor is a set of the social and cultural values that are held
in Thai society. It is to these social and cultural value
orientations with respect to university education that we shall
now turn.
CHAPTER II

THAI SOCIAL VALUES

This chapter considers a complex of Thai social and cultural values. Consideration of these values will assist our understanding of demands which the parents/children group, the students, the business and the government may presumably generate upon the Thai university education system.

It will be useful at the outset to give two definitions of the concept of cultural values which will suffice for our present purpose. Of the many definitions of the concept of "values" that social scientists use, the simplest and broadest one is that "values are criteria by which people decide what to do". In this definition what is left open is "the question of whether some values or some kinds of behaviour are more important than others".1 In essence, values thus defined serve as "criteria of decision-making". Another definition, somewhat more specific and substantive than the former one, states that "...the values which are the core of any social system are basic sources of meaning and perception for those in the system. They are the standards in terms of which choices are made, and in terms of which situations are observed and interpreted as a basis for possible

choice".\(^2\) According to this latter definition, values are essentially the standards whereby choices are made by individuals in a social system. Moreover, values can have an intrinsic worth of their own even if they cannot be implemented. In this sense, values can be defined as "the attitude or worth which an individual or group assigns to or associates with an object, idea, or belief, generally in terms of what the individual or group feels is the degree to which the object, idea, or belief can satisfy a desire".\(^3\) Within the framework of these three definitions of social and cultural values, values would provide a source from which demands -- in this case demands for university education -- are derived.

Having given various definitions of the concept of social values which presumably may provide a basic frame of reference for demands upon university education, we shall now examine the complex of Thai social and cultural values. There are altogether five social values to be discussed, namely, the values of Sanuk and Choei, the value of individualism, the value of status and the value of education. It is assumed that social values appear likely to influence, to a varying extent, demands for university education made by all four of the social groups — the parents/children group, the students, the business enterprises


\(^3\) Robert J. Stalcup, Sociology and Education (Columbus, Ohio: Charles E. Merrill Publishing Company, 1968), p.32.
and the government.

The Values of Sanuk and Choei

The two values of sanuk and choei are interrelated in the sense that they both originated as the behavioural expressions of the model of the ideal personality formalized in the Buddhist concept of Brahem Vihara (the four sublime states of consciousness). This concept of Brahem Vihara comprises the four ethical components, namely, metta (loving kindness), karuna (compassion), mudita (emphatic joy) and uppekkha (equanimity). While sanuk is, at most by implication, a secular equivalent of the value of mudita (emphatic joy), choei represents a secular version of uppekkha (equanimity). Sunuk can be variously translated as "enjoyment", "pleasure", "fun", or "to have a good time". Choei essentially means to remain calm and cool, to show no anxiety and to be uninvolved under numerous circumstances. The real tenor of these two cultural values identified from ethical-religious concepts is reflected in Wilson's apt description of some of the roles of Buddhism in Thai society:

"It encourages a certain love of enjoyment, coolness in the face of trouble, and indifference to disappointment, which makes life easier and suffering bearable." 4

The Thai has "a conception of the good life that stresses fun." This is an indication that the Thai places a high value upon sanuk or fun. The Thai's love of the abiding enjoyment of social pleasures means that the elements of sanuk to contain in the activities he is to engage in is regarded as a legitimate dimension of his way of life. Thus, to cater to the taste of the Thai, sanuk will have to be one of the highlights of the entire activities of any nature, be it social, ceremonial or even religious. However, sanuk to the point of over-indulgence or for a purely hedonistic purpose is perhaps not considered a value in its own right. Indeed, the Thai look upon life generally as something to be enjoyed, as something very pleasant, without much concern about how to cope with problems and difficulties that will arise in the future. In fact, the culture of the Thai is fundamentally oriented towards "being" rather than towards "doing" -- an orientation which tends to emphasize sociability and fun at the expense of an orientation towards activity or work. In this connection, a concept of pleasure is more valued than that of work because whereas pleasure is considered a good thing per se, work is not regarded


as a good in itself. Sanuk as a value can thus markedly influence the general pattern of Thai social behaviours.

Thai culture is the one which "places great value on internal equanimity, upon being choei or having a 'cool heart'. This enables one to take life as it comes, without strain or excitement". In their daily lives, the Thai will have to face many situations in which a high degree of tolerance necessarily will be shown, for example, for unacceptable or deviant behaviour, anger incurred by others, non-conformity or failures to keep promises, and the like. To be capable of demonstrating a degree of choei, the Thai will remain at ease and show a sense of non-involvement or non-interference towards such situations.

Both the cultural values of sanuk and choei, to a varying degree, can have a negative effect on people's sense of commitment and an exertion of their efforts for tedious and laborious tasks towards the development goals of a society. A combined effect of these two values can make for a light-hearted and unconcerned approach to life, resulting as a matter of course in the non-acceptance of the world or the societal problems and even a belittlement of the respect for work considered as one of the necessary conditions for an accomplishment of goals like economic development.

---

The Value of Individualism

The second in the complex of Thai cultural values is the value of individualism. The Thai version of individualism can be regarded as the Theravada Buddhist equivalent of the Christian tenet of "salvation". As the concept implies, a practice of this individualism is considered as each individual's responsibility, indeed a really personal value. This is due to individualism's great emphasis upon a Buddhist belief in reincarnation and in karma which obliges each individual to seek other-worldly goals through the making and accumulating of merit in order to improve his karma at a next rebirth. This moral world-view of Buddhism which justifies the cosmic role of the individual has in effect done much to mitigate his commitments towards obligation and responsibility for a society's problem-solving. As an individualist, the Thai does not take seriously his social obligation and responsibility but is more inclined to satisfy his personal and individualist obligations without having to suffer a wound inflicted upon him by society.10 Due to a widespread sanction of this value of individualism, attempts to develop a society and to further social goals are likely to rank low in an individual's scale of social values. Unlike the doctrine of individualism that emerged in the Western world, this version of Theravada Buddhist individualism is deeply embedded in a faith

in the virtue of non-involvement in the secular affairs of the world. In this regard a utilization of human labour and intelligence for solving societal problems and as means to an improvement of human life is devalued. For the average Thai, both individual and collective social actions aimed at bettering man's lot are thus not justified on religious grounds. At best they are only implied but not greatly stimulated. When a primacy is given to individualism as a personal value, there can be found among the Thai only at a minimum a sense of solidarity, of social and inter-personal obligations, of ideological commitment and perhaps of loyalty towards other things apart from his personal values. Finally, such a traditional religious emphasis upon individualistic behaviour actually is not conducive to an understanding and development of the western values of secular rationality, efficiency and productivity which are regarded as underlying the dominant patterns of behaviour in scientific-technological societies.

The Value of Status

Having discussed the value of individualism, we now continue with the value of status. This is the third in the total syndrome of cultural values we propose to deal with in the present chapter. The characterization of Thai society as a

12 Ayal, op.cit., pp. 547-548.
"prestige society" has traditionally been associated with the so-called "boss mentality". This "boss mentality" is directly attributed to a desire often expressed by the elders that their children should grow up to become bosses. Such a platitudinous saying is actually the elder's blessing to the young, exhorting them to attain the prestigious rank of a boss and avoid being relegated to a debased status of servant. One major contemporary consequence of the high value traditionally placed upon the status and prestige of a boss is an attitude of distaste harbouried by the Thai against work that requires an exertion of manual and physical labour and other menial work. On the other hand, professions that require desk work, especially appointments to higher positions in the government bureaucracy, or white-collar jobs or other jobs of a non-manual kind are all highly valued because they entail a higher status which a boss truly deserves. A status-consciousness of the Thai is apparently justified on the ground of this biased attitude. This status-consciousness, coupled with a virtual lack of comprehension of egalitarianism among the Thai, have become factors contributing

13 This concept of the "boss mentality" is a characteristic of Thai society which has been inherited from the rigidly stratified sakdi na system abolished in 1932 after 700 or so years of existence. The social stratification of the sakdi na system was based upon the class division of the population into freemen and slaves, masters and servants, and nobility and commoners. See Paitoon Kruekaew, Characteristics of Thai Society (Bangkok, 1970), pp. 98-101; 159-160.

14 Ibid.
towards an authoritarian pattern of social relationships, formalized and understood in terms of superior-inferior relationships which foster and inculcate instances of respectful behaviours inherent in the very syntax of the language. Such respectful behaviour, expressing deference shown by individuals of lower to individuals of higher status, represents the real substance of the social relationships between those individuals and the medium by which social relationships in specific cases are ordered.

If status in the traditional sense which we have already elaborated is conceived as a personal attribute of prime importance, this is also true of status in the modern sense — a status to be acquired. The determinants of this achieved social status of individuals in present-day Thai society are numerous and capable of varied permutations and combinations. They include wealth, talent, family connections, religious behaviour, education, political power and governmental position. These intermixed status criteria are a product of an amalgamation of traditional Thai and Western values. On the basis of these criteria for social status, there exists nowadays, especially in

---

15 Personal references by titles, pronouns and other pronominal forms are status laden in the sense that they connote differences in the relative social status of the speakers concerned. See Wilson in Kahin (ed.), *op.cit.* p.35; see also Wilson, *op.cit.*, pp.50 and 79.

16 *Wilson, op.cit.*, p.79.

17 *Wit, op.cit.*, p.74.
urban society, a relatively large degree of social mobility both up and down the scale of social status. As Wilson puts it, it is by no means difficult for individuals to move up or down this status ladder. The fact that social mobility has at present become a greater reality than it was previously can be explained by a constant change of individuals' jobs, status and movement both in and out of Bangkok and other cities.

In a transitional society like Thailand where the traditional ascriptive criteria for jobs on the basis of birth, age and other ascriptive status, give way to the modern criteria for selection on the basis of individual achievements, one of the important social purposes of education becomes that of serving as a mechanism for role allocation, placing individuals into different jobs and different statuses in the social structure. Out of a complex of the seven criteria for social status already referred to, the acquisition of advanced levels of education and degrees and later governmental and bureaucratic positions can in particular determine the chances for individuals to achieve a vertical social mobility and thus a higher social status. This can be possible for achievement-oriented individuals who, by virtue of their advanced education and degrees, can climb the ladder of social status through entry into the government bureaucracy. As Shor states, the prestigious government service

18 Wilson in Kahin (ed.), op.cit., p. 35.
provides for the upwardly mobile the major avenue for an attainment of higher social status. The significance of these two criteria for status is also evidenced in the ruling segment of Thai society whose most distinguishing characteristics have been its advanced levels of education and its bureaucratic nature. In the case of the groups at the highest levels of urban society, namely the aristocracy (the royal family and the traditional nobility) and the senior military and civil bureaucrats (the new commoner elite), political power may be another criterion that, in conjunction with the criterion of bureaucratic position (both military and civil), determine the high social status associated with those groups.

Having seen how some of the criteria, in particular, the acquisition of advanced levels of education and degrees, governmental and bureaucratic positions and political power determine an achieved social status of individuals, it would be pertinent to briefly examine the various component parts of the social structure of Thailand. At the pinnacle of the social structure is the king, while the peasantry which comprises over

---

21 Wit, op. cit., p. 75.
22 Ibid., pp. 74-75.
80 per cent of the total population constitutes the foundation or the base of the social structure. In between the king and the peasantry are found the five urban status groups. In descending order of social status, these social status groups are: the aristocracy (the royal family and the traditional nobility); the new commoner elite (top military, political, administrative, professional and business leaders); the upper middle class (intermediate-level civil servants, military officers, professionals, teachers, merchants, small businessmen, and white-collar workers); a lower middle class (overwhelmingly Chinese and consisting mainly of craftsmen and skilled labourers); and a lower class (unskilled labourers, domestic help, peddlers, etc.).

23 Although the Buddhist clergy enjoys a high social status, it is not regarded as part of this social structure. Due to its ecclesiastical nature, it is thus outside this secular social structure. Ibid., p.75.

24 The term "social status group" is preferred to "social class". Even though urban society, particularly that of Bangkok, is much more stratified and has a more elaborate hierarchy of social status groups compared to rural Thai society, it does not have a true class system in the traditional European sense of the term. Due to a lack of class consciousness and of common class interests, Bangkok society is thus by no means "marked off into static social compartments out of which people never move." The lack of class consciousness and of common class interests can be seen in the fact that these individuals do not have a strong sense of kinship ties with other members of their own group. Rather, they are a group of discrete individuals who share a common prestige status on the basis of certain status criteria. See Phillips in Sharp (ed.), op.cit., pp.162-164, quoted in Wilson, op.cit., p.53.

25 Wit, op.cit., pp.74-75.
The Value of Education

The Thai places a high value upon education in general and university education in particular. This is the last in the series of Thai cultural values and the one which ranks high in a hierarchy of all values in Thai society. Thai culture is marked by a stress upon success or personal achievement in education and also especially in university education. There are thus two constituent components of this major value of education at both university and non-university level. There are deeply-held values attached to each of these components.

At a non-university level only education of an academic type is esteemed whereas education of a vocational type is not. It is this academic type of education, especially at a secondary level, which leads directly to a university education, thereby providing a convenient route to white-collar jobs in the government bureaucracy and in the professions generally. The respect thus accorded to academic education for this reason can be seen against a low social status of blue-collar jobs which vocational education at a non-university level entails. A firmly-entrenched attitude of distaste harboured by Thai society against manual jobs with which vocational education is associated could

---

well explain the low social status of those blue-collar jobs.\(^{27}\)

The biased attitude towards vocational education leading to blue-collar jobs, as contrasted with academic education leading to university training for white-collar jobs endowed with high social status, has given rise to unpopularity of vocational education provided in schools and technical institutes — an unpopularity in the sense that vocational education is inferior and thus does not enjoy widespread acceptance.\(^ {28}\)

A university level education for a degree assumes pre-eminence chiefly because a basic orientation of present-day Thai society is such that a certification of university degrees takes precedence over knowledge and skills both of practical and unpractical utility. A deeply-held value Thai society has attached to university education thus lies very significantly in success or personal achievement in obtaining university degrees. Indeed, Thai cultural value of today has given a predominance to university degrees as such at the expense of knowledge and skills.\(^ {29}\) This is a commonly accepted value which much influences

\(^{27}\) An illustration of a close interrelationship existing between manual labour and low social status is found in the conception that the farmer and the labourer are both regarded as belonging to the lowest class status in the present-day Thai social structure.


young people in their aspiration to obtain degrees from Thai and, where possible, from foreign universities.

Although education for a university degree as such is highly valued, knowledge and skills for their own sake and for professional purposes as concomitants of a university degree are also valued, to a lesser extent, by students. But at the same time since Thai society recognizes university degrees as a symbol of social status and prestige, it can then be asserted that education for a university degree from the point of view of Thai society is tantamount to education for higher social status and prestige to be accorded by the society. In the sense that university education is education for a degree and in itself for higher social status to distinguish those who are university-educated from those who are not, Thai society can be stereotyped as one which stresses the form rather than the essence of life. An emphasis that university education is pro forma thus reflects Thai society's commitment to degrees as a dominant value in university education. Students' tendency to become degree-conscious is related to another Thai value of "maintaining face", for to maintain or rather "not to lose one's face" in this connection an acquisition of a university degree has to be given a very high priority.

30 Kruekaew, op.cit., p.103.
31 Ibid.
Having discussed in some detail the complex of Thai social and cultural values, it would be worthwhile to state some qualifications about a general observance of these values in Thai society. On the whole, these values in their essentials are sanctioned and upheld by both urban and rural Thai, although differences exist in the extent to which they are observed. It should also be borne in mind that this complex of the Thai values are imbedded in Theravada Buddhism which constitutes the core of the traditional culture of the vast majority of the Thai people. The Thai social value system is thus inseparable from Theravada Buddhist religion. However, it is noticeable that some of these basically traditional religious values may be in a state of flux and thus have possibly become secularized or modernized. In the following section we shall attempt to examine the secularized version of some of these traditional Thai/Buddhist values towards their reflection in university education, outlining a process of change in the secularization of these values and trying to explore the manner in which Thai and Western institutions have influenced the secularization process itself. In doing so, some allusion to the historical development of the interactions between Thai and modern values is relevant and will be discussed as far as it is possible. We readily admit that a secularization of values is indeed a difficult and complicated theme and as a result only

highly generalized impressions can be given. The discussion of this theme will inevitably be shot through with limitations and weaknesses. And as already stated elsewhere in the "Limitations" of the thesis, hardly any scholar, indigenous Thai or foreign, has ever made an attempt to seriously research into this complex subject of the secularization of the traditional religious Thai values. For all that, we shall now turn our attention to the secularization of values.

Secularization of Traditional Thai/Buddhist Values

As a result of an adoption and an assimilation of modern Western values by the Thai, certain elements of these traditional Buddhist values have therefore become secularized and modified. To be sure, such a secularization of values actually represents an amalgamation of traditional Thai and modern Western values so that both the indigenous and the newly-accepted alien values could remain juxtaposed with one another. In this realm of the secularization of values taking place in the acculturated milieu of Thai society, perhaps an appropriate illustration may be made of the attitude of the Thai towards the adoption of values from the West in instances where those values are deemed as suiting their mentality. Whether or not this is a selective adoption showing a sense of eclecticism is to be judged by the Thai themselves. In regard to such an attitude of the Thai, Riggs expresses the following view:
Unlike the Confucian trained intellectuals of China who wrestled stubbornly with the problem of how to reconcile Chinese cultural values with Western materialism and science, the Thai tend to accept anything which appeals directly to them as having value regardless of whether or not it conflicts with other accepted values. Hence they may take as equally useful Western medical notions and traditional concepts of spirit possession as cause of disease. Truth is not perceived in either/or terms, and propositions are judged on the basis of their empirical usefulness. The Thais were pragmatists long before the philosophy of pragmatism was invented."

This culturally ingrained attitude towards a reconciliation of different values would provide an explanation for a secularization that has occurred to some of the traditional Thai/Buddhist values. Typically, although the secularization of values is felt in Thai society as a whole, it is more clearly perceptible in cities like Bangkok and Chiangmai as well as other large provincial urban areas which are more exposed to Westernizing influences than in the rural areas. It would seem interesting to note that although Theravada Buddhism provides the clear and authoritative statement of the traditional values of Thai society such values have now been articulated in more secular terms. The secularization of traditional Thai/Buddhist values may well represent the transmission of the form of the original religious values rather than the contents of these values.

---

Hence, it would appear likely that the form of these Buddhist values may remain relatively unchanged while the values themselves may then be expressed in the form of secularized values rather than their contents.

The process of secularization resulting from the interactions between the traditional Buddhist values and the Western values probably began in the reigns of King Mongkut (1851-1868) and King Chulalongkorn (1868-1910) about a century or so ago when Thailand had embarked upon the course of modernization of the country. In the words of Frank J. Moore, "During the last 100 years, and especially the last 25 years, the introduction of Western ways and values has set loose forces which have worked substantial revisions in the old order. In general, there is a gradual drift...away from some traditional Thai values and toward techniques and values modeled on the Western example." 34 The Thai value system has not maintained itself in a sort of stable equilibrium but since then has shown a dynamism that enabled the Thai people to reconcile their traditional values with the newly-adopted values from the Western culture in meeting successfully the exigencies of the changing world. 35 From the last century until today is the period

during which the Thai people have experienced vast and fundamental changes in their lives. The modernization of education, government and administration, which had bearing upon the secularization of the traditional Thai values, has ever since continued uninterrupted.

Beginning in the last century, the traditional pattern of Thai life was disturbed. Western military, technological and commercial power began to impinge upon the political consciousness of the Thai. But fortunately, Thai reaction to the West was both realistic and positive. On the one hand, Thai leaders were willing to surrender a bit of its national sovereignty in exchange for its own independence. On the other hand, they were willing to learn from the West. King Mongkut, for example, concluded treaties with Great Britain, the leading colonial power of this region. Meanwhile, the Thai traditional elite undertook to teach themselves the rudiments of the new Western knowledge and technology. It was also during this period that Western thoughts began to challenge traditional Thai ways of thinkings. American Protestant missionaries arrived to settle down in Bangkok. The significance of these missionaries lay in the Western knowledge, technology and values which they brought with them to Thailand. These men were doctors who brought new and efficacious medicine to the sick and the dying. They also brought the printing press to print religious tracts and then inaugurated an English-language newspaper to spread their views on spiritual and material salvation. They established an informal school where missionary wives
taught English to women of the palace. Among the other contributions made by the missionaries are the typewriter, the sewing machine, a definitive Thai-English dictionary, Western dentistry, Western medical education as well as some basic foundations of a modern school system. In many ways, therefore, the missionaries "brought the West" to Thailand.\textsuperscript{36} As these Western influences began to penetrate the Thai culture, the Thai leaders appeared to have been conscious of the fact that these activities were somehow or other a challenge to the traditional way of life and thinking of the Thai people. Their response took the forms of attempts to preserve the heritage of the past, to make improvements on it, to examine its foundations and also to adopt and adapt new thoughts to the traditional corpus of knowledge.

King Mongkut himself probably made a significant intellectual and educational advance. He taught his courtiers to appreciate comparative religion, international affairs, ancient and modern languages and modern science and technology, the knowledge of which he had obtained from his frequent intercourse with the resident missionaries, both Protestant and Roman Catholic. He himself studied Latin and English, arithmetic, astronomy and techniques of printing, and encouraged his cousins and followers to take up modern medical practices and to study

chemistry and other sciences. He later hired first an English woman and then an American missionary as tutors to his son and heir, Prince Chulalongkorn.

The threat of Western imperialism coupled with certain movements in domestic politics impelled the Thai leaders to strengthen their control over the outlying provinces, to improve their military organization, and to reform the system of government and administration. The role of education in this critical period was to help to produce a new generation of leaders and bureaucrats in order to anticipate and to keep pace with the momentum of the great reforming processes. As David K. Wyatt has rightly observed,

"Profoundly important to the modernization of Thai society was the introduction of modern education during the reign of King Chulalongkorn (1868-1910). New schools on the Western model and a curriculum greatly different from that of the Buddhist monastery education of a few decades earlier contributed substantially to the definition of new roles and groups in Thai society and to the formation of a new generation of modern men which by the reign of King Wachirawut (1910-1925) had assumed direction of the public life of a Thai nation becoming modern."[37]

During the first decade of his reign, King Chulalongkorn tried first to improve upon education within the palace walls. In 1870 the King founded a school for his brothers and half-brothers,

his cousins and the children of his supporters whom he had enrolled in a militarized Corp of Pages. Two years later, after his state visit to British India, the King followed his father's example in appointing an English tutor for his brothers, half-brothers and cousins.

King Chulalongkorn realized that he had to go beyond the palace walls and make innovations in order to help Thai education produce the qualified personnel so urgently needed for the reform of the government and administration at that time. As a result, the government's major efforts in educational reforms were soon directed towards the establishment of state-run secondary schools and the encouragement of private secondary schools. In 1879 the King authorized an American missionary, Samuel McFarland, to open a school at Nanthauthayan Palace which became familiarly known as Suan Anan School. A committee was formed to supervise this specifically lay foundation, the curriculum of which consisted of such useful subjects as reading, writing and simple calculations. In 1882, the pre-cadet school named Suan Kulap expanded into an ordinary secondary school. The King was quoted as stating the reasons why this pre-cadet school had been expanded into an ordinary secondary school in the following terms.
"...But not only soldiers are needed. Nowadays, knowledgeable and quick-witted men who can be of real use in the administration are urgently needed." 38

In 1885, the government encouraged a Roman Catholic missionary, Father Colombet, to open another lay school which took the name of Assumption College.

In the same period, the government also began to institutionalize educational administration and to fix academic standards. In 1891, the government promulgated the Royal Edict on Examinations which added to the curriculum a third Standard consisting of more sophisticated subjects such as rhetoric, logic, versification, and more advanced arithmetic. An idea of how long secondary education should ideally last at that time was given by the fact that a parallel English Standard was established according to which students were required to master reading, writing, translation, geography, foreign history, commerce, astronomy and hygiene in a six-year course.

The great reforms of the late 1880's and the 1890's made the government realize that the personnel it needed would be even better qualified if they had received some form of higher education or advanced technical training. (See the section on the historical development of university education in Thailand).

The development of the educational bureaucracy and secondary education during the reign of King Chulalongkorn and thereafter did not mean that mass education was neglected. Indeed, at the same time that he was trying to improve education within the palace walls, King Chulalongkorn was also doing much to develop another traditional center of education, the Buddhist monasteries. The government started to harness the academic resources of the monasteries to educational development. In 1884, the government required the traditional ways of teaching of the monasteries to be formalized. A number of abbots in Bangkok and the provinces did open proper schools in the monasteries. An attempt was later made to spread the benefits of modern education to the provinces.

The development of mass education tended to be slow at first but it did gradually gather momentum as time went on. It was not until the late 1890's, when Thailand's external relations had become relatively stabilized and King Chulalongkorn had paid a goodwill visit to Europe, that the government really began to make a determined effort to spread modern education to the masses. In 1898, King Chulalongkorn ordered the Ministry of the Interior and the Buddhist Church, both of which were then trying to make their authority nation-wide, to cooperate and to use their influence and machinery to extend education to the provinces. Provincial abbots were urged to open proper schools in their monasteries. However, it was not until later on in the reign of King Wachirawut that the government could begin to consider
compulsory primary education. And universal primary education for children aged between seven and fourteen was not made compulsory by royal edict, and then with many qualifications, until 1921.

It will be seen that education in Thailand took as long as a century or so to evolve from its traditional form to the modern system as it is known. Under Western political and military pressure on the Thai nation and because of Western intellectual challenge to the Thai mind, the transition was made from informal teaching to a standardized education under the supervision of a centralized educational bureaucracy. In this process of modernization of education, the old was inextricably intermixed with the new, for even as new ideas were adopted, old institutions were adapted to make them more responsive to contemporary needs. The desire to preserve the cultural heritage of the past as well as the recognition of the need for innovations seemed to be inherent in the process of modernization of Thai education. Mass education and universal compulsory primary education came to be based largely on the traditional foundation of education, the monasteries in the provinces and in the metropolis.

Modernization in Thailand went beyond the confines of education. Many other new things were introduced for the first time in the reign of King Chulalongkorn: post and telegraph service, railways, water works, the Gregorian calendar, the police force, fiscal reform, maps and surveys. There is no doubt that
modernization that was initiated is of a variegated nature and type. Apart from these innovations, mention should also be made of the emergence of a market or exchange economy which had been making its inroads into traditional Thailand at that time. One of the important factors that helped bring about this exchange economy was the opening up of the country to overseas trade with the West and thereby to the world markets. Such an undertaking helped to stimulate development of a monetized sector of the Thai economy.

Within the context of the modernizing processes that have been under way for about a hundred years or so now, it is likely that the traditional Thai/Buddhist value system would stand a chance of being adapted and modified — that is, in other words, it has become secularized to a greater or lesser degree. In the process of modernization of the country, it seemed inevitable that the changing social goals and practices might come into conflict with the traditional values and teachings of Theravada Buddhism which had already taken root in Thai society. There was then a need to make adjustments in order to harmonize secular Western elements with the spiritual religious elements in the Thai culture. Traditional religious values were thus under the pressures of becoming more or less reoriented to suit new

39 For further details of these aspects of the modernization process, see Siffin, op.cit., pp.52-58.

requirements and needs which had arisen. Once these religious values have become secularized they tend to become removed from their religious context. In this connection, it is also interesting to note that what the traditional elite really desired was modernization rather than "Westernization" of the country. And modernization was desired for the sake of preserving the national independence at the same time. As Michael Edwardes has observed, modernization was adopted by the traditional elite in order to protect the country against the Western colonial powers and to defend Thai culture from becoming Westernized. In her attempts at modernization, it was fortunate for Thailand that the traditional religious values appeared to present no stumbling block to the modernizing processes begun during those fateful years but rather tended to positively contribute to the modernization still in progress. As Norman Jacobs has stated succinctly,

"It is difficult to maintain that any Thai religious value can ever be an obstacle to progress, especially in the manipulative hands of a decisionmaking elite ever willing to accommodate religious values to the pragmatic exigencies of the times."  

Take, for example, the modernization of education that has been adopted. The government's concern with Western secular


education resulted from the needs of the royal service and consequently interest in that education, as we may well realize, was understandably utilitarian.\textsuperscript{43} The government held a utilitarian view on the uses of modern knowledge which it saw as a means of creating the practical skills necessary for modernizing the country. On the whole, Buddhist values as subscribed to by the average Thai are not seen as passive or indifferent to material or economic well-being and so negation of such a well-being is not entailed. No religious obstacle then seems to stand in the way of accepting, for example, technological innovations which the Thai think will be able to help them achieve a better material well-being. It should also be pointed out that primarily religious education of the period before modernization was launched is no longer emphasized and thus declines considerably in its importance. Buddhist humanistic ethics has since then been relegated to just a very minor part of the school curriculum. And as modernization gains momentum, secular conception of education definitely takes precedence over religious conception of education. Education is nowadays conceived much more in terms of its practical utility and of its other values than as a means for achieving personal spiritual salvation and religious enlightenment.

In present-day Thailand modernization in its varied aspects has become a factor that makes it possible for the Thai

\textsuperscript{43} Siffin, \textit{op. cit.}, p. 56.
people to accept many of the Western ways and values — in fact, they have already adopted and adapted these Western ways and values since modernization began in the middle of the nineteenth century. Moore's view is probably correct when he states,

"Objective change in Thailand has an important subjective corollary, namely, that the people — elite and masses — have increasingly accepted the desirability of change. This is the truly dynamic force in present-day Thailand." 44

The spread of the market economy, increased ease of communication and transportation, widespread use of mass media, increasing urbanization, modernization of the educational system, administrative centralization, international cultural exchanges, foreign trades, tourism as well as importation of modern Western technology — these, among others, are manifold aspects that constitute the processes of modernization in Thailand today. Through these on-going processes of modernization many of the Western ways and values have of course continually influenced the traditional Thai value system in one way or another. Indeed, these very processes of modernization have resulted in the secularization of the traditional Thai/Buddhist values.

There are instances in which Western material values have found their way into the traditional value of status. Thus, social status and wealth have, to an increasing extent, become

44 Moore, op.cit., p.18.
positively correlated.\textsuperscript{45} In present-day Thai society, material affluence in the forms, for example, of large pecuniary gains and possession of stately homes and big prestige cars, has become a source of high social status that is well recognized. To all intents and purposes, the more materialistic value of wealth actually determines social status. But in a similar vein and to an important degree, an acquisition of advanced education together with university degrees more preferably taken from institutions in highly developed countries as certification of academic success can combine with the possession of those items of material wealth to confer a high social status upon individuals concerned. Needless to say, therefore, university education plus material wealth is presently recognized as another determinant of a high social status. Insofar as university education and degrees in this sense are thus considered significant, they tend to be regarded as a means to an end, among others, of an achieved social status.

If a degree of change has occurred to elements of the value of social status, the desire for achievement has in fact added a new dimension to the value change in the context of contemporary Thai society. This desire for achievement as one of the essential qualities of an "organization man" has emerged as a value not only of certain social groups in Thai society, but it has also become accepted as a newer value orientation in the

\textsuperscript{45} Shor, \textit{op.cit.}, p.69.
domain of the bureaucracy. As Shor has remarked, "Within the sphere of governmental administration, the contemporary infusion of achievement-oriented standards similarly has intruded conspicuously upon traditional preoccupations with ritual, etiquette, equanimity and personal gratification."\(^{46}\) Because of an incentive for such higher material and symbolic rewards, the emergent value of achievement-orientation\(^ {47}\) is considered all-important for undergoing the time-consuming process of educational preparation and training required as a condition for entry into a bureaucratic organization.\(^ {48}\) In this sense, the value of achievement-orientation is implemented chiefly by the modernizing educated Thai who are found in the bureaucracy and in institutions of higher learning. These are individuals who are highly motivated to achieve an "upward" social mobility through success in their academic goals and in their organizational bureaucratic jobs. Hence, one of the clearly noticeable trends to be perceived in Thai society today is that the modernizing value of achievement-orientation now tends to receive an increasing degree of sanction and support as a criterion for social status and economic rewards at the expense of the traditional value of ascription on the basis of birth, age, and

\(^{46}\) Ibid.

\(^{47}\) This value is technically defined as "the psychic urge to achieve higher material and symbolic rewards." See Amitai Etzioni, Modern Organizations (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1964), p.109.

\(^{48}\) Ibid.
sex which is now declining considerably in its influence.\textsuperscript{49} The fact that the force and influence of the newly-emergent value of achievement-orientation is now gaining momentum can be explained for all of Southeast Asia, including Thailand, by what Hayden states realistically:

\begin{quote}
"... throughout the region, social organization is moving -- largely through the channels of education -- from a basis of ascription through the accident of birth to a status conferred by achievement and based upon skills and competence -- a combination of ability and educational attainment."\textsuperscript{50}
\end{quote}

The foregoing has been the perspective of a secularization in certain of the traditional value orientations the effect of which is more strongly felt by some sectors of the urban Thai society. But in a somewhat marked contrast to this perspective of secularization, Thai society as a whole may at the same time be looked at through a filter of some other values which are still rather steadfastly held and thus remain substantially unchanged in their essence. Among these values, one is considered not conducive to a furtherance in the long run of a national goal of social and economic modernization.

\textsuperscript{49} See Guskin in Textor (ed.), \textit{op.cit.}, pp.104-105.

The emphasis of the traditional Thai value of individualism on non-conformity which is not as yet seen as changing towards the emphasis upon conformity to the group presents a stumbling block to a development of individuals' sense of social commitment towards the societal goal of modernization. This is true even of the achievement-oriented and well-educated individuals. In his comment on the detrimental effect of individualism on non-conformity to group activism, Wit makes the following statement: "... given Thai individualism, there has been little tendency for such individuals to coalesce into anything approaching a stable and coherent group."^51

This brings us to a question of a change in some of the cultural values which tend to impede national development. In the sense that cultural values are one of the main constituent parts of the so-called "development potential"^52 of a society, values should become resources to be tapped in the interest of furthering the society's modernization goal rather than becoming a force and influence at work which retards and obstructs the progress of national development. To serve as a prerequisite to a furtherance of the national development goal, therefore, cultural values like individualism needs to be modified to stress group collective efforts not only for the benefit of individuals but of the larger national society. In regard to the need for a

^51 Wit, op.cit., p.75.

^52 See Ayal in Tilman (ed.), op.cit., p.549.
change in cultural values to benefit development and thereby an
individual who holds the values, Wit has intimated a pertinent
suggestion by stating: "... to some extent, a new Thai man must
emerge in behavioral terms before substantial development occurs."53

We have so far considered the secularization of certain
traditional Thai/Buddhist values and have also touched upon the
traditional value that is still to be secularized. It would be
appropriate at this point to consider also the value that is
notable for its absence or for a modicum of sanction and support
it receives in Thai society. This is the universal value of
science and technology. It is because of this that the value of
science and technology, or rather the virtual lack of this
scientific and technological value, is in a marked contrast to
the traditional Thai values we have already dealt with.

A prevalent notion one can perceive of Thailand as well
as of other Southeast Asian countries has to do with the value
of science and technology. In this connection all these national
societies are marked by a virtual absence of the so-called
scientific disposition and the most pervasive cultural influences
are those concerned with religion. In fact, their traditional and
spiritually oriented cultures have an effect of strengthening the
existence of a spiritual and noumenal reality which, from the
viewpoints of both the individual and society, is considered as

53 Wit, op. cit., p. 164.
more important than the empirical and the phenomenal. For example, the systems of religious belief which many of the developing societies adhere to are considered antipathetic to the inculcation of the flexible and empirical spirit essential to scientific and technical development. This is also the case in Thailand where the emphasis of Theravada Buddhism upon the pursuit of other-worldly goals stresses the significance of the normative over the objective, of the cosmic and moral conception over the natural conception of the universe. These conceptions present a grave difficulty to an inculcation of such empirical spirit indispensable to the value of science and technology.

When the attitudes of the people are deeply entrenched in their own traditional religious values, they tend to regard those values as more important and more acceptable than the empiricism of science. This is especially true of rural as compared with urban and modernized sectors of Thai society. As Herbert Phillips has stated, while the urban residents tend to have a more scientific outlook towards their lives, resulting in an attenuation of their religious fervour, the peasants still view "all human intentions ... forever set within a framework of cosmic, and particularly moral, unpredictabilities .... To them,


human volition represents only one of several indeterminants and uncontrollable factors giving rise to events." The lack of this scientific disposition or outlook on the part of the overwhelming majority of the population will present obstacles to an acceptance and an integration of the more modern value of science and technology into Thai society at the present time when economic and social modernization of the country is being undertaken.

In terms of the scientific disposition indispensable to the acceptance and integration of this scientific value, it is the methods and ways of thinking characteristic of science that present such obstacles. This is because the scientific methods and the scientific modes of thinking are either not understood or least understood by those Thai who are steeped in their traditional religious values. In other words, most of the Thai lack the scientific disposition. For the human, material and financial resources are only instruments for the operations of this scientific disposition and will be of little avail if the developing societies are still lacking in this crucial ingredient conducive to the acceptance and development of the value of science and technology. While in Thailand there is not this

56 Phillips, op. cit., p.80.
capital of the scientific disposition to draw upon, its indigenous culture is also found to be incompatible with the scientific mode of thinking. To be sure, Thailand is a society which has not yet made the value of science and technology an integral part of its culture. The Thai is by no means habituated to the universal pattern of causality, the central core value of scientific mode of thought. That is, they are not used to thinking of the phenomenal, natural and social world as interacting in terms of cause and effect. The notions of scientific rationality, of system and of conceptualization which are essential to an empiricism of science, for example, are all alien and thus unintelligible to their mentality and outlook. What Dwaine Marvick has said about the mentality of African students applies impeccably well to that of the Thai. "They lack the habit of asking why, the assumption that causal conditions can be identified, the willingness to treat an event analytically, as an example or case study, rather than descriptively, for its own sake." 58

The case of Asian villagers may further illustrate this point. When an innovation such as the improved seed or chemical fertilizer fails they will never look for a rational scientific cause. Instead, they tend to find a satisfactory explanation in the fact that the failure comes from outside and thus they have

a perception that external things are evil.\(^59\) When the scientific disposition or outlook is lacking the indigenous culture of the Thai is least amenable to an acceptance and development of the value of science and technology, particularly in terms of its methods and thoughtways. Consequently, when an attempt is made to introduce the modern value of science and technology, this value cannot readily become grafted upon to the cultural milieu of Thai society.

We have in this chapter considered the complex of traditional Thai Buddhist values — those that have become secularized and those that appear in their pure religious forms as yet to become modified and secularized. It is assumed that these values would provide a basic frame of reference for the various groups in Thai society to generate demands upon the university education system. This may become evidenced as we look into demands of the parents/children group which we propose to do next.

\(^{59}\) F.G. Bailey, "The Peasant View of the Bad Life" (mimeographed and undated), p. 2.
CHAPTER III

Thai Society's Demand For University Education

This chapter attempts to discuss Thai society's demand for university education. To be more precise, it will deal with demands that are generated by the parents/children group. The chapter begins by referring to the operational definition of demand by this parents/children group in Thai society. An attempt will also be made to discuss some important factors that are assumed to determine demand for university education generally by the parents/children group.

Operational Definition of Demand of Thai Society

It is admitted that the theoretical concept of "demand" has a variety of meanings. It can be taken to mean many different things in many different ways. It is thus one of the most
ambiguous and confusing concepts. As one of the most variably defined concepts, the term "demand" may be suggestive of a political movement by students. This concept of "demand" moves between allusion to political activism and passive expectation of education. But industrial demand may perhaps be the weakest definition. Faced with the various and differing usages of the term, it may be useful to operationalize the definition of demand to serve our purpose in this thesis.

The term "demand for university education" will be taken to mean a want for such an education or a kind of a market demand for university education. In economics, demand means the desire, ability and willingness of an individual to purchase a good or

---

1 Coomb's restated definition of the concept of "social demand" as "the aggregate 'popular' demand for education; that is, the sum total of individual demands for education at a given place and time under prevailing cultural, political and economic circumstances" does not seem to fit into the analysis of Thai society's demand for university education given in this thesis. The same is true of Coomb's earlier definition of the concept of "social demand" which he gave in The World Educational Crisis: A Systems Analysis as "... the number of students trying to enter school or trying to stay in and go further, reflects society's social demand for education.... Social demand for education... has a way of growing faster than manpower requirements...." See Philip H. Coombs What is Educational Planning? (Paris: International Institute for Educational Planning, UNESCO, 1970), pp.37-38. and also Philip H. Coombs, The World Educational Crisis: A Systems Analysis (New York: Oxford University Press, 1968), pp.17-18. It appears that Coomb's definitions of demand may well fit into the analysis of education at all levels in other contexts which his books aim to explain rather than into the analysis of demand for university education in the context of Thai society.
service. However, desire by itself is not equivalent to demand. The consumer must also have the funds or the ability to obtain funds in order to convert the desire into demand. Consumers of university education are able to purchase that education, thus converting their desire into demand for university education. In the context of the present chapter, the term "demand" has imposed a limitation upon itself in terms of usage and meaning. In this thesis it is assumed that the parents and their children are a separate social group from university students, from the business and from the government. At the same time it cannot be assumed that this parents/children group spreads across the entire Thai society. From the data supplied in this thesis this group is unlikely to extend far beyond an urban, middle-class section of Thai society. The fact that 75.5% of students at CMU and 72% of students at CU are financially supported in their university education by their parents indicates that demand is thus presumably isolated into a group consisting essentially of those members of the population who can provide adequate financial support to put their children through a university. (See Item No. 7 in Appendix B). Moreover, from data in the thesis the fact that 43% of the fathers of students at CMU and 33% of the fathers of students at CU either own or are employed in private business and industry plus the fact that 30% of fathers of students at

---

CMU and 31% of fathers of students at CU are employed in the
government service also indicate that this group of parents and
their children belong to the urban middle-class section of Thai
society. Consequently, the operational definition of demand for
university education to be discussed in this chapter is
restricted to this social group consisting of parents and children
drawn from the urban middle-class section of Thai society. Demand
thus represents the demand for university education generated mainly
by the members of this sector of the society. This social group
contains a high proportion of parents and children from middle-
class families. It may perhaps be said that university education
in Thai society primarily caters to a "middle-class" clientele.

In addition, the parents/children group must also include
those students currently enrolled at the university. However,
from the data in the thesis (analysis of Question 6, see Appendix
C at the end of the thesis), 65.5% of students at the two
universities surveyed apparently denied their parents' influence
when asked whether they came to the university mainly to satisfy
their parents' desire for them to gain social recognition and
status. The fact that those students answered this question in
this manner did not mean that they entirely disregarded their
parents' desire for university education. They only disregarded
their parents' influence only insofar as that university education
meant to them mainly in terms of a gain in social recognition
and status. To be sure, so far as the parents' influence in terms
of university education providing vocation and knowledge is
concerned, those students might not deny their parents' influence and desire. It is therefore a pity, we admit, that we had not added questions on the parents' influence with regard to career and knowledge. Conclusions concerning demand for university education and relationship to the parents/children group can thus be sustained for the reasons stated above. It is actually the students who confused themselves when answering Question 6 of the questionnaire; and it is possible that they might not become aware of their parents' influence over them. A deficiency exists in that no follow-up questions were set in the questionnaire. A look at the analysis of Question 6 in Appendix C also reveals that 29.5% of students at CMU and 24% of students at CU did not deny their parents' influence on their coming to the university to gain social recognition and status.

One of the milestones that has marked Thailand's formal educational system in particular since the 1960's is an unprecedented growth in demand for education as well as for university education. With the opening of four new universities in the 1960's enrolments of full-time students have increased severalfold compared with earlier periods. However, this phenomenal growth in the demand for university education, as well as for education at other levels, is not unique to Thailand. It has in fact encompassed the whole world. As vividly portrayed by the UNESCO itself, "pressure from the masses to accede to education is a characteristic feature of the second half of the twentieth century; it has increased spectacularly since the Second World
War, in all continents and at all social levels." Throughout the world and especially in developing countries such a growth in demand for education and for university education may be attributed mainly to pressures from certain groups in the society such as the parents/children group. A fervent wish of parents to give their children an opportunity to improve their lives through more and better education — to be no longer bound on a wheel — actually gives the demand for education its "explosive quality." In Thai society, the rising educational aspirations of the parents/children group can be evidenced in the clamour for admission into the universities on the part of a far greater number of university — bound high school graduates than can be admitted each year. In the academic year 1970-71, for example, about 9,000 out of 20,000 or so applicants for university admission were admitted to all the universities and other institutions of higher learning. In view of this spectacular increase in the demand for university places, to meet the "popular" demand for university education rather than to make that education "popular"
presents a problem of a tremendous magnitude. This is the problem of a mounting pressure of demand for university education generated in Thai society by the parents/children group drawn from the urban middle-class section of the whole population.

Factors Influencing the Demand For University Education

In the context of the operational definition of demand for university education already stated, what in effect brings about such an enormous growth in the demand for university education generated by the parents/children group in Thai society? Coomb's statement may perhaps be relevant and applicable also to Thai society. As he has pointed out, of all the factors that determine demand for education the most influential is "the culture itself, the climate of attitudes and convictions about what education can do for people."  

Pressure for more education generated by the parents/children group stems chiefly from an expectation that academic education and a university degree can provide graduates with white-collar jobs. This expectation — indeed a high valuation of university education — is what Hla Myint has stated as one of the two causes that account for the educational expansion in

6 Ibid., pp.450 and 452. See also Pin Malakul, "Education in Thailand Today", in Witt Siwasriyanon (ed.), Vistas of Thailand (Bangkok: Public Relations Department, 1963), p.70.

most Southeast Asian countries. Just as this high valuation of university education and university degrees may be readily accepted in those Southeast Asian societies, so too it is the case in present-day Thai society. As we have seen, one of the major value orientations of Thai society is towards education and ultimately towards university education. That the Thai vests much confidence in the value of education may be clearly evident in the parental desires and expectations of what university education can do for their children as well as in those of the children themselves. These desires and expectations possibly reflect the demand for university education as one of the major social values in the Thai culture. Education as a "consumers' good" to meet that demand is thus socially desirable and recognized as a well-cherished cultural value to be fulfilled by peoples in Southeast Asian countries. In their desires and expectations of what university education can do for their children the parents/children group in Thai society, influenced as it is by the social value of university education and degrees, seem to demand university education for three major reasons. First, they are eager to acquire professional knowledge and skills,

---

8 See Hla Myint, *Southeast Asia's Economy: Development Policies in the 1970's* (Middlesex, England: Penguin Books Ltd., 1972), p.144. According to Hla Myint, another cause of the educational expansion, of no concern to us in this chapter, is the belief that educational expenditure represents 'investment in human capital' and that rapid economic development can be promoted by 'crash' programmes of educational expansion.

to get a job of their choice and advance in it. Second, they are keen to acquire and to maintain the social status and prestige conferred by being university-educated. Third, they are curious and so desire to gain an intellectual knowledge to satisfy their intellectual curiosity.

Demand Influenced By the Value of University Education For Professional Careers.

The parents/children group tends to be firmly convinced of the value of university education and degrees for future professional careers. The fact that they hold this functional-utilitarian value of university education and degrees has done much to raise their own educational aspirations, thereby placing a heavy demand upon the university education system. This is true not only of developing societies like Thailand today but also of developed societies where economic motivations of preparation for jobs generate the social and political pressures, and thus demand, for education. In other words, it is people's thinking of education as a main avenue to careers or jobs that gives rise to the demand for education. This professional orientation of university education is widely accepted in Thai society by the parents/children group in the belief that university education and degrees are means of "getting ahead" in life, a stepping-stone

---

to white-collar, high-status professions of their choice. In the words of the authors of a publication issued by Thailand's Ministry of Education, "Education is always associated in the developing society with 'getting ahead', of 'improving one's lot,' of vaulting from traditional to modern ways of living." Being fully aware of these aspirations and beliefs, the parents/children group has perhaps assumed the necessity of university education for its practical value. Because of this, there has taken place in Thai society a transitional development in which educational preparation and professional certification of university degrees has increasingly replaced the patronage system as necessary criterion of job recruitment. When this is the case, the need for a degree certification of formal university education as a prerequisite to white-collar professional careers appears to be strongly felt by the parents/children group. The parents/children group coming from the middle-class background tends to be oriented towards the professional utilitarian value of university education and degrees. As we have noted in the preceding chapter on the Thai social and cultural values, present-day Thai society has placed a great value upon university degrees to such an extent that university education per se will not be duly recognized without degrees as its sine qua non. The fact that university education...
degrees as such are at a premium can also be seen, for example, in the government's personnel requirements which are stated only in terms of university degrees to the neglect of functions, training and experience required. Without university degrees, however well-educated or technically proficient an individual is, he is by no means entitled to occupying a job or position rightly deserved by other university-educated persons whose qualification is attested to by degrees. Consequently, not university education as such but rather university education with degrees as its required certification for professional employments has in effect brought a pressure of an ever-increasing demand to bear upon the universities for a provision of more and more places.\footnote{International Bank for Reconstruction and Development, A Public Development Program for Thailand (Baltimore: The Johns Hopkins Press, 1959), pp.221-22, quoted in Fred W. Riggs, Thailand: The Modernization of a Bureaucratic Polity (Honolulu: East-West Center Press, 1966), p.341.}

\footnote{The opening in 1971 of Ramkamhaeng University with a record enrolment of about 40,000 or so students—the highest ever in the history of university education in Thailand since 1916 — serves as an institutional expression of the great functional significance of the value of university education and degrees as a passport to various professional careers. It has been said, perhaps rightly, that the establishment of this "open" university, the first of its kind in Thailand, may be a response to the demand for university degrees rather than for university education as such.}
Demand Influenced By the Value of University Education for Social Status

The parents/children group has already recognized a functional-utilitarian value of university education with degrees as an indispensable prerequisite to white-collar professional careers. They can at the same time see a symbolic value of university education and degrees and it is this symbolic value that brings them a high social status. There is perhaps no doubt that because of this higher learning is closely associated with the desire to advance in the scale of social status which the parents/children group has fostered. In developing societies such as Thailand, the perception of the parents/children group towards university education as an avenue of higher social status is probably well-recognized. As McConnell has aptly phrased it, "To individuals, education seems to be the infallible ladder for ascent in status." 15

It will perhaps be recalled that being university-educated is tantamount to having higher social status, according to the Thai cultural value of social status. And this value may be rationalized by a biased attitude towards a certain type of work. This value emphasizes an elitist attitude towards manual work of all kinds and hence prejudices individuals against work on the farms, in the factories or in the bush. On the contrary,

this value of status stresses white-collar jobs or professions for which university graduates are incumbents. "In the underdeveloped countries, "Harbison and Myers conclude, "schooling may be looked upon as 'an escape route' from the bush to a white-collar job in the government." The correlation of high social status with the white-collar jobs has thus significantly contributed to an increase in demand generated by the parents/children group for an access to university education. In developing countries one of the ways in which a university can be regarded is that it is an institution to meet the demand for education that confers high social status. This is an attitude that, according to Eric Ashby, contributes to the idea of "a university's social purpose" in developing societies. To the extent that Thai society values university education as an avenue of high social status, the parents/children group may always find a logical ground to make demand for university education.

University degrees as symbols of academic achievement have a social significance out of all proportion to themselves as paper credentials. They are, so to speak, worthy of admiration in the eyes of others. Closely intertwined with this status value of university education and degrees, what is of further interest and consequence is a conception of university education and degrees as a necessary instrument of upward social mobility.

16 Harbison and Myers, op.cit., p.186.
Prestigious careers gained by university education would entitle one to a coveted status of membership in the middle class of Thai society because, as we have seen, university education is among the major determinants of achieved social status. It may not be erroneous to say also that apart from the middle class status in the social structure a possession of university education and degrees could bring one commensurate economic rewards. So, what university education and degrees can do for the parents/children group has become fairly obvious. And this also seems to justify the demand for university education put forth by the parents/children group.

Demand Influenced By the Value of University Education for Intellectual knowledge

The motivation behind the demand placed on university education by the parents/children group rests not only in the expectation that the children will get better jobs as well as higher social status but also in the expectation that they will become better educated intellectually. This may well indicate an intellectual orientation of the parents/children group towards university education. University education for an intellectual purpose, for the children to be intellectually educated, reflects a theoretical and academic value of learning which is not only recognized in contemporary Thai society but also has traditionally been associated with the long-standing Buddhist culture of the Thai. Knowledge and learning for its own sake along with an
accumulation of merits according to Buddhist precepts have been, and still are, well respected for their religious value. This time-honoured tradition of great respect for individuals with a certain degree of secular and religious education has been a legacy of the past. In present-day Thai society secularly well-educated persons with university degrees are greatly deferred to, regardless of whether their knowledge and skills are of functional-utilitarian or intellectual value. Thus, one of the value-orientations towards university education is a conception of intellectual learning and knowledge for its own sake. Despite a perceived orientation of university education towards greater professional and utilitarian emphasis, university learning to acquire intellectual knowledge as such has become readily accepted as a concomitant of learning for a career purpose. Consequently, apart from the professional and status orientations of university education, the parents/children group, in making their demand upon university education, also have a conception of an intellectual value-orientations towards university education. These three value-orientations appear to be intermixed in varying magnitudes, depending upon the attitudes of individuals concerned. In their conception of education beyond the high school, the parents/children group may hold aspirations, for example, towards the value of job-training as a concomitant of the value of an intellectual training known as general education, or vice versa.

This is perhaps another way of saying that the parents/children group has recognized the value of university education not only for the purposes of furthering a career and of raising social status but simultaneously, though in varying proportions, for the purpose of acquiring intellectual knowledge for its own sake. Along with the career and status value-orientations towards university education of the parents/children group, the value-orientation of intellectual knowledge for its own sake would serve to generate the society's (i.e., the parents/children group drawn largely from the urban middle-class section of the Thai population) demand for university education.

The foregoing discussion has dealt with the factors influencing the demand of the parents/children group for university education. More specifically, it has given consideration to a cluster of cultural and social value-orientations of the parents/children group regarding the importance of university education and degrees for the purposes of promoting professional careers, of improving social status and also of obtaining intellectual knowledge. In other words, these then are what university education and degrees can do from the viewpoint of the parents/children group whose demand seems insatiable. What Harbison has eloquently stated in the following words may give a succinct summary of those values which university education can fulfil for the parents/children group.
"...Unlike the demand for material goods, which may become saturated, the demand for education is never really satisfied, not only because it offers the individual an endless frontier of advancement in career and status but also because it opens irresistible frontiers for the human mind and curiosity."  

A Simplified Assessment of the Demand of the Parents/Children Group for University Education

Having discussed the demand which is influenced by certain social and cultural value-orientations held by the parents/children group, we now turn to look at a simplified quantitative assessment of the demand of this social group by trying to draw upon the concepts of demand and needs within the framework of education and manpower studies, as developed by Frederick Harbison. That an accurate assessment of demand by this group is too intricate and complicated a matter to study, let alone delve into, and is lacking in its own method and theoretical framework, has resulted in only a superficial numerical assessment of that demand. We would also stress that this is merely an experimental attempt to tentatively quantify that demand, in an inaccurate manner.

Before we venture to undertake that rough assessment, it would be useful to make clear the expressions "demand" and "needs" as used in this thesis. According to Frederick Harbison,

the concept of "needs" can be explained within the framework of manpower studies. The manpower assessment will determine needs which represent the country's manpower requirements to meet specific social and economic goals. The concept of needs thus indicates manpower requirements geared for national economic and social development of a country. On the other hand, the term "demand", as already defined in the context of this thesis, means a want or a desire of an individual for university education. It is in a sense analogous to a kind of a market demand. It is further assumed that a desire or want by itself will be equivalent to demand only so long as the individuals who are consumers have the funds or ability to convert that desire into demand. Consumers who demand university education are able to purchase that education, thereby converting their desire into demand for university education. And in the context of the present chapter only parents and children who belong to the urban middle-class families in Thai society are able to effectively demand university education. Writing on the subject of high-level manpower in Thailand, Guy Hunter, an internationally known authority in this field, has explained the concepts of "demand" and "needs" along
similar lines. Hunter has made an attempt to distinguish between "education demands" which he means "a program which will give some satisfaction to the popular demand for education and keep some gradual rise in educational attainment of the population as a whole." By "economic manpower demands" Hunter means "the requirements for particular types of education and training necessary to maintain economic progress." Hunter admits, however, that this distinction cannot be precise and rigid. Quite clearly, some economic effect is produced by an output of far more graduates than appear to be necessary for the economy. Theoretically, needs and demand tend to become distinct and the distinction between these two concepts may be useful for analytical purposes. But in practical terms demand and needs may tend to overlap at many points and so university education to satisfy individual demand and the same education to satisfy the country's manpower requirements for economic growth can hardly be distinguished or made precise. By drawing upon, and also slightly adapting from, a table which Harbison calls "an analytical sweat-box," we may attempt to make a simplified and inaccurate assessment of the demand for university education generated by the parents/children group. Our slightly adapted "analytical sweat-box" is shown below.

"Analytical Sweat-Box"

<table>
<thead>
<tr>
<th>Professions</th>
<th>Needs</th>
<th>Demand</th>
<th>Reasons</th>
<th>Actual Enrolment in 1971*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>rather</td>
<td>large</td>
<td>High social status but not very high income</td>
<td>Education = 4,276</td>
</tr>
<tr>
<td></td>
<td>large</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientists and Engineers</td>
<td>very</td>
<td>large</td>
<td>High social status and High income</td>
<td>Engineering = 3,290</td>
</tr>
<tr>
<td></td>
<td>large</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctors, dentists, pharmacists, and</td>
<td>very</td>
<td>large</td>
<td>High social status and High income</td>
<td>Sciences = 2,826</td>
</tr>
<tr>
<td>medical technologists</td>
<td>large</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professions of small graduates in</td>
<td>very</td>
<td>large</td>
<td>High social status but not very high income</td>
<td>Medical Sciences = 5,509</td>
</tr>
<tr>
<td>social sciences, the humanities and</td>
<td>large</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>law</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural scientists</td>
<td>very</td>
<td>large</td>
<td>Not very high social status but rather high</td>
<td>Humanities = 4,356</td>
</tr>
<tr>
<td>and Artists</td>
<td>large</td>
<td></td>
<td>income</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architects and Artists</td>
<td>very</td>
<td>very</td>
<td>Not very high social status but rather high</td>
<td>Agriculture = 3,876</td>
</tr>
<tr>
<td></td>
<td>small</td>
<td>small</td>
<td>income</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fine Arts = 884</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total = 40,251</td>
</tr>
</tbody>
</table>

*Figures shown in this column indicate the number of undergraduates enrolled in the nine universities in Thailand during the academic year 1971. Undergraduates enrolled in Ramkhamhaeng University are not included. This university had an enrolment intake of about 40,000 students in the humanities, social sciences, law and education when it was opened in 1971.

A particular point at issue, from a study of this box, is the demand for the professions to be pursued by graduates in social sciences, the humanities, law, for the professions of architects and artists and for the teaching profession. These professional groups are distinguished from the other remaining professional groups in the box (namely, engineers, scientists, medical scientists and agriculturists) in the sense that the latter professional groups are designated by the Thai government (in its national economic development plans) as high-level (i.e., university-educated) manpower needs required for national economic and social development. Since the former professional groups are not designated as such, they are regarded in theory as the professional groups whose types of university education may satisfy demand generated by the parents/children group rather than the demand of the country's economic development. In numerical terms, the total enrolments in the fields of social sciences, the humanities and law, as shown in the box, are altogether the largest compared with each of the other remaining categories of the professions. These total enrolments altogether number 19,590 students. When the total enrolments in the fields of education and fine arts are added to those in the social sciences, the humanities and law, the student enrolments in these fields put together which may be designated as the demand made by the parents/children group will swell to 24,750. These enrolments are already well over half of the total enrolment of students in all the fields of study put together, as shown in the box.
Such has been our attempt to make the simplified quantitative assessment of the demand for university education generated by the parents/children group. As will be noted, the assessment of the demand in this case has been made solely on the basis of the magnitude of student enrolments tabulated in the "analytical sweat-box." In qualitative terms, the data on enrolments shown in the box indicate that the largest number of students are enrolled in the social sciences, the humanities and law. These fields of study altogether are characterized by what Van der Kroef has described as "verbal specialization," curricula well suited to bureaucratic and administrative careers. Here again, though these "verbal specialization" fields of study may not satisfy the present manpower requirements or needs of the country, it is argued that university graduates in these fields can serve in the bureaucratic and administrative careers in the government. So there is no denying that the government itself may need these outputs and regard these fields of study as meeting its manpower requirements. The government of course must somehow have a personnel run and man the routine administration and

---

22 The overconcentration of students in these fields, perhaps also greater in appeal, is a phenomenon that can be found in many Asian countries where careers in the government service remain attractive to university graduates. In Thailand, the traditional career objective of a very large proportion of university graduates in these fields has been employments in the government bureaucracy. For the characterization of these fields as "verbal specialization", see Justus M. Van der Kroef, "Asian Education and Unemployment: The Continuing Crisis", Comparative Education Review, Vol. 7, No. 2 (1963), p. 175.
bureaucracy. For all that, however, the Thai government in the previous century actually demanded graduates in these fields when it embarked upon the modernization process.

To further illustrate the phenomenon that there is an overconcentration of students in the social sciences, the humanities and law, we may cite the case of Ramkamhaeng University. This not only suggests an expansion of demand for university education of the parents/children group in these fields but in a way may also suggest that there is an educational preference for these fields of study. The fact that Ramkamhaeng University\textsuperscript{23} which opened its doors for the first time in 1971 has about 40,000 students enrolled in the social sciences, the humanities, law and education may well attest to the above suggestions. Through the recent establishment of Ramkamhaeng University, the Thai university education system as a whole has now witnessed a phenomenon known as the "explosion of enrolments" of university students. It appears that this university was brought into being in response to the mounting pressures of unprecedented demand for

\textsuperscript{23} Being literally called, in Thai parlance, "the academic market university", Ramkamhaeng is an "open" university employing an "open" admission system by which no entrance examination is formally required. Unlike the other nine universities, Ramkamhaeng also has a large enrolment of part-time students. A breakdown of enrolments by faculty offering instruction in each of these fields cannot be given, due to lack of relevant statistics.
university education leading to degrees.\textsuperscript{24} The case of Ramkamhaeng University\textsuperscript{25} has perhaps demonstrated that there exists a trend in demand for university education by the parents/children group towards the disciplines of the social sciences, the humanities and law. This trend in demand is exemplified both by the current enrolments of Ramkamhaeng University and by the typically large enrolments of students in these same disciplines at other universities, as we have already noted.

A word about reasons which may possibly account for a larger provision of university education in these fields than in scientific and technological fields. It is much less expensive for the government to provide university education in social sciences, the humanities and law than in engineering, medicine, science and agricultural science, both in terms of financial investment and facilities. Moreover, university education in scientific and technological fields seem to be more expensive on the part of the parents/children group who will derive the benefit from it. And teachers are harder to find in science and

\textsuperscript{24} It has been known that the government founded Ramkamhaeng implicitly as an emergency counter-measure to satisfy a demand of the disgruntled Members of Parliament in the opposition. Those MPs made the demand for a new university to be set up so that their children, other eligible individuals and they themselves can have an access to university education which could provide them with academic degrees they need.

\textsuperscript{25} Informal open-ended interviews with some high-ranking faculty members of Ramkamhaeng University all point to the conclusion that a large majority of students at Ramkamhaeng are basically motivated to obtain university degrees as a means to promote themselves in their jobs and in their social status.
technology than in the "verbal specialization" fields. The government is limited in its policy and practices to provide university education in science and technology it requires due to lack of funds and other needed facilities. Therefore the government is always impelled to provide university education in social sciences, the humanities and so on instead although unemployment of graduates trained in these disciplines may occur.

To be sure, then, the observation that the demand for university education by the parents/children group in Thai society is mainly for the social sciences, the humanities and law can be considered superficial. And although it may appear to be so in theory, in practice we cannot say that students doing sciences, engineering or medicine, for example, are satisfying the government's manpower requirement for economic development. It is indeed possible that these students may be satisfying their own private demand (i.e., demand that is assumed to be generated by the parents/children group under consideration) and that they do so seem to result from the fact that they can read and understand the job market more clearly. So we cannot assume fields of study alone to indicate and distinguish between the demand of the parents/children group and demand of the government (i.e., manpower requirements). Consequently, it would not be correct to say that demand of the parents/children group is not for university education in the scientific and technological fields which are perhaps more attractive to the job markets and at the same time more expensive for the government to provide.
This appears to be a complicated matter in itself. The two concepts of "demand" and "needs or manpower requirements" are only useful in theoretical analysis and actually have left much room for us to contend on the grounds that "demand" and "needs" cannot be precisely regimented or differentiated. In practice, they tend to become fused and intermixed. The "analytical sweat-box" merely allows us to superficially assume and discern the size or magnitude of the demand for university education generated by the parents/children group.

We have thus far discussed in some detail Thai society's demand for university education. As it has turned out in our analysis, this demand appears to be restricted mainly to the demand for university education made in actual practice by the parents/children group. To be more specific, this parents/children group comes from the urban middle-class background. As members of this social class, these parents are able to financially support their children during a university career. They are those members of the entire Thai population who can effectively make demand for university education. To support the above contention, it would be worthwhile to cite data on the socio-economic background of the students as shown both in the university handbook of statistics and in Appendix B at the end of this thesis. Comparison of the two tables reveals that this parents/children group which is assumed inviolate belongs mostly to the socio-economic status shared by owners of businesses and industry, self-employed white-collar workers, as well as by government officials of the middle ranks and above.
### Table 2

Breakdown of the Occupations of the Fathers of the Students Represented in the Questionnaire Samples

<table>
<thead>
<tr>
<th>Occupations</th>
<th>CMU</th>
<th>CU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private business and industry</td>
<td>86</td>
<td>33</td>
</tr>
<tr>
<td>Government service</td>
<td>60</td>
<td>31</td>
</tr>
<tr>
<td>Manual workers</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>Farming and gardening</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Not indicated</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Deceased</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Pensioner</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

Total of students: 200 CMU, 100 CU

*Source: Appendix B (Basic Data of the Questionnaire Respondents)*
Table 3

Breakdown of the Occupations of the Fathers of the Students Enrolled at CMU in 1972

<table>
<thead>
<tr>
<th>Occupations</th>
<th>Percentage of Students</th>
<th>Total Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietors and Employed</td>
<td>51.60</td>
<td>3281</td>
</tr>
<tr>
<td>Government officials</td>
<td>27.32</td>
<td>1737</td>
</tr>
<tr>
<td>Agriculture</td>
<td>6.46</td>
<td>411</td>
</tr>
<tr>
<td>Employees</td>
<td>6.06</td>
<td>385</td>
</tr>
<tr>
<td>Others</td>
<td>8.56</td>
<td>544</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>6358</strong></td>
</tr>
</tbody>
</table>


The demand for university education of the parents/children group presumably seems to require an emphasis on certain social and cultural values of Thai society, as we have already noted. Prominent among these are the values of university education for the purposes of professional training, of raising a social status and of securing intellectual knowledge for its own sake. The demand for university education to be considered in the next chapter may perhaps require an emphasis upon other cultural and social values and wouldpossibly serve other purposes than those already stated in the case of the parents/children group. The business enterprises and the government will be
another social groups whose demands for the finished products of university education constitute the subject matter of the chapter that follows.
CHAPTER IV

The Demands of the Business and the Government

This chapter deals with the demands for high-level (i.e., university-trained) manpower of various categories. They are the demands which both the private sector of the economy comprising commercial and industrial enterprises and the public sector of the economy or the government have together placed upon the universities. But before we consider these high-level manpower demands, it would be necessary to operationalize the definitions of demands for high-level manpower of both the private and the public sectors as will be used within this thesis.

The demands for high-level manpower generated by the private sector may be defined as the requirements for particular types of university education and training necessary to fulfill the business's goal and value of rational operation and management of its enterprises. This operational definition of the demands of the business is partly based upon, and partly adapted from, Guy Hunter's definition of "economic manpower demands" which he stated in his book entitled "Higher Education and Development in Southeast Asia: High-Level Manpower" published in 1967 by UNESCO and IAU, pp. 61-62. In his own definition of economic manpower demands Hunter did not distinguish between demands for manpower of the business and those of the government. However, his definition is found partly useful for the context of the demands of the business as will be discussed in this thesis. With respect
to the demands for manpower made by the government, we have found Frederick Harbison's definition of the concept of "manpower requirements" very appropriate and relevant to the Thai case. The concept of "manpower requirements" may be defined, in a simple but readily comprehensible term, as "clearly evident needs for persons with particular education, training and experience. The assumption here is that such persons are necessary, if not indispensable, for achievement of a programme of national development."¹ This will then be taken as the operational definition of the demands for high-level manpower imposed on the universities by the Thai government within the context of this thesis. As used in this thesis, the distinction between the manpower demands of the business and the "manpower requirements" for economic and social development is not precise and rigid. The distinction is only theoretically useful in analysis of the demands of the private and public sectors of the Thai economy. In practice these demands and the demand for university education of the parents/children group the operational definition of which was given in the previous chapter may interact and behave independently while at the same time becoming fused and intermixed. It is contended, for example, that the parents/children group's demand for university education, for some reasons, may grow faster than high-level manpower demands of the private and public sectors

and may lead on some occasions to "unemployment of the educated."

Apart from projections and estimates of demands for high-level manpower of the business and the government as stated in the national development plans, there is only a dearth of actual figures of these demands and of other relevant information on the demands of these two sectors of the economy. However, despite the very paucity of social documentation on these demands, every possible attempt has been made to collect all available data for the purpose of making this chapter as substantive as it should be. Whatever actual figures and national statistics may be found, they are available in a very limited amount. Moreover, it has been found out that the most up-to-date actual figures of the high-level manpower demands that are made available are those for 1974. The very paucity of required information on these demands has therefore entailed a major limitation of this chapter.

The Demands of the Business Enterprises

Towards the conclusion of the Second National Economic Development Plan period an eminent Thai economist, Dr. Prom Panitchapakdi, in his capacity as the Deputy Secretary-General

---

2 See Philip H. Coombs, The World Educational Crisis: A Systems Analysis (New York: Oxford University Press, 1968), pp.17-18. Coombs stated three main reasons why the society's demand for education can increase more rapidly. They are: (1) The mounting educational aspirations of parents and their children; (2) The stress of public policy on educational development as a precondition for overall national development and the stress on the democratic imperative; (3) The population explosions acting as quantitative multiplier of the society's demand.

of the National Economic Development Board, has observed that as with the Thai economy as a whole the demand for high-level scientific and technological manpower has increased disproportionately to its supply and to the capacity of the universities to produce such manpower to meet demands of both the private and public sectors. It was then expected that the expanding industrial enterprises in the private sector would make demands for a large number of engineers during that same plan period despite the fact that the government's estimated demand for about 2,200 engineers would outstrip the estimated supply of about 1,900 engineers during the five-year plan period. The foregoing estimate of the demand and supply of engineers has indicated that there may be a serious shortage of the supply of engineers to meet the demand of the private sector. In the Third Five-Year National Economic and Social Development Plan (1972-76) it was thought that the shortage of high-level manpower would continue to persist. According to the Third Plan's estimates of demand

---


5 Ibid., p. 24.

During the six-year period of the First National Economic and Social Development Plan (1961-66), account was not taken of demand for university-trained personnel of the private sector. Moreover, no attempt was made to assess the manpower requirements of the government to meet the specific development goals as stated in this plan. It was expected then that as the public sector developed it would provide an infrastructural basis for a subsequent development of the private sector in a free enterprise system Thailand had planned to adopt.
and supply of high-level manpower, the supply of university graduates trained in sciences and technology (e.g., engineers) who are in high demand by the private sector will be inadequate. Indeed, the problem of manpower shortage will be further aggravated during the five-year period of the Third Plan. Since the enterprises of industry, construction, commerce and transportation are expected to continue to expand for the duration of the Third Plan, this will contribute to an increase in demand for manpower required for their operations.

It appears that altogether the private sector has made demands for three major occupational categories of university graduates, namely,

1) Scientific and technological manpower (e.g., engineers, scientists, medical scientists, and agricultural scientists);
2) Professional personnel (e.g., graduates in commerce, economics, business administration, law, social sciences, fine arts, humanities, and education);
3) Managerial and administrative personnel (otherwise known as supervisory personnel) (e.g., managers and administrators).

As Philip H. Coombs has pointed out, manpower surveys and requirement projections are unavoidably shot through with

limitations, uncertainties, and imperfections. They can be very useful to educational planning. But manpower studies have almost invariably revealed large discrepancies — both current and prospective — between the pattern of educational output and the pattern of demand for such manpower.

It seems that the procedures for estimating future demand Thailand uses is rather simplistic. As Frederick Harbison has observed, the most difficult aspect of manpower analysis is the determination of long-term future requirements. In theory, there is no generally accepted methodology for estimating future demands. Some people talk about "predicting" or "forecasting" manpower demands; others contend that they are making "projections." Before analysing the demands and supply of university graduates, it may be useful to point out or examine briefly the common approach which is in current use in Thailand. A rather simple method of estimating future demands is to ask existing establishments to specify them. This is the case in the demand for manpower by the government. But it does not appear to be so in the case of the private sector. This will provide an informed judgment of short-term requirements, but it is quite unreliable for long-run

---

8 Coombs, op.cit., p.75.
estimates. Because of the limitations of the approach Thailand has used, there seems to be no other way of estimating the demand and supply of manpower except to show actual figures of demands and supply. We shall compare national statistics of university graduates in each field of study with the graduates who get employed in the private sector in order to know what categories of high-level manpower the private sector actually demands. In this section, we shall concentrate on actual figures or national statistics of demands for manpower made by the business establishments rather than on "projections" or "forecasts" which, as already noted, are beset by uncertainties and imprecisions.

As it applies to developing countries such as Thailand, most of the demands of the private sector for manpower are concerned with manpower in the "modern" urban sector of the economy and focus largely upon high-level university-trained manpower.

Perhaps the available national statistics concerning a current status of professional employment of the university graduates of 1973 in the various fields of study may point out the actual figures of the private sector's manpower demand in the three major occupational categories of graduates. The actual figures presented in Table 4 that follows are intended to show the professional employments of university graduates in the private business organizations.

10 Ibid., p.195.
The Demand of the Private Sector for the University Graduates of the Academic Year 1973

<table>
<thead>
<tr>
<th>Major Fields of Study of the Graduates</th>
<th>Total Number of Employed Graduates</th>
<th>Percentage Distributions of the Graduates Employed in the Private Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>382</td>
<td>42.93 %</td>
</tr>
<tr>
<td>Law</td>
<td>315</td>
<td>58.41 %</td>
</tr>
<tr>
<td>Medical Sciences</td>
<td>752</td>
<td>19.41 %</td>
</tr>
<tr>
<td>Humanities</td>
<td>497</td>
<td>47.69 %</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>120</td>
<td>80.00 %</td>
</tr>
<tr>
<td>Sciences</td>
<td>285</td>
<td>54.39 %</td>
</tr>
<tr>
<td>Engineering</td>
<td>722</td>
<td>57.48 %</td>
</tr>
<tr>
<td>Education</td>
<td>4,449</td>
<td>13.76 %</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>1,542</td>
<td>68.10 %</td>
</tr>
</tbody>
</table>

Source: Bureau of the Universities, Guides to University Education (Bangkok: July 1976), p.72.

Note: (1) Graduates employed in state enterprises and in international organizations or agencies are not included in the Table. The number of graduates employed by them is very small.

(2) Graduates with higher degrees (i.e., Master's degrees and Ph.D. whose number is very small) are not included. None of the graduates of Ramkamhaeng University are included because this University did not graduate its students in or before 1973.
This table shows a percentage distribution of the university graduates of the academic year 1973 who are employed by the private sector. These graduates are those who obtained their Bachelor's degrees in 1973 in the nine major fields of study. These are the only available national statistics that can be found. According to the figures presented in this table, demands of the business for scientific and technological manpower are high, especially for engineers and professional scientists (i.e., 57.48% and 54.39% for engineers and scientists respectively). Next in order of percentage are the business demands for agricultural scientists and medical scientists (i.e., 42.93% and 19.41% for agricultural scientists and medical scientists respectively). As also indicated in the same table, the business demands for professional personnel appear to be high except for graduates in education. A majority of graduates in fine arts, social sciences, law, and the humanities are employed in the private sector (i.e., 80.00%, 68.10%, 58.41%, 47.69% respectively).

On the whole, according to data on actual employment of the graduates presented in this table, the demands of the private sector for both scientific and technological manpower and professional personnel appear to be fairly high except for the graduates in medical sciences and education (i.e., only 19.41% and 13.76% for graduates in medical sciences and in education respectively). These figures on actual employment of graduates in the categories of scientific-technological manpower and
professional personnel are relative rather than absolute, being presented in percentage. It may be assumed that demands of the business may be limited by the size and the growth rate or expansion of business enterprises. The demands of the business may also be limited by the fact that the enterprises concerned may demand the services of graduates with the Master's degree or in some cases with a Ph.D. Moreover, the private business organizations may set the limits for themselves in utilizing professional knowledge and skills of the graduates from the universities. The fact that some business organizations have no position that can be filled by high-level, university-trained manpower (but instead by graduates of secondary schools or of technical institutes) may also be another factor that can actually limit the size of the demands for manpower produced by the university. Consequently, the data on actual employments of the university graduates only indicate a trend in the demands of the business. It seems that demands of the business for the two major occupational categories of the graduates (i.e., scientific-technological manpower and professional personnel) generated by the private sector of the Thai economy are in actual fact proportionately large.

Aside from the demands for these two major occupational categories of graduates, the private sector also generates its demand upon yet another category of high-level manpower, that is, a managerial and administrative personnel. However, unlike the scientific-technological and professional personnel the universities
can train and produce, this category of personnel is the one for which universities cannot provide despite some demand for it from the private sector. And since a university cannot be a formal training institution to produce such a managerial and administrative personnel, from where will the supply of this type of personnel be derived to meet the existing requirements of the business labour market for the high-level skills of these supervisory personnel?

Under the prevailing conditions of the Thai business labour market, it appears that a provision of these managerial and administrative personnel may be made, as in the case of other developing countries, by drawing upon a supply of university graduates from other professional sectors. This may be feasible in the sense that potentially there will be an output of university graduates in fields such as engineering, law, sciences, social sciences, the humanities, and the like, who are adequately trained and thus qualified to assume the roles of managers and administrators after undergoing some further training on the job in the business and industrial enterprises concerned. As Harbison has realistically stated, managerial training is not meant to be a job for a formal educational institution such as a university to undertake, except that it produces graduates adequately qualified to subsequently develop their potentials as managers and administrators. 11 In accord with what we have

indicated regarding the preparation and training of the practically-oriented supervisory personnel, the authors of the Third Development Plan have also admitted that no educational system is ever able to produce an output of would-be managers and administrators.  

Against this perspective of the business demand for individuals equipped with the skills of managers and administrators, we may consider the numerical estimates of demand for administrative and managerial personnel as have been made in Thailand's Third Five-Year National Economic and Social Development Plan (1972-76). According to the projected data stated in this Plan, both the private and public sectors make an aggregate demand for about 30,000 persons in the category of managers and administrators during the five-year period of 1972-1976. This number represents about 1.2% of the estimated 2.586 million workers of various categories to be employed in the total labour force during that period. However, the Plan does not specify an exact projected number of personnel in this category of managers and administrators to be demanded by the private sector, nor does it do so for the public sector. In fact, no actual statistics of demand in this category can be found. It is therefore impossible to measure demand for managers and administrators. On the whole, compared with the estimated amount

---

13 Ibid., p.196.
of demand for each of the other manpower categories in the total labour force, this projected amount of demand for managerial and administrative personnel seems to be by far the smallest in terms both of actual number and percentage.

According to the Third Plan, one of the methods by which the private sector may satisfy its demand for managers and administrators is to offer various incentives with a view to drawing capable, experienced and qualified persons who have, for example, been presently employed in the public sector to join the ranks of managers and administrators in the private enterprises. Otherwise, as an alternative measure, foreign-owned business firms may provide for the high-level skills of managers and administrators by "importing" the indigenous resources of their own supervisory personnel from abroad. By resorting to such measures the business has caused a transfer of some qualified and experienced personnel from the public sector to the higher-paid appointments in the private sector. For example, some senior and experienced engineers, being offered a larger amount of emoluments, decide to give up underpaid jobs in the government service to accept the more financially rewarding positions in the private business. In this way, the business and industry may be able to recruit managerial and administrative personnel to meet some of its demands. However, this can perhaps be done on a limited scale since this type of personnel is actually in short

14 Ibid., pp.195-196.
The table that follows (Table 5) may give us some idea of the magnitude of the demand for managerial and administrative personnel which the private sector makes. Due to a lack of actual data of employments of this type of personnel in the private sector as distinguished from the public sector, it may probably be appropriate to present an aggregate data of employments of this type of personnel in the Thai labour force as a substitute for such data on actual employments in the private business sector.

Table 5
Managerial and Administrative Personnel in the Total Labour Force
(in Number and Percentages) in 1969

<table>
<thead>
<tr>
<th>Occupations</th>
<th>Whole Kingdom</th>
<th>All Municipal Areas</th>
<th>Non-Municipal Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>Total Administrative and Managerial Workers</td>
<td>17,157,000</td>
<td>100.00</td>
<td>1,878,200</td>
</tr>
<tr>
<td></td>
<td>109,500</td>
<td>0.6</td>
<td>64,200</td>
</tr>
</tbody>
</table>

Table 5 indicates that persons employed in administrative and managerial ranks constitute only 0.6% of the total labour force of the whole kingdom. The very small number of personnel in this category suggests that the demand which the private sector makes for them will be correspondingly very small, as evidenced also by the projected data from the Third National Development Plan mentioned earlier. It is unfortunate that we cannot sub-divide data presented in Table 5 into persons employed by the private and public sectors since these national statistics are not available in such details. Figures in Table 5 only give us an idea of how small the number of persons in this category is when compared with the total labour force.

We have so far examined the demands for high-level manpower of the business community. Our examination has revealed that the demands of the business appear to be for the three major occupational categories of university graduates, namely, scientific and technological, professional as well as managerial and administrative personnel. It may be assumed that the business demands these personnel for the purposes of applying scientific-technological as well as professional knowledge and skills to a rational organization, operation and management of the modernizing industrial and commercial enterprises.

Demands for manpower personnel of somewhat similar categories may also be made for the purposes quite distinct from those of the private business concerns. These are the stated purposes of planning, implementing and expediting economic and
social development of the country. It is the national government (an agency undertaking a responsibility for national economic and social development) which generates the demands for those categories of manpower personnel to serve such development purposes. With this in mind, demands of the government geared primarily for economic and social development of the country will now be considered.

The Demands of the Government

Before considering the demands of the government, it would be necessary to turn our attention first to an analysis of national goals. This will indicate the context in which the university education system can be linked to overall national goals through demands made by the government to serve those goals. Specific manpower requirements by the government will then be considered within this framework.

In developing societies there can be such overriding national goals as the creation and maintenance of national unity, economic development and social justice. As Curle has pointed out, education can be given a role to play to bring about these national goals of the developing societies.16 In the case of Thailand which is also a developing society, only economic development is accorded a topmost priority in the pecking order of all the major conceivable goals of the nation. Indeed, it can

be said that economic development is the prime goal of the nation. This has been clearly indicated in the official statement of the goal made in the Third Five-Year National Economic and Social Development Plan (1972-1976) and also in its two predecessors covering the plan periods of 1961 to 1971.\textsuperscript{17} The Third Five-Year Development Plan, currently being implemented, is actually Thailand's overall national development plan. Within the framework of the broad national goal of economic and social development, this Plan has set forth a total of eight specific development goals. In an outline form, they are as follows:\textsuperscript{18}

1. Promoting and preserving national security in the belief that there exists an indispensable interrelationship between economic development and national security.

2. Increasing the national income in proportion to the economic resources of the nation.

3. Solving the persistent problem of the balance of international payments.

4. Maintaining the economic stability of the nation.

5. Raising income levels and the levels of living of people residing in the regions and rural areas.

6. Extending the public services, especially those in the form of the social services, to enable an increasing number of the population to benefit from them.

\textsuperscript{17} National Economic Development Board, \textit{op.cit.}, pp.87-95. 
\textsuperscript{18} \textit{Ibid.} For further details, see especially pp.91-92.
7. Reducing the rate of population increase.

8. Raising the levels of employments.

The Third Five-Year Development Plan is essentially an embodiment of both the broad national goal of economic and social development and of all the specific development goals as have been outlined above. An achievement of these specific development goals will depend upon a supply of skilled high-level manpower trained especially in scientific and technological fields. As indicated at the outset, if education is assigned a role to help bring about an accomplishment of the national goal of economic and social development, it is university education in particular which can play a leading role and which concerns us here. When a national development plan such as Thailand's Third Plan to which reference has already been made places a special emphasis upon economic and social development, an educational system -- in this case the university sector of the system -- can be linked to the national goal of economic and social development by means of a manpower policy geared to achieve the requisite goal. Since universities are responsible for producing the high-level manpower to undertake Thailand's economic and social development, the universities have in effect become a deliberate instrument of the national goal of economic and social development. This is the point at which the universities and the government meet in the

19 Ibid., p. 184.
context of the latter's manpower requirements geared towards attaining that overriding national goal.

Within the framework of the universities being an instrument for producing manpower needed to serve the all-important national goal of economic and social development, this national goal clearly defines a context within which the government makes its manpower requirement demands upon the universities. In terms of the government's manpower requirement demands, the Third Five-Year National Education Development Plan (1972-1976) has recognized that education in the form of manpower is actually a requirement for national economic and social development. Indeed, this Third Education Development Plan has even stressed that whether or not the national development of Thailand can be achieved will in very large measure depend upon a development of its manpower resources.21 Such an overwhelming significance of manpower resources has made it imperative for a country with limited financial resources such as Thailand to make pressing demands upon an available supply of its manpower resources both at the middle and higher levels.

At the higher or university level, the government's manpower requirements have specifically called for a higher rate of increase in the output of university graduates trained in development-related, scientific-technological fields such as

agriculture, engineering, medicine and sciences than in the number of graduates in other fields of less relevance to national development.22 An order of priorities has therefore been determined, requiring the greatest proportional increase in the number of graduates trained in those scientific-technological disciplines. In line with these priorities, the Third Five-Year National Economic and Social Development Plan has indicated that there would be an increase in enrolments of undergraduates to be educated in the scientific-technological fields already mentioned so as to satisfy the manpower requirements of the government.23 The target set for the nine universities is to increase the enrolment of about 45,100 in 1972 to about 63,520 in 1976, the last year of the said Plan period.24 This increase will account for about 40.83 per cent of the base enrolment figures of 1972. The increased enrolment of undergraduates will be effected especially in the fields of agriculture, engineering, medicine and sciences, as already indicated.25

Since national development requires an application of scientific and technological knowledge to aid in increasing economic productivity aimed, for example, at raising the levels

22 Ibid., p.82.
24 The estimated enrolment figures shown here do not include students at Ramkamaeng University. This "open" university is to maintain an annual enrolment of about 40,000 students.
of living of the population, this will necessitate an increase in the amount of the government's demand for highly trained scientific and technological manpower.\footnote{Prom Panitchapakdi (May 1970), \textit{op.cit.}, p.22.} When this is the case, the scientific and technological manpower has been singled out as a category of specialized manpower on which the government has made demands for achievement of the national goal of development.

In view of such a demand of the government for this category of manpower, the Third Five-Year National Economic and Social Development Plan has assessed the government's projected manpower requirements. This quantitative assessment of such projected manpower demand as shown in this Plan for the five-year period of 1972 to 1976 is presented in Table\ref{table:manpower_requirements} below.
The Government's Demand for Scientific and Technological Manpower
Projected For the Period of 1972 to 1976.

<table>
<thead>
<tr>
<th>Occupational Categories</th>
<th>Demands</th>
<th>Supplies</th>
<th>Numerical difference between demand and supply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Plus(+)</td>
</tr>
<tr>
<td>Agriculturalists</td>
<td>3,000</td>
<td>5,300</td>
<td>2,300</td>
</tr>
<tr>
<td>Engineers</td>
<td>2,500</td>
<td>4,700</td>
<td>2,200</td>
</tr>
<tr>
<td>Medical doctors</td>
<td>2,700</td>
<td>2,000</td>
<td>-</td>
</tr>
<tr>
<td>Scientists</td>
<td>8,500</td>
<td>3,400</td>
<td>-</td>
</tr>
</tbody>
</table>


Note: Included in the demands for engineers and scientists are the demands of the government for 300 teachers with degree qualifications in engineering and for 2,400 teachers with degree qualifications in science.
By an inference drawn from the above assessment of the projected manpower requirements presented in Table 6, it appears that these data on demands of the government for scientific and technological manpower are only projections by the authors of the Plan rather than actual figures of the demands. Furthermore, whether or not these estimated amounts of demands and supplies of the required manpower through the use of the "manpower-forecasting" approach may be accurate, let alone feasible in practice, can indeed be very doubtful, given the rather long-term assessment and time perspective of five years and other unforeseen factors that may become involved in the production and utilization of these manpower supplies. Available projected data of this kind are unreliable. They are presented presumably to suggest the magnitude of the problem at hand. So, observations and comments such as that the current shortage of scientific and technological manpower Thailand has been experiencing becomes a major bottleneck in implementing the national goal of economic development as laid down in the development plans may be disproved or refuted. The same is true of another observation such as that the shortage of required scientific and technological manpower such as agriculturists, engineers, medical doctors and scientists has made it difficult for the various government ministries to find well-trained manpower of this kind in adequate numbers who can fill vacant positions created by the development projects.27 And as

27 Ibid., p.23.
indicated in Table 6, although the expected supply of agriculturists and engineers is estimated to far exceed the demand at the conclusion of the Plan period, this is only the projected estimate of supply and demand which is unlikely to become practicable. Even the projected shortages in the manpower supply which is said to be very acute in the case of scientists but less so in the case of medical doctors may not be feasible in practice either.

When projected estimates fail to measure the government's manpower requirements demand, perhaps it would be more realistic and pertinent to rely on data on actual employments of university graduates which are available in a very limited amount. In doing so, we would be better able to have an idea of the magnitude and categories of manpower which is actually in demand by the government. Table 7 that follows will tell us something about the government's demand for university-trained manpower through the use of data on actual employments of the graduates in the government or public sector.
The Demand of the Government for the University Graduates of the Academic Year 1973.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>382</td>
<td>50.00 %</td>
</tr>
<tr>
<td>Law</td>
<td>315</td>
<td>34.93 %</td>
</tr>
<tr>
<td>Medical Sciences</td>
<td>752</td>
<td>80.05 %</td>
</tr>
<tr>
<td>Humanities</td>
<td>497</td>
<td>47.68 %</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>120</td>
<td>15.84 %</td>
</tr>
<tr>
<td>Sciences</td>
<td>285</td>
<td>37.89 %</td>
</tr>
<tr>
<td>Engineering</td>
<td>722</td>
<td>22.30 %</td>
</tr>
<tr>
<td>Education</td>
<td>4,449</td>
<td>85.12 %</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>1,542</td>
<td>22.87 %</td>
</tr>
</tbody>
</table>

Source: Bureau of the Universities, Guides to University Education (Bangkok: July 1976), p.72.

Note: (1) Graduates employed in state enterprises and in international organizations or agencies are not included in the Table. The number of graduates employed by them is very small.

(2) Graduates with higher degrees (i.e., Master's degrees or Ph.D. whose number is very small) are not included. None of the graduates of Ramkamhaeng University are included because this University did not graduate its students in or before 1973.
As Table 7 shows, both the professional personnel and the scientific-technological personnel appear to be in demand by the government although the amounts of demand vary from high to low. It is interesting to note that graduates in education and the humanities (i.e., professional personnel) are in high demand by the government (85.12% and 47.68% respectively). Graduates in the main field of medical sciences and in agriculture (i.e., scientific-technological personnel) are also in high demand by the government (80.05% and 50.00% respectively). On the contrary, other scientific-technological personnel (i.e., graduates in sciences and engineering) is not in high demand by the government (37.89% and 22.30% respectively). It is also interesting to note that in contrast to the graduates in education and in the humanities other professional personnel (i.e., graduates in law, social sciences, and fine arts) is not in high demand by the government (34.93%, 22.87% and 15.84% respectively). Taken as a whole, data on actual employments in Table 7 indicate that university graduates in education, medical sciences, agriculture and the humanities are in high demand by the government whereas graduates in other fields of study are not in high demand by the government. At the same time it should be noted that in actual fact the government generates demands for university graduates in all the nine major fields of study but, according to the figures in Table 7, its demands for university-trained manpower seem to concentrate in those four major fields of study, namely, education, medical sciences, agriculture and the humanities.
When compared with the projections of the government's demands given in Table 6, it may be realized that those projected demands appear unrealistic because the government actually does not make demands only for scientific-technological manpower, as Table 6 seems to indicate. By contrast, Table 7 clearly indicates that graduates in education and the humanities (fields which are not scientific-technological) are actually also in high demand by the government. And although actual demands of the government shown in Table 7 are only for one year, these demands seem to suggest a trend which presumably may not vary much from year to year.

The data on actual employments of the graduates as presented, for example, in Table 7 have shown that the government has become by far one of the largest consumers of the finished products of the universities in both the scientific-technological fields and in the other professional fields. This tends to determine an all-important role of university education insofar as the government's manpower requirements geared to serving the development goals of the country are concerned. As both a producer and a supplier of personnel in the scientific-technological

28 Data on actual employments of university graduates of the academic year 1973 are those available for the first time at this writing. The Bureau of the Universities has never before conducted any survey of actual employments of university graduates. Data on employments of graduates of the subsequent academic years are not available yet.

and in other professional categories, university education from the point of view of the government is a national investment in high-level manpower. This viewpoint seems, according to the Third Five-Year National Education Development Plan (1972-1976), to be officially held by the Thai government. As stated in this Plan, the government has regarded education as a kind of investment one of the major outcomes of which is education's capability to produce skilled personnel to meet the manpower requirements of the country. Since education — in this case university education — has become a major source of high-level skills and trained talents to be utilized in furthering the national goal of development, this from one point of view can be regarded as university education's crucially important economic role.

Concluding Observation

It may be realized that in important respects demands for university education are related to, and hence influenced by, the society's social and cultural values. Therefore demands for university education are likely to reflect the social and cultural values which presumably have influenced them. For example, the demands generated by the parents/children group tend, as we have seen in the previous chapter, to reflect the influence of both

29 National Education Council, op. cit., p. 6.
traditional and secularized values of Thai society such as, in particular, the values of social status, of intellectual knowledge for its own sake, and of training for professional careers. This may not be so in the case of the demands of the business and of the government for university-produced manpower. The government's demand for university graduates in the fields of medical sciences, agriculture and science, for example, tends to reflect the influence of the modern and universal value of science and technology which, as described in Chapter 2, is not yet widely recognized or pervasive in Thai society as a whole but, as evidenced by the demand for manpower trained in these fields, is endorsed and found useful by the government itself. At the same time, the government's manpower requirements demand for graduates in education and in the humanities, for example, tends to reflect the influence of the traditional and secularized values of teaching Thai arts, literature, language as well as modern languages such as English, French and German as can possibly be evidenced in the course contents of those academic disciplines. Likewise, the business's manpower demand for graduates in the fields of fine arts, social sciences, law, and the humanities seems to reflect the influence of the traditional and secularized values, for example, of arts, literature, languages, law and social sciences. The business's demand for graduates in engineering, sciences, and agriculture similarly would seem to reflect the influence of the modern and universal value of science and technology — a value that, as already mentioned, is only partially accepted in
Thai society generally but is as yet to be more fully integrated into that society. It appears that the values that are held important by the government and the business enterprises tend to be considered pragmatically from the point of view of their utility as an instrument for promoting both the goals of the government and the goals of the business. In this sense, those values may be described as instrumental, rational and utilitarian. While the government seems to place a high premium upon those values in its commitment to economic and social development which in turn has become the foremost goal and the predominant value of the government, the business tends to place a major emphasis upon a combination of those traditional and secularized values in an attempt to fulfil its foremost goal and value of rational operation and efficient management of its commercial and industrial enterprises.

The chapter that follows will discuss some of the demands that the two samples of the students at two universities have placed upon the Thai university education system. As may be noted, the values and hence the demands of the parents/children group (already discussed in Chapter III) on the one hand and the values and hence the demands generated by the business and by the government (already discussed in Chapter IV) on the other would appear to come into conflict with one another at the point of their interface. It is assumed that those values and demands would exert some of their influences upon the students in making their own demands upon the university education system. As a
result, the demands which the students generate may presumably indicate a measure of conflicts at the point of their interface which may perhaps arise between the values and hence the demands of the parents/children group, of the business and the government as well as of the students themselves. Here again, it may be presumed that these students may in turn be more or less influenced by all those various conflicting patterns of demands at the point of their interface which they will then pass on to the university education system. Chapter V will consider some of those demands of those sampled students in some detail.
CHAPTER V

THE DEMANDS OF THE STUDENTS

This chapter discusses some of the demands of the undergraduate students at two universities, namely, Chiangmai and Chulalongkorn Universities. These demands of the students are studied empirically by the use of a written questionnaire. The structured written questionnaire (a copy of which is reproduced in Appendix A at the end of the thesis) was distributed to a sample of 200 student respondents at Chiangmai University and to another sample of 100 student respondents at Chulalongkorn University. The two questionnaire samples were selected according to the following procedures.

(1) Divide the total number of student enrolment by the number of a required sample to be drawn from that university (i.e., \( \frac{5979}{200} \) for Chiangmai University). Thus, at Chiangmai University about every 29.89th or 30th student was interviewed. (In the event that any 30th student was unavailable, the next one on the list was taken for interview).

(2) Divide the total number of students in each constituent faculty of that university by the total number of student enrolment in that university and multiply by 100, to obtain a percentage for each constituent faculty (i.e., \( \frac{1442}{5979} \times 100 \) for the Faculty of Social Sciences at Chiangmai University).
(3) Then, finally, obtain a sample required from each constituent faculty by calculating a relevant percentage of 200 in the case of Chiangmai University and of 100 in the case of Chulalongkorn University (i.e. 24.11% or 48 respondents to be drawn from the Faculty of Social Sciences to constitute part of the Chiangmai University sample of 200 respondents).

On the basis of the procedures already stated above, a faculty distribution of the respondents in both samples can be shown in the following tables.
### TABLE 8

**FACULTY DISTRIBUTION OF RESPONDENTS IN THE CMU SAMPLE**

(N = 200)

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Faculties</th>
<th>Number of Respondents required in the Sample of 200</th>
<th>Percentage of Respondents</th>
<th>Actual Number of Students Enrolled in 1972</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Social Sciences</td>
<td>48</td>
<td>24.11</td>
<td>1,442</td>
</tr>
<tr>
<td>2</td>
<td>Humanities</td>
<td>38</td>
<td>19.13</td>
<td>1,144</td>
</tr>
<tr>
<td>3</td>
<td>Medicine</td>
<td>35</td>
<td>17.59</td>
<td>1,052</td>
</tr>
<tr>
<td>4</td>
<td>Education</td>
<td>32</td>
<td>15.80</td>
<td>938</td>
</tr>
<tr>
<td>5</td>
<td>Science</td>
<td>31</td>
<td>15.50</td>
<td>927</td>
</tr>
<tr>
<td>6</td>
<td>Agriculture</td>
<td>12</td>
<td>6.12</td>
<td>372</td>
</tr>
<tr>
<td>7</td>
<td>Engineering</td>
<td>4</td>
<td>1.75</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>100</strong></td>
<td><strong>5,979</strong></td>
</tr>
</tbody>
</table>
TABLE 9

FACULTY DISTRIBUTION OF RESPONDENTS IN THE CU SAMPLE

(N = 100)

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Faculties</th>
<th>Number of Respondents required in the Sample of 100</th>
<th>Percentage of Respondents</th>
<th>Actual Number of Students Enrolled in 1972</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Commerce and Accounting</td>
<td>17</td>
<td>17.17</td>
<td>1,975</td>
</tr>
<tr>
<td>2.</td>
<td>Science</td>
<td>17</td>
<td>16.99</td>
<td>1,954</td>
</tr>
<tr>
<td>3.</td>
<td>Education</td>
<td>16</td>
<td>15.99</td>
<td>1,839</td>
</tr>
<tr>
<td>4.</td>
<td>Engineering</td>
<td>16</td>
<td>15.86</td>
<td>1,824</td>
</tr>
<tr>
<td>5.</td>
<td>Political Science</td>
<td>10</td>
<td>9.79</td>
<td>1,126</td>
</tr>
<tr>
<td>6.</td>
<td>Arts</td>
<td>7</td>
<td>7.45</td>
<td>880</td>
</tr>
<tr>
<td>7.</td>
<td>Medicine</td>
<td>5</td>
<td>4.88</td>
<td>539</td>
</tr>
<tr>
<td>8.</td>
<td>Mass Communications and Public Relations</td>
<td>4</td>
<td>4.15</td>
<td>478</td>
</tr>
<tr>
<td>9.</td>
<td>Architecture</td>
<td>4</td>
<td>3.90</td>
<td>449</td>
</tr>
<tr>
<td>10.</td>
<td>Economics</td>
<td>3</td>
<td>2.87</td>
<td>331</td>
</tr>
<tr>
<td>11.</td>
<td>Veterinary Science</td>
<td>1</td>
<td>0.95</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>11,499</strong></td>
</tr>
</tbody>
</table>
The questionnaire was originally conceived in terms of six main themes. The original grouping of the questionnaire items into the six main themes is presented below.

**Theme 1 : Objectives of Students for Coming to a University**

This theme consists of the following four questionnaire items:

- **Question 3**: "The most important reason for coming to a university is to acquire intellectual knowledge for its own sake."
- **Question 4**: "The main objective of university education should be to train students for their careers."
- **Question 5**: "I come to a university mainly to raise my social status."
- **Question 6**: "I come to a university mainly to satisfy my parents' desire for me to gain social recognition and status."

**Theme 2 : Utilities of University Courses to Students and to Thai Society**

This theme consists of the following eight questionnaire items:

- **Question 7**: "To what extent do you consider a university degree as essential to an advancement in your career life?"
Question 8: "I regard my own university courses as helping me substantially in the promotion of my future career."

Question 29: "Courses in the humanities (e.g., philosophy, languages, history, literature, and classics, etc.) are not useful to students' careers and thus should not be included in the curriculum."

Question 30: "Courses should not so much fulfill career needs of students but rather be geared towards satisfying their intellectual interests as such."

Question 31: "In your opinion, which of the following major fields of study are more useful to Thai society in terms of national development (rank them in order of usefulness)?

Ranking Order
(a) Social Sciences (e.g., sociology, economics, political science, and anthropology)
(b) Humanities (e.g., philosophy, fine arts and music, history, languages, literature and classics)
(c) Physical sciences (e.g., mathematics, geology, physics, chemistry, statistics)
(d) Biological sciences (e.g., biology, botany, zoology)
(e) Business administration
(f) Education
(g) Engineering
(h) Agriculture
(i) Law

(j) Medicine

Question 32: "The main priority of university courses should be to deal with the current problems and needs of Thai society."

Question 33: "It is more important for a university to produce graduates of culture and distinction than job-trained specialists."

Question 34: "Preservation of traditional Thai culture should be a major priority of university courses."

Theme 3: The Extent to which Students' Views towards the Roles of University Education and Degrees Are Influenced by Meritocratic Criteria.

This theme consists of the following four questionnaire items.

Question 10: "Members of old Thai families who fail to gain admission to universities through lack of formal qualifications should nonetheless be admitted since they would represent a definite social asset to the universities."

Question 11: "I think that knowledge gained from a university education is of more value than any subsequent material success in the form of wealth."
Question 12: "Success in my future life will depend more from academic and other career achievements rather than from wealth and family status."

Theme 4: Importance of Ability to Mix Socially and Social Activities Compared with the Importance of Academic Ability and Studies.

This theme consists of the following two questions.

Question 9: "In selection of students for universities, ability to mix socially is just as important a criterion as academic ability."

Question 14: "During a university career, social activities should be as important as academic studies."

Theme 5: The Extent to Which Students Hold Authoritarian and Non-Authoritarian Views towards the Educational Process of a University Together with Students' Views towards a Prestige of the Academic Profession.

This theme consists of the following eight questionnaire items.

Question 15: "Students should not have a say in a university's policy-making on academic matters."

Question 16: "Students should have a voice in the administrative affairs of a university."
Question 17: "Lectures are more effective than seminars as a method of teaching and learning."

Question 18: "Obedience is more important than friendship in teacher's relations with their students."

Question 19: "In my opinion, if teachers maintain close personal contacts with students this is likely to lead to a weakening of discipline."

Question 20: "Students should always feel free in classes to disagree with their lecturers."

Question 21: "In my programme of study, I would prefer to (circle one):
(a) Choose all the subjects myself.
(b) Choose most of the subjects myself.
(c) Choose half of all the subjects myself and let my teachers choose another half of them for me.
(d) Let my teachers choose most of the subjects for me.
(e) Let my teachers choose all the subjects for me.

Question 22: "University teaching is a profession of high prestige in Thai society."

Theme 6: Students' Attitudes towards the Contents of Their University Courses

This theme consists of the following six questionnaire items.
Question 23: "On the whole, what is your judgment of of the content of the courses you are now taking?"

(a) More general than specialized.
(b) More specialized than general.
(c) Both equally.
(d) Can't say.

Question 24: "I prefer that my courses should be:"

(a) More general than specialized
(b) More specialized than general
(c) Both equally
(d) Can't say

Question 25: "In my view, the courses I am now engaged in are:"

(a) More useful for careers than for their own sake.
(b) More useful for their own sake than for careers.
(c) Both equally
(d) Can't say

Question 26: "I would prefer that my courses should be:

(a) More useful for careers than for their own sake.
(b) More useful for their own sake than for careers.
(c) Both equally
(d) Can't say."
Question 27: "On the whole, I think the emphasis of my course is (circle one):

(a) More applied (i.e., oriented towards applications and problem-solving) than pure (i.e., concerned with essential principles)
(b) More pure than applied
(c) Equally with both pure and applied
(d) Mainly applied
(e) Mainly pure."

Question 28: "I prefer that the emphasis of my course should be (circle one):

(a) More applied than pure.
(b) More pure than applied
(c) Equally with both pure and applied
(d) Mainly applied
(e) Mainly pure"

Questions 1, 2 and 35 cannot be grouped together into a theme. Question 1 and 2 ask the respondents to indicate expected employers and the professions of their choice and preference. Question 35 asks the respondents to compare the academic standard of their university with that of other universities in Thailand insofar as they can perceive it and is in fact intended as a question with which to end the questionnaire.

In analyzing the responses obtained from this questionnaire, the Pearson product-moment correlation coefficients
(r) were used as a method to find out the relationships between
the responses to the questions already incorporated in all those
above-stated themes except the responses obtained from the
questions in the sixth theme and except the responses from some
other questions in other themes such as Questions 7, 21 and 31
(the responses obtained from the questions in the sixth theme and
those obtained from Questions 7, 21 and 31 cannot be analyzed
by using the Pearson product-moment correlation coefficients).
On the basis of the significant relationships that have been
found among those responses, the responses themselves can be
arranged together into five groups. This means that the grouping
of responses to the questions has in practice turned out
differently from the initial and original postulation of themes.
The numerical values of the correlation coefficients actually
determine which responses to the questions can be grouped
together. In other words, each of the five groups is the result of
of our analysis by means of the correlation coefficients. The
responses in each of the five groups are the responses that appear
to be highly correlated with one another, as the data on
correlation coefficients will show.

The five groups of the correlated responses to the
questions are as follows:

Group 1

This group consists of the responses to eight questions
altogether, namely, Questions 3, 4, 5, 8, 10, 11, 13 and 14.
These responses tend to be significantly correlated with one another. The numerical values of correlation coefficients \((r)\) are shown in Table 10 below.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Correlation Coefficients ((r))</th>
<th>Overall Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMU Sample</td>
<td>CU Sample</td>
</tr>
<tr>
<td>3 : 4</td>
<td>0.747</td>
<td>0.779</td>
</tr>
<tr>
<td>3 : 5</td>
<td>0.945</td>
<td>0.992</td>
</tr>
<tr>
<td>3 : 8</td>
<td>0.982</td>
<td>0.975</td>
</tr>
<tr>
<td>3 : 10</td>
<td>-0.607</td>
<td>-0.606</td>
</tr>
<tr>
<td>3 : 11</td>
<td>0.900</td>
<td>0.822</td>
</tr>
<tr>
<td>3 : 13</td>
<td>0.892</td>
<td>0.788</td>
</tr>
<tr>
<td>3 : 14</td>
<td>0.990</td>
<td>0.959</td>
</tr>
<tr>
<td>4 : 5</td>
<td>0.765</td>
<td>0.729</td>
</tr>
<tr>
<td>4 : 8</td>
<td>0.794</td>
<td>0.842</td>
</tr>
<tr>
<td>4 : 10</td>
<td>-0.760</td>
<td>-0.740</td>
</tr>
<tr>
<td>4 : 11</td>
<td>0.935</td>
<td>0.964</td>
</tr>
<tr>
<td>4 : 13</td>
<td>0.966</td>
<td>0.996</td>
</tr>
<tr>
<td>4 : 14</td>
<td>0.685</td>
<td>0.905</td>
</tr>
<tr>
<td>5 : 8</td>
<td>0.953</td>
<td>0.971</td>
</tr>
<tr>
<td>5 : 10</td>
<td>-0.818</td>
<td>-0.643</td>
</tr>
<tr>
<td>5 : 11</td>
<td>0.937</td>
<td>0.803</td>
</tr>
<tr>
<td>5 : 13</td>
<td>0.892</td>
<td>0.748</td>
</tr>
<tr>
<td>5 : 14</td>
<td>0.949</td>
<td>0.939</td>
</tr>
<tr>
<td>8 : 10</td>
<td>-0.684</td>
<td>-0.750</td>
</tr>
<tr>
<td>8 : 11</td>
<td>0.943</td>
<td>0.910</td>
</tr>
<tr>
<td>8 : 13</td>
<td>0.918</td>
<td>0.856</td>
</tr>
<tr>
<td>8 : 14</td>
<td>0.983</td>
<td>0.961</td>
</tr>
<tr>
<td>10 : 11</td>
<td>-0.839</td>
<td>-0.875</td>
</tr>
<tr>
<td>10 : 13</td>
<td>-0.766</td>
<td>-0.786</td>
</tr>
<tr>
<td>10 : 14</td>
<td>-0.614</td>
<td>-0.712</td>
</tr>
<tr>
<td>11 : 13</td>
<td>0.985</td>
<td>0.977</td>
</tr>
<tr>
<td>11 : 14</td>
<td>0.878</td>
<td>0.919</td>
</tr>
<tr>
<td>13 : 14</td>
<td>0.847</td>
<td>0.918</td>
</tr>
</tbody>
</table>
Group 2

The second group comprises the correlated responses to Questions 15, 17 and 19. The numerical values of correlation coefficients \( r \) of these correlated responses are tabled below.

Table 11

<table>
<thead>
<tr>
<th>Questions</th>
<th>Correlation Coefficients ( (r) )</th>
<th>Overall Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMU Sample</td>
<td>CU Sample</td>
</tr>
<tr>
<td>15 : 17</td>
<td>0.888</td>
<td>0.975</td>
</tr>
<tr>
<td>15 : 19</td>
<td>0.892</td>
<td>0.989</td>
</tr>
<tr>
<td>17 : 19</td>
<td>0.991</td>
<td>0.986</td>
</tr>
</tbody>
</table>

Group 3

The third group consists of the correlated responses to Questions 3, 5, 8, 11, 12, 13 and 22. The numerical values of correlation coefficients \( r \) of this group are shown in the following table.
<table>
<thead>
<tr>
<th>Questions</th>
<th>Correlation Coefficients (r)</th>
<th>Overall Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMU Sample</td>
<td>CU Sample</td>
</tr>
<tr>
<td>3 : 5</td>
<td>0.945</td>
<td>0.992</td>
</tr>
<tr>
<td>3 : 8</td>
<td>0.982</td>
<td>0.975</td>
</tr>
<tr>
<td>3 : 11</td>
<td>0.900</td>
<td>0.822</td>
</tr>
<tr>
<td>3 : 12</td>
<td>0.659</td>
<td>0.896</td>
</tr>
<tr>
<td>3 : 13</td>
<td>0.892</td>
<td>0.788</td>
</tr>
<tr>
<td>3 : 22</td>
<td>0.742</td>
<td>0.949</td>
</tr>
<tr>
<td>5 : 8</td>
<td>0.953</td>
<td>0.971</td>
</tr>
<tr>
<td>5 : 11</td>
<td>0.937</td>
<td>0.803</td>
</tr>
<tr>
<td>5 : 12</td>
<td>0.780</td>
<td>0.943</td>
</tr>
<tr>
<td>5 : 13</td>
<td>0.892</td>
<td>0.748</td>
</tr>
<tr>
<td>5 : 22</td>
<td>0.859</td>
<td>0.982</td>
</tr>
<tr>
<td>8 : 11</td>
<td>0.943</td>
<td>0.910</td>
</tr>
<tr>
<td>8 : 12</td>
<td>0.588</td>
<td>0.887</td>
</tr>
<tr>
<td>8 : 13</td>
<td>0.918</td>
<td>0.856</td>
</tr>
<tr>
<td>8 : 22</td>
<td>0.735</td>
<td>0.942</td>
</tr>
<tr>
<td>11 : 12</td>
<td>0.560</td>
<td>0.725</td>
</tr>
<tr>
<td>11 : 13</td>
<td>0.985</td>
<td>0.977</td>
</tr>
<tr>
<td>11 : 22</td>
<td>0.641</td>
<td>0.761</td>
</tr>
<tr>
<td>12 : 13</td>
<td>0.511</td>
<td>0.641</td>
</tr>
<tr>
<td>12 : 22</td>
<td>0.876</td>
<td>0.982</td>
</tr>
<tr>
<td>13 : 22</td>
<td>0.535</td>
<td>0.674</td>
</tr>
</tbody>
</table>
The fourth group comprises the correlated responses to a total of six questions, namely, Questions 4, 8, 11, 13, 29 and 32. The table that follows shows the numerical values of their correlation coefficients.

**Table 13**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Correlation Coefficients (r)</th>
<th>Overall Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMU Sample</td>
<td>CU Sample</td>
</tr>
<tr>
<td>4 : 8</td>
<td>0.794</td>
<td>0.842</td>
</tr>
<tr>
<td>4 : 11</td>
<td>0.935</td>
<td>0.964</td>
</tr>
<tr>
<td>4 : 13</td>
<td>0.966</td>
<td>0.996</td>
</tr>
<tr>
<td>4 : 29</td>
<td>-0.720</td>
<td>-0.713</td>
</tr>
<tr>
<td>4 : 32</td>
<td>0.985</td>
<td>0.992</td>
</tr>
<tr>
<td>8 : 11</td>
<td>0.943</td>
<td>0.910</td>
</tr>
<tr>
<td>8 : 13</td>
<td>0.918</td>
<td>0.856</td>
</tr>
<tr>
<td>8 : 29</td>
<td>-0.629</td>
<td>-0.656</td>
</tr>
<tr>
<td>8 : 32</td>
<td>0.877</td>
<td>0.774</td>
</tr>
<tr>
<td>11 : 13</td>
<td>0.985</td>
<td>0.977</td>
</tr>
<tr>
<td>11 : 29</td>
<td>-0.764</td>
<td>-0.829</td>
</tr>
<tr>
<td>11 : 32</td>
<td>0.968</td>
<td>0.944</td>
</tr>
<tr>
<td>13 : 29</td>
<td>-0.682</td>
<td>-0.734</td>
</tr>
<tr>
<td>13 : 32</td>
<td>0.986</td>
<td>0.989</td>
</tr>
<tr>
<td>29 : 32</td>
<td>-0.744</td>
<td>-0.718</td>
</tr>
</tbody>
</table>
Group 5

This is the last group of correlated responses that can be formed by the results of correlation coefficients after we have tried to find the relationships that may exist among the responses to all the questions capable of being analyzed by the use of correlation coefficients ($r$). It may also be noted that several responses to the questions have appeared in more than one group. For example, the responses to Questions 3, 4, 5, 8, 11 and 13 have appeared in Groups 1, 3, 4 and 5, although not all of them have reappeared in all these groups at the same time.

This fifth group shows the correlation coefficients that have been found among the responses to Questions 3, 5, 30 and 34. The numerical values of correlation coefficients are indicated in the table below.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Correlation Coefficients ($r$)</th>
<th>Overall Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMU Sample</td>
<td>CU Sample</td>
</tr>
<tr>
<td>3 : 5</td>
<td>0.945</td>
<td>0.992</td>
</tr>
<tr>
<td>3 : 30</td>
<td>0.749</td>
<td>0.944</td>
</tr>
<tr>
<td>3 : 34</td>
<td>0.833</td>
<td>0.832</td>
</tr>
<tr>
<td>5 : 30</td>
<td>0.637</td>
<td>0.962</td>
</tr>
<tr>
<td>5 : 34</td>
<td>0.886</td>
<td>0.891</td>
</tr>
<tr>
<td>30 : 34</td>
<td>0.765</td>
<td>0.903</td>
</tr>
</tbody>
</table>
The written questionnaire survey was undertaken during my field research conducted in Chiangmai and Bangkok, Thailand, from the beginning of January to the end of April 1972. The questionnaire was administered to two samples comprising altogether 300 respondents who were drawn from the undergraduate student population at Chiangmai University in Chiangmai and at Chulalongkorn University in Bangkok. The Chiangmai University sample comprises 200 student respondents and the Chulalongkorn University sample consists of 100 student respondents. The 300 respondents were drawn from the rosters of undergraduate students currently enrolled in each of the constituent faculties of the two universities. The rosters were provided by the Office of the Secretary of each of the faculty concerned.

Chiangmai University had a total enrolment of 5,979 students, all undergraduates, in the academic year 1972 at a time when the questionnaire survey was conducted. Chulalongkorn University's total enrolment numbered 11,499 undergraduate students in the same academic year. According to the formal procedure (already referred to elsewhere in this chapter) by which the questionnaire samples were selected, every 30th student at Chiangmai University was actually selected as a questionnaire respondent and every 115th student at Chulalongkorn University was similarly selected as a respondent of the questionnaire survey.

It would perhaps suffice to state here briefly why we have selected the students enrolled in Chiangmai and Chulalongkorn Universities as the respondents in our two samples and how the
questionnaire was distributed to them.

Students enrolled in these two universities were selected as our questionnaire respondents primarily for four major reasons. First, both Chiangmai and Chulalongkorn Universities are fully-fledged universities. They are the institutions which offer academic instructions in all the major fields of human learning, namely, engineering, sciences, education, social sciences, the humanities, medical sciences, fine arts, agriculture, and law. Although fine arts are presently not being taught at Chiangmai University, nor is agriculture at Chulalongkorn University, Chiangmai University is planning to establish the Faculty of Fine Arts — the last of its faculties — in a few years' time and Chulalongkorn University will in the near future have its own Faculty of Agriculture. The fact that both these universities offer courses of instruction in all the major academic fields of study may make it possible for us to draw samples of student respondents from the Faculties teaching the academic disciplines that both universities share. This may perhaps enable the responses elicited from the questionnaire to be compared between the two institutions.

Second, both Chiangmai and Chulalongkorn Universities require their undergraduate students to take courses in basic general education (i.e., the humanities, social sciences, and natural sciences) as a compulsory part of their programme of study, regardless of the students' major fields of study they intend to specialize in. Because these two universities provide
instructions in courses in general education both as a concomitant of courses in professional education and to help broaden students' knowledge and interests, they are classified as falling into the same category (Category A) of the existing Thai universities.\(^1\) Other universities in Thailand which so far have not adopted this practice are now planning to follow the example of Chiangmai and Chulalongkorn Universities in providing courses in general education as part of a requirement for a Bachelor's degree programme.

Third, the relative homogeneity of the student population at both universities in terms of parents' socio-economic status, professions, places of residence and the like may perhaps be also a factor of some significance. Although Chiangmai University is literally a regional university and Chulalongkorn University is located in metropolitan Bangkok, this does not seem to matter much at all. Chiangmai is actually the second largest city next only to Bangkok and in recent years it has become increasingly urbanized and modernized to the extent that the city is well equipped with modern physical facilities, more densely populated and has become a commercial and industrial centre of growing importance. It may be said that the urban milieu of Bangkok and Chiangmai is now different in terms of size

---

rather than in terms of other modern facilities and the like. To be sure, the student intake of both Chiangmai and Chulalongkorn Universities comes mostly from urban middle-class families. A large majority of the students' fathers are employed in the government service and operate or own private business and industry (white-collar, employer and self-employed families). Therefore, in terms of their parents' income, social status as well as places of residence, the student population of both universities is relatively homogeneous. Children from the poorer rural families have much lower probability of being admitted to a university. The following table indicates a percentage distribution of university students by social and economic backgrounds.

---


Table 15

Percentage Distributions of Students by Social Backgrounds

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Employers and Self-employed</th>
<th>Government Officials</th>
<th>Agricultural</th>
<th>Employees</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chulalongkorn</td>
<td>56.29</td>
<td>25.46</td>
<td>5.04</td>
<td>8.52</td>
<td>4.68</td>
<td>100</td>
</tr>
<tr>
<td>University</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chiangmai</td>
<td>52.11</td>
<td>26.83</td>
<td>6.21</td>
<td>8.65</td>
<td>6.21</td>
<td>100</td>
</tr>
</tbody>
</table>


Data from this table suggest that a large majority of students at Chulalongkorn and Chiangmai Universities come from the urban, middle-class backgrounds (i.e., the employers/self-employed and government officials classes).

Moreover, the geographical distribution of students whose homes are in cities and towns in various regions of the country is made possible by the Joint University Education Entrance Examination administered by the National Education Council. As things are, students who reside in the northern region can choose to go to and be admitted into Chulalongkorn University while students who live in Bangkok or other regions can choose to go to and be admitted into Chiangmai University. Of a total of 5,979 students enrolled at Chiangmai University in the academic year 1972, for example, 1684 students come from the
metropolitan area of Bangkok while 918 students come from Chiangmai and the rest of this total comes from every province in the whole kingdom.4

Fourth, it is both more convenient and time-saving for the author of this thesis to choose to conduct the questionnaire survey at Chiangmai and Chulalongkorn Universities. The author has got to know the place and some of its officials who can accord him necessary facilities and convenience while carrying out the survey. They may give him an access to the roster of student enrollees in each faculty. Contacts with them may be rather personal and rapport may develop. Moreover, since the author has only a limited amount of time at his disposal — about four months for this field research, he would anticipate a fruitful cooperation from individuals with whom he may come into contact, considering the rather complicated procedure by which the questionnaire forms can be distributed to the student respondents and finally returned to be collected by the author. Otherwise, it would be difficult for him to accomplish the task in time.

On the basis of these four major reasons that are taken into consideration the author has obtained an approval from his thesis supervisor to choose Chiangmai and Chulalongkorn universities as the site for administration of the questionnaire.

In order to distribute the questionnaires to the students already selected on the faculty roster as potential respondents in

the two samples, a short personal letter formally requesting their cooperation in filling in and returning the completed questionnaires was sent to each of them individually at his or her faculty. Arrangements were made for the respondents who had been so requested to collect the questionnaires in which were enclosed a cover-letter and then to return the completed questionnaires at the Office of the Secretary to the faculties. In cases where some of the questionnaires that had been collected by the respondents were found missing or failed to be returned for reasons unstated and thus unknown to the author, the next student on the faculty roster (i.e., the 31st student in the case of CMU and the 116th student in the case of CU) was accordingly selected to replace the respondents who did not return the completed questionnaires. In another short letter of the same kind he or she was then requested to fill in and return the completed questionnaire. This procedure had to be repeated time and again (i.e., if the 31st or the 116th students were unavailable, the 32nd or 33rd and the 117th or 118th students as the case may be were requested to fill in the questionnaire) until the required samples of 200 and 100 respondents were finally obtained.

The respondents in the two samples were actually chosen in this way. The students' names that appeared on the faculty rosters were used as the basis on which the sample population was drawn. It may thus be said that the rosters that had been used for such a purpose did give every student of every faculty of every year a completely equal chance of being selected as one of the actual questionnaire respondents. The selection of student respondents in the two samples was by no means arbitrary. That there appeared to be a larger number of 3rd and 4th year students who answered the questionnaire than 1st and 2nd year students
(see Item No. 1 in Appendix B at the end of the thesis) is perhaps due to an understanding that the 3rd and 4th year students were more willing and more interested in answering the questionnaire that they might have thought was concerned with some aspects of the university education they were pursuing. It may also presumably be because these older students were more mature and thus became more responsible for what they were asked to do. In actual fact, it is not intended that the respondents are to be equally distributed among their years of study by using the "systematic sampling" of this kind. Interestingly enough, our chi-squared tests (results of which will be shown in the analysis of the questionnaire findings) have revealed no significant difference in answering the questionnaire between 1st, 2nd, 3rd and 4th year students in the two samples.

The questionnaire was originally formulated in English. It was later translated into Thai by the author who exercised great care to ensure the subtleties and nuances of the Thai version. This written questionnaire, reproduced in Appendix A at the end of the thesis, employs a large proportion of structured or closed questions which ask the respondents to express their attitudes on a five-point scale of agreement-disagreement continuum. It also employs some "fixed-alternative" questions the response to which can be indicated by either marking the given answers of one's choice or by ranking the answers provided in order of preference or importance.
Analysis of the Questionnaire Data

In order to present the results of the questionnaire more succinctly, we shall commence our analysis of statistical material from complete tables of correlations between questionnaire responses. We shall conduct the analysis by giving a brief outline of responses to all questions which were asked within the survey. Analysis could then be made of significant questions, of significant responses and of the most interesting correlations which appear between the questions. This will be the form of analysis we use in presenting the results of the written questionnaire survey. In doing so, our analysis will not misrepresent what the overall results tend to demonstrate.

As stated earlier in this chapter, we have five tables of correlations between questionnaire responses. Before going on with the analysis, all those tables will have to be presented here again.
Table 16

Group 1 of Correlations

<table>
<thead>
<tr>
<th>Questions</th>
<th>Correlation Coefficients (r)</th>
<th>Overall Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMU Sample</td>
<td>CU Sample</td>
</tr>
<tr>
<td>3 : 4</td>
<td>0.747</td>
<td>0.779</td>
</tr>
<tr>
<td>3 : 5</td>
<td>0.945</td>
<td>0.992</td>
</tr>
<tr>
<td>3 : 8</td>
<td>0.982</td>
<td>0.975</td>
</tr>
<tr>
<td>3 : 10</td>
<td>-0.907</td>
<td>-0.606</td>
</tr>
<tr>
<td>3 : 11</td>
<td>0.900</td>
<td>0.822</td>
</tr>
<tr>
<td>3 : 13</td>
<td>0.892</td>
<td>0.788</td>
</tr>
<tr>
<td>3 : 14</td>
<td>0.990</td>
<td>0.959</td>
</tr>
<tr>
<td>4 : 5</td>
<td>0.765</td>
<td>0.729</td>
</tr>
<tr>
<td>4 : 8</td>
<td>0.794</td>
<td>0.842</td>
</tr>
<tr>
<td>4 : 10</td>
<td>-0.760</td>
<td>-0.740</td>
</tr>
<tr>
<td>4 : 11</td>
<td>0.935</td>
<td>0.964</td>
</tr>
<tr>
<td>4 : 13</td>
<td>0.966</td>
<td>0.996</td>
</tr>
<tr>
<td>4 : 14</td>
<td>0.685</td>
<td>0.905</td>
</tr>
<tr>
<td>5 : 8</td>
<td>0.953</td>
<td>0.971</td>
</tr>
<tr>
<td>5 : 10</td>
<td>-0.818</td>
<td>-0.643</td>
</tr>
<tr>
<td>5 : 11</td>
<td>0.937</td>
<td>0.803</td>
</tr>
<tr>
<td>5 : 13</td>
<td>0.892</td>
<td>0.748</td>
</tr>
<tr>
<td>5 : 14</td>
<td>0.949</td>
<td>0.939</td>
</tr>
<tr>
<td>8 : 10</td>
<td>-0.684</td>
<td>-0.750</td>
</tr>
<tr>
<td>8 : 11</td>
<td>0.943</td>
<td>0.910</td>
</tr>
<tr>
<td>8 : 13</td>
<td>0.918</td>
<td>0.856</td>
</tr>
<tr>
<td>8 : 14</td>
<td>0.983</td>
<td>0.961</td>
</tr>
<tr>
<td>10 : 11</td>
<td>-0.839</td>
<td>-0.875</td>
</tr>
<tr>
<td>10 : 13</td>
<td>-0.766</td>
<td>-0.786</td>
</tr>
<tr>
<td>10 : 14</td>
<td>-0.614</td>
<td>-0.712</td>
</tr>
<tr>
<td>11 : 13</td>
<td>0.985</td>
<td>0.977</td>
</tr>
<tr>
<td>11 : 14</td>
<td>0.878</td>
<td>0.919</td>
</tr>
<tr>
<td>13 : 14</td>
<td>0.847</td>
<td>0.918</td>
</tr>
</tbody>
</table>
## Table 17

### Group 2 of Correlations

<table>
<thead>
<tr>
<th>Questions</th>
<th>Correlation Coefficients (r)</th>
<th>Overall Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMU Sample</td>
<td>CU Sample</td>
</tr>
<tr>
<td>15 : 17</td>
<td>0.888</td>
<td>0.975</td>
</tr>
<tr>
<td>15 : 19</td>
<td>0.892</td>
<td>0.989</td>
</tr>
<tr>
<td>17 : 19</td>
<td>0.991</td>
<td>0.986</td>
</tr>
</tbody>
</table>

## Table 18

### Group 3 of Correlations

<table>
<thead>
<tr>
<th>Questions</th>
<th>Correlation Coefficients (r)</th>
<th>Overall Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMU Sample</td>
<td>CU Sample</td>
</tr>
<tr>
<td>3 : 5</td>
<td>0.945</td>
<td>0.992</td>
</tr>
<tr>
<td>3 : 8</td>
<td>0.982</td>
<td>0.975</td>
</tr>
<tr>
<td>3 : 11</td>
<td>0.900</td>
<td>0.822</td>
</tr>
<tr>
<td>3 : 12</td>
<td>0.659</td>
<td>0.896</td>
</tr>
<tr>
<td>3 : 13</td>
<td>0.892</td>
<td>0.788</td>
</tr>
<tr>
<td>3 : 22</td>
<td>0.742</td>
<td>0.949</td>
</tr>
<tr>
<td>5 : 8</td>
<td>0.953</td>
<td>0.971</td>
</tr>
<tr>
<td>5 : 11</td>
<td>0.937</td>
<td>0.803</td>
</tr>
<tr>
<td>5 : 12</td>
<td>0.780</td>
<td>0.943</td>
</tr>
<tr>
<td>5 : 13</td>
<td>0.892</td>
<td>0.748</td>
</tr>
<tr>
<td>5 : 22</td>
<td>0.859</td>
<td>0.982</td>
</tr>
<tr>
<td>8 : 11</td>
<td>0.943</td>
<td>0.910</td>
</tr>
<tr>
<td>8 : 12</td>
<td>0.588</td>
<td>0.887</td>
</tr>
<tr>
<td>8 : 13</td>
<td>0.918</td>
<td>0.856</td>
</tr>
<tr>
<td>8 : 22</td>
<td>0.735</td>
<td>0.942</td>
</tr>
<tr>
<td>11 : 12</td>
<td>0.560</td>
<td>0.725</td>
</tr>
<tr>
<td>11 : 13</td>
<td>0.985</td>
<td>0.977</td>
</tr>
<tr>
<td>11 : 22</td>
<td>0.641</td>
<td>0.761</td>
</tr>
<tr>
<td>12 : 13</td>
<td>0.511</td>
<td>0.641</td>
</tr>
<tr>
<td>12 : 22</td>
<td>0.876</td>
<td>0.982</td>
</tr>
<tr>
<td>13 : 22</td>
<td>0.535</td>
<td>0.674</td>
</tr>
</tbody>
</table>
Table 19

Group 4 of Correlations

<table>
<thead>
<tr>
<th>Questions</th>
<th>Correlation Coefficients (r)</th>
<th>Overall Correlations Table</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMU Sample</td>
<td>CU Sample</td>
</tr>
<tr>
<td>4 : 8</td>
<td>0.794</td>
<td>0.842</td>
</tr>
<tr>
<td>4 : 11</td>
<td>0.935</td>
<td>0.964</td>
</tr>
<tr>
<td>4 : 13</td>
<td>0.966</td>
<td>0.996</td>
</tr>
<tr>
<td>4 : 29</td>
<td>-0.720</td>
<td>-0.713</td>
</tr>
<tr>
<td>4 : 32</td>
<td>0.985</td>
<td>0.992</td>
</tr>
<tr>
<td>8 : 11</td>
<td>0.943</td>
<td>0.910</td>
</tr>
<tr>
<td>8 : 13</td>
<td>0.918</td>
<td>0.856</td>
</tr>
<tr>
<td>8 : 29</td>
<td>-0.629</td>
<td>-0.656</td>
</tr>
<tr>
<td>8 : 32</td>
<td>0.877</td>
<td>0.774</td>
</tr>
<tr>
<td>11 : 13</td>
<td>0.985</td>
<td>0.977</td>
</tr>
<tr>
<td>11 : 29</td>
<td>-0.764</td>
<td>-0.829</td>
</tr>
<tr>
<td>11 : 32</td>
<td>0.968</td>
<td>0.944</td>
</tr>
<tr>
<td>13 : 29</td>
<td>-0.682</td>
<td>-0.734</td>
</tr>
<tr>
<td>13 : 32</td>
<td>0.986</td>
<td>0.989</td>
</tr>
<tr>
<td>29 : 32</td>
<td>-0.744</td>
<td>-0.718</td>
</tr>
</tbody>
</table>
Table 20
Group 5 of Correlations

<table>
<thead>
<tr>
<th>Questions</th>
<th>Correlation Coefficients (r)</th>
<th>Overall Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMU Sample</td>
<td>CU Sample</td>
</tr>
<tr>
<td>3 : 5</td>
<td>0.945</td>
<td>0.992</td>
</tr>
<tr>
<td>3 : 30</td>
<td>0.749</td>
<td>0.944</td>
</tr>
<tr>
<td>3 : 34</td>
<td>0.833</td>
<td>0.832</td>
</tr>
<tr>
<td>5 : 30</td>
<td>0.637</td>
<td>0.962</td>
</tr>
<tr>
<td>5 : 34</td>
<td>0.886</td>
<td>0.891</td>
</tr>
<tr>
<td>30 : 34</td>
<td>0.765</td>
<td>0.903</td>
</tr>
</tbody>
</table>

In taking a look at the correlation coefficients of those five groups, it should be noted that the overall correlations are calculated so as to test the groupings of the items rather than assuming them.

A brief outline of responses to all questions that were asked in the questionnaire will be given as follows:

**Question 1**: On the whole, government, private business and industry are most preferred as potential employers of the respondents in both CMU and CU samples. State enterprise, own business and other potential employers are not much preferred by the respondents.
Question 2: On the whole, university teachers, business men, administrators, school teachers and engineers are most preferred as the professions the respondents in both samples would like to enter after their graduation. Other professions such as a farmer is not preferred.

Question 3: A large majority of the respondents in both samples (i.e., 74.5% in the CMU sample and 73% in the CU sample) have reported that the most important reason for coming to a university is to acquire intellectual knowledge for its own sake. Responses are shown in the following table.

Table 21

<table>
<thead>
<tr>
<th>Nos</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>39</td>
<td>19.5</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>110</td>
<td>55.0</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>19</td>
<td>9.5</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>29</td>
<td>14.5</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>3</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total :</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 4: An overwhelming majority of the respondents in both samples (i.e., 90.5% in the CMU sample and 95% in the CU sample) have stated that the main objective of university education
should be to train students for their careers. Responses are shown in the table below.

Table 22

<table>
<thead>
<tr>
<th>Nos</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>94</td>
<td>47</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>87</td>
<td>43.5</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>13</td>
<td>6.5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 5: A large majority of the respondents in both samples (i.e., 63.5% in the CMU sample and 68% in the CU sample) have said that they come to a university mainly to raise their social status. Responses are shown in the table that follows.
Table 23

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>45</td>
<td>22.5</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>82</td>
<td>41</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>39</td>
<td>19.5</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>29</td>
<td>14.5</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total :</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 6: A majority of the respondents in the CMU sample (i.e., 41.5%) have said that they come to a university mainly to satisfy their parents' desire for them to gain social recognition and status. On the contrary, a majority of the respondents in the CU sample (i.e., 42.00%) have said that they do not come to a university mainly to satisfy their parents' desire for them to gain social recognition and status. Responses are shown in the following table.
Table 24

<table>
<thead>
<tr>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1 Agree strongly</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>2 Agree</td>
<td>59</td>
<td>29.5</td>
</tr>
<tr>
<td>3 Neither agree nor disagree</td>
<td>39</td>
<td>19.5</td>
</tr>
<tr>
<td>4 Disagree</td>
<td>63</td>
<td>31.5</td>
</tr>
<tr>
<td>5 Disagree strongly</td>
<td>15</td>
<td>7.5</td>
</tr>
<tr>
<td>Total :</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 7: A large majority of the respondents in both samples (i.e., 61.0% in the CMU sample and 67.0% in the CU sample) have replied that they consider a university degree as "fairly essential" to an advancement in their career life. Responses are shown in the table above.
Table 25

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>Cal State University (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
</tr>
<tr>
<td>1</td>
<td>Very essential</td>
<td>33</td>
<td>16.5</td>
</tr>
<tr>
<td>2</td>
<td>Fairly essential</td>
<td>122</td>
<td>61</td>
</tr>
<tr>
<td>3</td>
<td>Can't say</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Not very essential</td>
<td>23</td>
<td>11.5</td>
</tr>
<tr>
<td>5</td>
<td>Not at all essential</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 8: A large majority of the respondents in both samples (i.e., 77.0% in the CMU sample and 75.0% in the Cal State University sample) have stated that they regard their own university courses as helping them substantially in the promotion of their future career. Responses are shown in the following table.
<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>45</td>
<td>22.5</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>109</td>
<td>54.5</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total :</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

**Question 9:** A majority of the respondents in both samples (i.e., 58% in the CMU sample and 49% in the CU sample) are of the opinion that in selection of students for universities ability to mix socially is just as important a criterion as academic ability. Responses are given in the following table.
Question 10: An overwhelming majority of the respondents in the two samples (i.e., 88% in the CMU sample and 92% in the CU sample) have stated that members of old Thai families who fail to gain admission to universities through lack of formal qualifications should not be admitted since they would not represent a definite social asset to the universities. Responses are indicated in the following table.

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>35</td>
<td>17.5</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>81</td>
<td>4.5</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>47</td>
<td>23.5</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>7</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 28

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>73</td>
<td>36.5</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>103</td>
<td>51.5</td>
</tr>
<tr>
<td></td>
<td>Total :</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

**Question 11**: A large majority of the respondents in the two samples (i.e., 79% in the CMU sample and 82% in the CU sample) have replied that they think knowledge gained from a university education is of more value than any subsequent material success in the form of wealth. Responses are tabled below.
Table 29

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>66</td>
<td>33</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>92</td>
<td>46</td>
<td>47</td>
<td>47</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>26</td>
<td>13</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>15</td>
<td>7.5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>1</td>
<td>0.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 12: A majority of the respondents in both samples (i.e., 45.5% in the CMU sample and 56% in the CU sample) have stated that success in their future life will depend more upon university degree than upon wealth and family status. Responses are shown in the table below.
Table 30

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>55</td>
<td>27.5</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>47</td>
<td>23.5</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>49</td>
<td>24.5</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>13</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 13: A large majority of the respondents in both samples (i.e., 80.5% in the CMU sample and 87% in the CU sample) have perceived that success in their future life ought to come more from academic and other career achievements rather than from wealth and family status. Responses are shown in the table below.
Table 31

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>70</td>
<td>35</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>91</td>
<td>45.5</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>15</td>
<td>7.5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>21</td>
<td>10.5</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>3</td>
<td>1.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total :</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 14: A large majority of the respondents in both samples (i.e., 75.5% in the CMU sample and 73% in the CU sample) have reported that during a university career social activities should be as important as academic studies. Responses are shown in the following table.
Table 32

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>119</td>
<td>59.5</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>26</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 15: A large majority of the respondents in both samples (i.e., 85% in the CMU sample and 79% in the CU sample) have expressed the opinion that students should have a say in a university's policy-making on academic matters. Responses are given in the table below.
Table 33

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>5</td>
<td>2.5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>14</td>
<td>7.0</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>11</td>
<td>5.5</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>116</td>
<td>58.0</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>54</td>
<td>27.0</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 16: A very large majority of the respondents in both samples (i.e., 93% in the CMU sample and 81% in the CU sample) have replied that students should have a voice in the administrative affairs of a university. Responses are tabled below.
Question 17: A majority of the respondents in both samples (i.e., 66% in the CMU sample and 70% in the CU sample) have stated that seminars are more effective than lectures as a method of teaching and learning. Responses are shown in the table below.
Table 35

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>39</td>
<td>19.5</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>27</td>
<td>13.5</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>108</td>
<td>54</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>24</td>
<td>12</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 18: A majority of the respondents in the CMU sample (i.e., 56.5%) have agreed that obedience is more important than friendship in teachers' relations with their students. On the contrary, a majority of the respondents in the CU sample (i.e., 42%) have disagreed that obedience is more important than friendship in teachers' relations with their students. Responses are shown in the table below.
Table 36

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>29</td>
<td>14.5</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>84</td>
<td>42</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>30</td>
<td>15</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>47</td>
<td>23.5</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>10</td>
<td>5</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 19: A majority of the respondents in both samples (i.e., 64.5% in the CMU sample and 79% in the CU sample) have replied that in their opinion if teachers maintain close personal contacts with students this is not likely to lead to a weakening of discipline. Responses are shown in the table that follows.
<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual</td>
<td>Percentage</td>
<td>Actual</td>
<td>Percentage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequencies</td>
<td>Distribution</td>
<td>Frequencies</td>
<td>Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>11</td>
<td>5.5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>33</td>
<td>16.5</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>27</td>
<td>13.5</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>108</td>
<td>54</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>21</td>
<td>10.5</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**Question 20**: An overwhelming majority of the respondents in both samples (i.e., 94% in the CMU sample and 95% in the CU sample) have replied that students should always feel free in classes to disagree with their lecturers. Responses are tabulated below.
Question 21: A very large majority of the respondents in both samples (i.e., 85.5% in the CMU sample and 86% in the CU sample) have replied that in their programme of study they would prefer to choose most or all of the subjects themselves. Responses are given in the following table.
Table 39

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Choose all the subjects myself.</td>
<td>57</td>
<td>28.5</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>2</td>
<td>Choose most of the subjects myself.</td>
<td>114</td>
<td>57</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>3</td>
<td>Choose half of all the subjects myself and let my teachers choose another half of them for me.</td>
<td>14</td>
<td>7</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>Let my teachers choose most of the subjects for me.</td>
<td>12</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Let my teachers choose all the subjects for me.</td>
<td>3</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total:</strong></td>
<td><strong>200</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Question 22:** A majority of the respondents in both samples (i.e., 50.5% in the CMU sample and 60% in the CU sample) have replied that university teaching is a profession of high prestige in Thai society. Responses are given in the table below.
Table 40

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>26</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>75</td>
<td>37.5</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>34</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

In responding to the statement of Question 22 the respondents in both samples were asked to provide a comment upon reasons for their answers. Our findings have shown that in the CMU sample while 166 respondents (i.e., 83 %) made the comments upon request another 34 respondents (i.e., 17 %) did not do so. In the CU sample, 80 respondents (i.e., 80 %) gave the comments whereas another 20 respondents (i.e., 20 %) did not. Following are the translated versions of the quotations of some of the selected statements made by the respondents in both samples in commenting upon reasons for their answers to Question 22.

(1) "University teaching is a hard and arduous work and requires training both in knowledge and skills. At the same time university teaching is a profession the remuneration of which is
not at all high." (A respondent in the CMU sample, voting "agree strongly" with Question 22).

(2) "The Thais do value a university degree and hence give great prestige to it. On the contrary, they much less value and recognize ability and other qualities of individuals." (A respondent in the CMU sample, voting "agree" with Question 22).

(3) "University teachers enjoy high prestige because they are persons who teach students in knowledge and skills. Students will later make use of such knowledge and skills in their careers upon graduation." (A respondent in the CMU sample, voting "agree" with Question 22).

(4) "University teaching is a career in the government service which has traditionally been given high prestige and status in Thai society. Moreover, the prestige and status of the government service is higher than the prestige and status associated with jobs in the private enterprises." (A respondent in the CMU sample, voting "agree strongly" with Question 22).

(5) "Thai society values university degree very highly. Regardless of whether degree holders can directly or indirectly utilize their degree qualifications in their careers, university graduates with degrees are given great prestige. Higher prestige can even be given holders of advanced degrees who teach in a university." (A respondent in the CU sample, voting "agree" with Question 22).
(6) "Thai society does recognize and pays its due respect to university education. As a consequence, university teachers are given high prestige and status they so deserve." (A respondent in the CU sample, voting "agree strongly" with Question 22).

(7) "In present-day Thai society prestige and status are not accorded on the basis of knowledge and expertise one has obtained but on the basis of the amount of material wealth and money one possesses." (A respondent in the CMU sample, voting "neither agree nor disagree" with Question 22).

(8) "Professionals such as high-rank career bureaucrats in the government administration and wealthy businessmen and industrialists can be more prestigious. University teachers are given less prestige compared to these professionals." (A respondent in the CMU sample, voting "disagree" with Question 22).

(9) "Not many people want to become teachers or university teachers mainly because teachers earn a low salary. Other careers such as those of medical doctors and engineers are of higher prestige and so are better recognized in the society." (A respondent in the CU sample, voting "disagree" with Question 22).

(10) "Only some people think that university teaching is a profession of high prestige. A great many people think that university teaching is a profession with low salary and
accordingly of low prestige. Thai society nowadays tends to give high prestige and status to those individuals whose careers bring them a large amount of monetary remuneration.” (A respondent in the Cu sample, voting "disagree" with Question 22).

(11) "Most of the Thais do not value knowledge and ability as highly as they value wealth and secure financial status of individuals." (A respondent in the CU sample, voting "disagree" with Question 22).

**Question 23**: In the CMU sample, 36% of the respondents have perceived that on the whole the content of the courses they are now taking is "more general than specialized," while another 34% of the respondents have perceived that the content of their current courses is equally general and specialized ("Both equally").

In the CU sample, 35% of the respondents have perceived that on the whole the content of the courses they are now taking is "more specialized than general", while another 32% of the respondents have perceived that the content of their courses is "more general than specialized."

Responses to this question are shown in the table below.
Table 41

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Categories of Responses</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>More general than specialized</td>
<td>72</td>
<td>36</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>More specialized than general</td>
<td>50</td>
<td>25</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>3</td>
<td>Both equally</td>
<td>68</td>
<td>34</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>Can't say</td>
<td>10</td>
<td>5</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Total :</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 24: A majority of the respondents in both samples (i.e., 54% at CMU and 49% at CU) prefer that their courses should be "more specialized than general".

In the CMU sample, another 36.5% of the respondents prefer that their courses should be equally specialized and general ("Both equally"), while another 44% of the respondents in the CU sample prefer that their courses should be equally specialized and general ("Both equally").

Responses are shown in the table below.
Question 25: A majority of the respondents in both samples (i.e., 55% at CMU and 41% at CU) replied that in their view the courses they are now engaged in are "equally useful both for careers and for their own sake." Responses are shown in the table below.

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Categories of Responses</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Freqs</td>
<td>Percent</td>
<td>Actual Freqs</td>
<td>Percent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Distribution</td>
<td></td>
<td>Distribution</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>More general than specialized</td>
<td>14</td>
<td>7</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>More specialized than general</td>
<td>108</td>
<td>54</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>3</td>
<td>Both equally</td>
<td>73</td>
<td>36.5</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>4</td>
<td>Can't say</td>
<td>5</td>
<td>2.5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 43

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Categories of Responses</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>More useful for careers than for their own sake.</td>
<td>35</td>
<td>17.5</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>More useful for their own sake than for careers.</td>
<td>45</td>
<td>22.5</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>3</td>
<td>Both equally</td>
<td>110</td>
<td>55</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>4</td>
<td>Can't say</td>
<td>10</td>
<td>5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Question 26**: A large majority of the respondents in both samples (i.e., 62% at CMU and 67% at CU) would prefer that their courses should be "equally useful both for careers and for their own sake." Responses are shown in the table below.
Table 44

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Categories of Responses</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>More useful for careers than for their own sake</td>
<td>64</td>
<td>32</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>More useful for their own sake than for careers.</td>
<td>12</td>
<td>6</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Both equally</td>
<td>124</td>
<td>62</td>
<td>67</td>
<td>67</td>
</tr>
<tr>
<td>4</td>
<td>Can't say</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total :</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 27: A majority of the respondents in both samples (i.e., 35.5% at CMU and 26% at CU) replied that on the whole they think the emphasis of their course is "more applied than pure." And in both samples, a number of the respondents (i.e., 25% at CMU and 24% at CU) replied that on the whole they think the emphasis of their course is "more pure than applied." Responses are shown in the table below.
Table 45

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Categories of Responses</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>More applied than pure</td>
<td>71</td>
<td>35.5</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>More pure than applied</td>
<td>50</td>
<td>25</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>Equally with both pure and applied</td>
<td>34</td>
<td>17</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>Mainly applied</td>
<td>10</td>
<td>5</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Mainly pure</td>
<td>35</td>
<td>17.5</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Total :</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**Question 28:** A majority of the respondents in both samples (i.e., 53.5% at CMU and 50% at CU) prefer that the emphasis of their course should be "more applied than pure." Responses are tabled below.
Table 46

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Categories of Responses</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual</td>
<td></td>
<td>Actual</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequencies</td>
<td></td>
<td>Frequencies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td></td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Distribution</td>
<td></td>
<td>Distribution</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>More applied than pure</td>
<td>107</td>
<td>53.5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>More pure than applied</td>
<td>3</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Equally with both pure and applied</td>
<td>66</td>
<td>33</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>4</td>
<td>Mainly applied</td>
<td>20</td>
<td>10</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>5</td>
<td>Mainly pure</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 29: A large majority of the respondents in both samples (i.e., 83% in the CMU sample and 84% in the CU sample) have replied that courses in the humanities (e.g., philosophy, languages, history, literature, and classics, etc.) are useful to students' careers and thus should be included in the curriculum. Responses are shown in the following table.
Table 47

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>9</td>
<td>4.5</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>24</td>
<td>12.0</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>102</td>
<td>51.0</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>64</td>
<td>32.0</td>
</tr>
<tr>
<td></td>
<td>Total :</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 30: A majority of the respondents in both samples (i.e., 48% in the CMU sample and 56% in the CU sample) have reported that courses should not so much fulfil career needs of students but rather be geared towards satisfying their intellectual interests as such. Responses are given in the table below.
Table 48

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>67</td>
<td>33.5</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>13</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>Total :</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 31: On the whole, social sciences, medicine and agriculture are the three major fields of study considered by the respondents in both samples as most useful to Thai society in terms of national development. At the same time, law and the humanities are considered by these respondents as two out of ten major fields of study that are of least utility to national development.

A breakdown of the respondents' rankings in order of their perceived usefulness of the ten major fields of study is given in the following table.
<table>
<thead>
<tr>
<th>Nos.</th>
<th>Fields of Study</th>
<th>CMU sample</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>CU sample</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td>4th</td>
<td>5th</td>
<td>6th</td>
<td>7th</td>
<td>8th</td>
<td>9th</td>
<td>10th</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
</tr>
<tr>
<td>1</td>
<td>Social Sciences</td>
<td>52</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Physical Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Biological Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Business administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23</td>
<td>29</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>38</td>
<td>28</td>
<td>27</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Agriculture</td>
<td>44</td>
<td>37</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>9</td>
<td>Law</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
<tr>
<td>10</td>
<td>Medicine</td>
<td>53</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>
Question 32: An overwhelming majority of the respondents in both samples (i.e., 93% in the CMU sample and 90% in the CU sample) have replied that the main priority of university courses should be to deal with the current problems and needs of Thai society. Responses are given in the following table.

Table 50

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>86</td>
<td>43</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>
Question 33: A majority of the respondents in both sample (i.e., 74% in the CMU sample and 59% in the CU sample) have replied that it is more important for a university to produce job-trained specialists than graduates of culture and distinction. Responses are shown in the table below.

Table 51

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th></th>
<th>CU (N = 100)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>3</td>
<td>1.5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>25</td>
<td>12.5</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>24</td>
<td>12</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>125</td>
<td>62.5</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>23</td>
<td>11.5</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Question 34: A majority of the respondents in both samples (i.e., 50.5% in the CMU sample and 48% in the CU sample) have stated that preservation of traditional Thai culture should be a major priority of university courses. Responses are shown in the following table.

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Scale of the Continuum</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
</tr>
<tr>
<td>1</td>
<td>Agree strongly</td>
<td>25</td>
<td>12.5</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>76</td>
<td>38</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>Disagree</td>
<td>38</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>Disagree strongly</td>
<td>11</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>
Question 35: A majority of the respondents in the CMU sample (i.e., 56%) stated that the academic standard at their university (CMU) is "about the same" as the academic standard at other universities in Thailand.

On the contrary, a majority of the respondents in the CU sample (i.e., 52%) stated that the academic standard at their university (CU) is "higher" than the academic standard at other universities in Thailand.

Responses are given in the table below.

Table 53

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Categories of Responses</th>
<th>CMU (N = 200)</th>
<th>CU (N = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Frequencies</td>
<td>Percentage Distribution</td>
<td>Actual Frequencies</td>
</tr>
<tr>
<td>1</td>
<td>Higher</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Lower</td>
<td>19</td>
<td>9.5</td>
</tr>
<tr>
<td>3</td>
<td>About the same</td>
<td>112</td>
<td>56</td>
</tr>
<tr>
<td>4</td>
<td>Can't say</td>
<td>59</td>
<td>29.5</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>
Positive correlations found between the responses to Questions 3, 4 and 5 tend to suggest that the respondents ought to be motivated by all three major objectives for coming to a university, namely, to acquire intellectual knowledge as such, to receive a professional training, and to raise a social status. It may also be assumed that although the respondents are motivated by all these three major objectives in varying proportions, they may not want to fulfill only one or two of these objectives at the expense of the others. It may be said then that these objectives would appear to constitute a major consistent pattern of objectives for attending a university. In Thai society learning and knowledge both for its own sake and for careers are valued as major sources of social status which is itself a Thai social value of great importance. When the respondents go to a university to acquire knowledge for its own sake and to secure a career training they may anticipate that their social status will be promoted. They may enjoy a high social status not only as university students but perhaps also as prospective incumbents for white-collar, high-status jobs in the government and in the professions. University education therefore seems to be a means whereby the respondents may fulfill all three major objectives for coming to a university.

At a first glance, there may appear to be a conflict among all these university — coming objectives. But it may be suggested that these objectives of the respondents come into conflict with one another at the point of the interface and in
fact these objectives seem to be mutually compatible. The Thai social and cultural values of education and social status, traditional as well as secularized, may perhaps account for this. As already noted, university education by providing both intellectual knowledge and career-training also contributes towards an enhancement of one's social status. It may thus be possible for the same respondents to be both intellectual-oriented and job-oriented while simultaneously being status-oriented once they have embarked upon their university education.

Positive correlations found between the responses to Questions 3, 4 and 5 and the responses to Questions 8, 11, 13 and 14 as well as the responses to Questions 10 (negative correlations) tend to suggest that taken as a whole these respondents have shown a primacy of the meritocratic imperatives associated with university admission practices. In the attitude of these respondents admission into the universities should be actually dependent upon academic ability and formal qualifications and not upon a consideration of ascriptive social status of the families. University education is not a domain in which malpractices such as nepotism and political patronage could be exercised to admit privileged but unqualified members of the upper-class families who lack formal qualifications required for university study. To be sure, individual achievements and merits of the applicants for university admission will take precedence over the privilege and prerogative by virtue of ascriptive social status determined by birth, wealth, and family backgrounds.
"Educational qualifications are," as Max Weber has pointed out," a substitute for birth or ascriptive claims to a style of life." The meritocratic orientation of the respondents has even gone to the extent that they have relegated to a very low place the potentiality of being a definite social asset to the universities of those privileged but unqualified sons and daughters born of those upper-class families.

Correlation coefficients found between the responses to Questions 3, 4, 5 and 10 (already analyzed) and the responses to Questions 8, 11 and 13 further suggest that achievement tends to be stressed by the respondents at the expense of ascription. The respondents appear to be of the opinion that university education (in terms of courses, knowledge and academic achievements) is expected to play a meritocratic role in promoting their future career lives. This would possibly mean that in bringing about success in future life achievement criteria should actually be more important than ascriptive criteria. One of the ways in which the respondents can attribute more importance to the achievement criteria is to place a higher valuation upon university education. That university education and education generally has acquired a high valuation seems to be common in developing societies such as present-day Thailand. As Coleman has stated," A modernizing society is presumed to be heavily committed to achievement criteria.

---

and therefore to place a high value upon education." Success in terms of upward social mobility into higher occupational achievement and upper social status may be attained by academic achievements in the forms of university degrees, knowledge, acquired competence and skills rather than by birth, age, wealth, and high social status of the families.

What is also interesting from the responses to Question 8 is that university courses tend to be perceived by the respondents as helping them substantially in their future career promotion. It may be possible that this question embodies two concepts. One concept is that university courses help promote future careers because university courses give a university degree which is regarded as a ticket. The other concept is that university courses may embody a content of intrinsic advantage within that career. Based on the correlations of this question with other questions as already indicated, this implies that the respondents as career men in the making may expect to utilize both a university degree and content of the courses in promoting their future careers according to achievement criteria.

Correlation coefficients found between the responses to Question 14 and the responses to all the other questions (i.e., 3, 4, 5, 8, 10, 11, 13) already analyzed seem to suggest that the respondents tend to attribute equal importance to a variety of

---

social activities on the campus and to a pursuit of their academic studies. One can probably observe this in Thai universities today. A large proportion of students tend to find pleasure in the surfeit of social and extra-class activities (e.g., sporting competitions, games, picnics, social gatherings, balls, trips, and so on) while being required to engage in regular academic and curricular activities. Even some faculty members maintain that social activities and academic studies should go hand in hand. The following statement may give a succinct summary of the viewpoint expressed by the faculty members in Thai universities.

"The faculty not only experiences the difficulty of making all students learn equally well what they are being taught, but also has worries about getting them to mix well with each other."

The quality of being a pragmatist of the Thai presumably will account for such a viewpoint and behaviour of the respondents and the faculty members. The Thai are naturally disposed to have pleasure and enjoyment while doing their work. This would more specifically mean that the Thai do their work while at the same time enjoying themselves with fun derived from

---

non-work activities. Being a pragmatist of the Thai probably reflects the basic assumption of the Thai cultural value of Sanuk that life should be enjoyed regardless of circumstances and nature of the activities one is actually engaged in. The pragmatical and lighthearted disposition of the Thai would presumably suggest why the respondents have appeared to equate the conviviality of the campus' social activities with the seriousness of classroom studies in importance.

Positive correlations found between the responses to Questions 15, 17 and 19 (see Group 2 of Correlations) would perhaps suggest that the respondents tend to prefer the liberalization of the educational process and of the policy-making process of the university. In the university's policy-making on academic matters they consider that they should have a vocal representation. As regards the methods of teaching and learning they have considered seminars as more effective than lectures. In the teacher-student relations their expressed viewpoint is that teachers' close personal relations with students are unlikely to cause a weakening of discipline.

Insofar as representation in the academic policy-making of the university is concerned, this appears to be quite logical. As Hayden has interestingly observed, "... a willingness to give sympathetic attention to student views will increase rather

---

than reduce the possibility of a rational solution." If students' representation through an expression of viewpoints in permitted it may probably augur well for a democratic and liberal policy-making on academic matters which include, for example, curricula and instructional programmes, structure and content of courses, teaching methods and a general policy of faculty recruitment, etc. The students have perhaps made a plea for the relations between themselves and the university administrators to become less authoritarian, less formal but more democratic and liberal. This probably represents a welcome departure from the traditional approach to learning and administration whereby demands and initiatives are imposed only from above. That the students appear to take an approach of representation and involvement rather than passivity and quiescence may perceptibly impinge upon the university's academic policy-making process.

Judging from the respondents' preference for the seminar rather than the passive "chalk and talk" method of the lecture, it may be assumed that the respondents tend to be liberal, non-authoritarian and democratic towards a familiar teaching-learning process of the university. Although both lectures and seminars are used to supplement and enrich the substance of each other, such a preference for the seminar appears all the more interesting in view of the fact that teaching

and learning at an undergraduate level in Thai universities are principally based on the lectures. One of the hallmarks of the seminar is that it can liberalize a rather marked degree of authoritarianism inherent in the nature of the lectures. Instead of being dictated to and, to a certain extent, being spoon-fed, students participating in a seminar are encouraged to express themselves rather freely and thereby to partake of a discussion in which both teachers and students can exchange their views in a liberal and mutually stimulating manner. About the authoritarianism of the lectures which result in undue emphasis upon rote memorization and examination orientation on the part of Chulalongkorn University students a number of years ago, Lind has the following to say.

"One sees students struggling to record in their notes as accurately as possible the exact words that the professor utters and then at examination time striving just as valiantly to reproduce from memory what they have previously recorded."\(^\text{10}\)

This may perhaps reflect an improper behaviour and disposition of Thai university students in a usual instructional situation at the time of the observation. They were uncritical, unanalytical and unquestioning, willing to admit substances imparted as if lacking apparently in intellectual curiosity. Perhaps an epithet such as that of "captive audiences" might thus

---

10 Andrew Lind, "Higher Education - Perspective from Southeast Asia", *Teachers College Record*, Vol. 64, No. 6 (March 1963), p.492.
be used to appropriately describe, with few exceptions, students in classrooms. However, all this is probably no longer useful for describing a majority of the respondents in our two samples. They have tended to reject the authoritarian and dogmatic value of the lectures to opt instead for the liberal and democratic value of the seminars.

The respondents have perceived that if teacher-student relations are close and personalized a weakening of student discipline is not likely to result. On the basis of this perception, the respondents have seemed to view the pattern of teacher-student relations in the liberal, democratic and unorthodox terms rather than in the traditional, authoritarian and formal terms as far as student discipline is concerned. It appears that they have tended to place a higher value upon a personalization of the teacher-student relations than upon respect, deference and status behaviour which may characterize the depersonalization of such relations.

It seems to be a usual phenomenon in Thai universities that teachers do not usually maintain close personal contacts with students. The relations between the teacher and the taught are therefore marked by impersonality and depersonalization. It may be assumed that a social distance characterized as it is by a difference in status, age and amount of education between the teacher and the taught is what makes such relations impersonal. In the matrix of a Thai cultural value of respect for age, for individuals with higher social status and for individuals with
more education, teachers are looked upon as phu yai (senior persons) and, conversely, students are regarded as phy noi (junior persons). On the basis of this assumption, the usual pattern of teacher-student relations is one of great respect for teachers and is rather formal and authoritarian. Guskin has described this traditional teacher-student relations in the following words.

"The teacher is the transmitter of knowledge and deserves every possible deference and respect; the student is immature, passive and ignorant -- an empty vessel into which proper knowledge must be poured."

Instead of opting for the impersonal and authoritarian pattern of teacher-student relations, the respondents appear inclined to call for the personalistic pattern of teacher-student relations.

Correlation coefficients found between the responses to Questions 3, 5, 8, 11, 12, 13 and 22 (see Group 3 of Correlations) probably suggest that a consideration of achievement criteria tends to be correlated with high prestige associated with university teaching profession. Another interesting correlation is that found between prestige of university teachers and intellectual knowledge and social status as objectives of

---

A high prestige of university teachers is probably derived from their academic achievements symbolized by university degrees. This prestige and status are achieved rather than ascribed or inherited. That university education may be regarded as instrumental to an implementation of the modernizing and newly-emergent value of achievement-orientation presumably is a factor that contributes to high prestige and achieved social status of university teachers. This may be further contended on the grounds that university teachers are responsible for imparting high-level knowledge and skills one can perhaps acquire through university education.

The correlations between the prestige of university teachers and intellectual knowledge and social status are also logical and some reasons for these correlations may be suggested. In retrospect, there has traditionally been the long-established association of the teaching profession with the Buddhist priesthood which has itself become the intellectual class of the society. Social status and prestige accorded the present generation of university teachers and lay teachers in general is considered as a cultural legacy of that long-standing relationships that have been in existence for several hundred years between the Buddhist monks and the teaching profession then staffed mainly by the intellectual monks themselves. Just as the monk-teachers of the former days had been entitled to, and indeed enjoyed, high prestige and social status in the traditional social hierarchy,
so also lay university teachers of today may have likewise acquired that prestige and social status in the contemporary social structure. It may be assumed that the intellectual quality of the university teachers is a personal attribute that has perhaps tended to go together with the teaching profession. That is possibly why the teaching profession, intellectual knowledge, social status and prestige may become correlated with one another.

What also seems interesting from the responses to Question 22 is that there is almost 50/50 split in the percentages of responses in both CMU and CU samples (for data, see Table ——). Partly on the basis of comments provided by the respondents while answering this question, some reasons may be suggested to see why the respondents have answered the question in that way. So, despite high prestige and social status presently being enjoyed by the university teachers, it seems paradoxical that the prestige of the university teachers is considered as not high and at the same time has indeed shown a sign of declining.

Certain economic conditions have become factors mainly responsible for this decline of the prestige of the academic profession. In terms of the emoluments of university teachers who are full-time bureaucrats government service, aside from the security it confers, is perhaps no longer such a claim to high prestige and status now as it has been not only from the viewpoints of Thai society and of the university teachers themselves but also of a number of the respondents answering Question 22.
The fact that university teachers are underpaid bureaucrats by a standard of their academic qualifications has brought about the decline in their prestige and status. At the present time when material well-being and a reasonable degree of comfort made possible by adequate income are valued in Thai society, university teachers have found it difficult to maintain or even enhance their prestige with the emoluments incommensurate with the rising cost of living. In support of the above contention, it may be worthwhile to cite certain comments made by the respondents to state why they think the prestige of university teachers has declined. For example, the respondents have said that:

"Only some people think that university teaching is a profession of high prestige. A great many people think that university teaching is a profession with low salary and accordingly of low prestige. Thai society nowadays tends to give high prestige and status to those individuals whose careers bring them a large amount of monetary remuneration." (A respondent in the CU sample, voting "disagree" with Question 22).

"Most of the Thais do not value knowledge and ability as highly as they value wealth and secure financial status of individuals." (A respondent in the CU sample, voting "disagree" with Question 22).

"In present-day Thai society prestige and status are not accorded on the basis of knowledge and expertise one has obtained but on the basis of the amount of material wealth and money one possesses." (A respondent in the CMU sample, voting "neither agree
nor disagree with Question 22).

As we have seen, therefore, the income factor is what really matters. This applies to teachers in Thai universities as it does to their counterparts in other Asian universities. As Shils has pertinently observed, "Teaching in colleges and universities is likewise not likely to increase in prestige in so far as income and dignity of employment are sources of such prestige." In the case of Thai university teachers, a concern over the neglect of the economic aspects of their monetary rewards has been expressed. These rewards are considered more personal than economic but their economic aspects are not to be overlooked.

Correlation coefficients found between the responses to Questions 4, 8, 11, 13, 29 and 32 (see Group 4 of Correlations) seem to suggest that career-training at the university, usefulness to careers of the courses in the humanities, and problems and needs of Thai society as a major priority of university courses appear to be correlated with one another. The correlations between the responses to these three questions (i.e., Questions 4, 29, 32) seem interesting. The same is true of correlations between the responses to Questions 8, 11, 13

which altogether imply that the respondents tend to subscribe to achievement-orientation by relying upon the usefulness of their university education. These respondents' perceptions of achievement-orientation also appear to be correlated with the responses to Questions 4, 29, 32 which altogether suggest, as noted above, that career-training objective, career utility of the humanities as well as Thai society's problems and needs as priority of courses tend to be correlated with one another.

The respondents have perceived a professional utility of courses in the humanities by stating that courses in the humanities are useful to their careers and thus should be included in the curriculum. This means that the students are perhaps asking for humanities options. In order to differentiate between this demand for students who are students in the humanities and students who are doing vocational courses, we have sub-analyzed the data from the questionnaire. By sub-analyzing these data it would appear realistic to expect that the students could know how the humanities courses would relate to subsequent employments. Sub-analysis of the questionnaire data has revealed that there are 114 vocational students and 86 non-vocational students (out of this number 38 are the humanities students) in the CMU sample of 200 respondents. 14 It has been found that out

---

14 At Chiangmai University, students enrolled in the humanities and social sciences are regarded as non-vocational students. Students enrolled in other fields of study (i.e., engineering, sciences, medical sciences, education and agriculture) are regarded as vocational students.
of 114 vocationally-oriented students 89 (about 78% of this
total number of vocational students) have said that courses in
the humanities are useful to their careers and thus should be
included in the university's curriculum. Out of 86 non-vocational
students 77 (about 89.53% of this total number of non-vocational
students) have also said that courses in the humanities are relevant
to their future careers and so should be included in the
curriculum. It is very interesting to note that 35 out of 38
humanities students (about 92.10% of the total number of the
humanities students represented in the CMU sample) have stated
that courses in the humanities are found useful to their future
professions and therefore should be included in the curriculum.
It may then be seen that a large majority of the students,
regardless of whether they are vocational or non-vocational
students, are asking for the humanities options. To be more
exact, a larger percentage of non-vocational students than
vocational students (i.e., 89.53% compared with 78%) are asking

15 Six vocational students have agreed or agreed strongly with the
statement of Question 29 that "courses in the humanities are not
useful to students' careers and thus should not be included in the
curriculum. Another 19 vocational students have neither agreed
nor disagreed with the statement of Question 29.

16 Four non-vocational students have agreed or agreed strongly
with the statement of Question 29 (for the statement of this
question see footnote No.15 above). Another five non-vocational
students have neither agreed nor disagreed with the statement of
Question 29. Out of these four non-vocational students there are
two humanities students who have agreed or agreed strongly with
the statement of Question 29 while another one humanities student
has neither agreed nor disagreed with the statement of that
question.
for those humanities courses.

In the CU sample of 100 respondents there are 80 vocational students and 20 non-vocational students represented in the sample.\textsuperscript{17} It has been found that 65 out of 80 vocationally-oriented students (about 81.25\% of this total number of vocational students) have said that the humanities courses are relevant to their professions.\textsuperscript{18} Out of 20 non-vocational students 19 (about 95\% of the total number of non-vocational students represented in this sample) have also said that the humanities courses are useful to their subsequent employments and so should be included in the curriculum.\textsuperscript{19} From our sub-analysis of the data in the CU sample, we see that as in the CMU sample a larger percentage of non-vocational students than vocational students (i.e., 95\% compared with 81.25\%) are also asking for the humanities options. Consequently, on the basis of our sub-analysis of the data in both samples we may probably argue that

\textsuperscript{17} At Chulalongkorn University, students enrolled in arts, economics and political science are regarded as non-vocationally-oriented students. Students enrolled in other fields of study (i.e., engineering, sciences, medical sciences, education, architecture, mass communications, commerce and accounting, and veterinary science) are regarded as vocational students.

\textsuperscript{18} Four vocational students in this CU sample have agreed or agreed strongly with the statement of Question 29, while another eleven vocational students have neither agreed nor disagreed with the statement of that question.

\textsuperscript{19} Only one non-vocational student in this CU sample has agreed with the statement of Question 29 and none of the non-vocational students in this sample has neither agreed nor disagreed with the statement of that question.
both vocational and non-vocational students (including the humanities students, see our foregoing analysis above) have found the humanities course useful to their subsequent professions and so are asking for the humanities options to be included in the curriculum.

The correlations found between the professional utility of courses in the humanities and current problems and needs of Thai society as a main priority of courses and a career-training at the university may perhaps exemplify a case in which the students tend to be career-minded. Presumably because of this the students may want their university courses to be related to rather than insulated from the various present problems and needs of their own indigenous society. They may probably realize that if such problems and needs are incorporated into the subject-matter or content of university courses as their major priority it would be fruitful to the professions they expect to pursue after graduation. There seems to be a variety of current problems and needs of Thai society that should be a major priority of courses. These include, for example, problems and needs in such fields as agriculture, industry, education, culture, administration, economy, politics, economic development, and the like. Since there is at present a dearth of university courses that deal with those problems and needs, more courses to be formulated can ill afford to overlook such a multitude of problems and needs Thai society has to come to grips
Correlation coefficients found between the responses
to Questions 3, 5, 30, 34 (see Group 5 of
Correlations) would seem to suggest that there exists
relationships between intellectual interests, preservation of
traditional Thai culture and social status. Insofar as
courses should not so much fulfil career needs of students
but rather be geared towards satisfying their intellectual
interests as such is concerned, a case may probably be made
against allowing the orientation of the subject-matter of the
courses towards becoming too much professional. With regard
to this matter, Perkins has expressed the following view.

"It is well, however, to state a caution
against orienting education too far towards
a vocational purpose. There are certain
basic intellectual tools to which the student
must be exposed and certain basic information
that he must acquire in order to be an educated
man in the modern world and to form an accurate
image of himself and his society." 21

20 For example, a look at the syllabus of the Department of
Economics at Chiangmai University reveals that out of the
forty-odd courses being offered there are at most four to five
courses whose subject-matter or contents lay stress upon the
current problems and needs of Thai society. See Chiangmai
University, Faculty of Social Sciences Catalogue 1969 (Chiangmai,
21 James A. Perkins, "Summary Report of the Conference Chairman:
The International Conference on the World Crisis in Education,
Williamsburg, Virginia, 1967", in Philip H. Coombs, The World
Educational Crisis: A Systems Analysis (New York: Oxford
The basic intellectual tools and information to which Perkins has referred are both concerned with cultivation of a suitable attitude towards and capacity for independent and critical thinking. This is a basic goal of courses meant to satisfy intellectual interests and the value and skill which those courses aim to promote. That one of the objectives of the students for coming to a university is to obtain intellectual knowledge presumably occasions their preference for the intellectual components apart from the career components of the courses. All this may perhaps have a relevance for a preservation of traditional Thai culture as a major priority of university courses.

By replying that preservation of traditional Thai culture should be a major priority of university courses, the students have expressed a concern for a preservation and enhancement of traditional Thai culture within the framework of a formal university education. In an attempt to preserve a nation's cultural heritage a part a university can play may be seen in the teaching of culture as one of its functions. As Shils has persuasively argued,

22 The teaching of culture as the basic function of the university was strongly advocated by Jose Ortega y Gasset, a renowned philosopher of higher education. He even regarded the university function of a transmission of culture as more important than the training of professionals, the training of the new scientists and the scientific research. However, the case made by Gasset who championed the cause of the teaching of national culture may appear to be overstated and overemphasized. See Jose Ortega y Gasset, Mission of the University (London: Kegan Paul, Trench, Trubner and Co., Ltd., 1946), pp.44-48.
"Universities must, in order to be universities, teach and investigate what is of universal validity; they must also teach and investigate what is of parochial value, either because it is practical or because it cultivates the parochial (or national) cultural tradition."  

A serious study of the various fields of traditional indigenous culture as an academic discipline used to receive only scant attention in the Thai university circle. It is only in recent years that an establishment of programmes and institutes to engage in the teaching and research of Thai culture has been undertaken by the government within the institutional framework of the universities. This cultural revivalism, as Shils has pointed out, represents an attempt to make the indigenous culture more prominent and more appreciated. In Thailand an upsurge of renewed interest, for example, in the traditional artistic, architectural, literary and religious inheritance may perhaps


24 For example, the Institute of the Thai Studies as a centre for teaching and research on Thai culture has been established in Bangkok by the government. See National Economic Development Board, Third Five-Year National Economic Development Plan, 1972-76 (Bangkok: The Prime Minister's Office, 1972), p.489.

represent such a revivalism. At Chiangmai University as at other universities, courses in Thai art, architecture, archaeology and literature, for example, have been offered.  

The nature of the courses that deal with the preservation of traditional Thai culture has perhaps made it possible for the subject-matter and contents of these courses to be orientated more towards satisfying the intellectual interests of the students. The courses of this nature typically embody the intellectual components and thus can be considered as part of the humanities. This may perhaps suggest why the courses on the preservation of traditional Thai culture ought to correlate with intellectual knowledge and interests and actually such courses are correlated with intellectual knowledge and interests. It also appears that the raising of a social status as a university-coming objective is in turn correlated with the preservation of traditional Thai culture, with the satisfying of intellectual interests as an aim of the courses and with the acquisition of intellectual knowledge as a university-coming objective. Such correlations as these are likely to suggest that the students who come to the university to acquire intellectual knowledge and to raise their social status would tend at the same time to pay attention to the courses which aim to satisfy

26 See Chiangmai University, Chiangmai University Announcement, 1971-72 (Chiangmai, Thailand: The Registrar's Office, 1971), pp. 120, 123, 140.
intellectual interests at the expense of career needs and to the courses which deal with the preservation of traditional Thai culture.

Apart from the overall correlations which are used to support the correlation coefficients between the responses to the questionnaire as already shown in those groupings of items, chi-square analyses on individual questions in the questionnaire are done in order to test the discrimination in answering the questionnaire between vocational and non-vocationally oriented students — a distinction fundamental to this thesis.

Following are the chi-square results showing significant difference (or lack of significant difference) in answering the questionnaire between vocational and non-vocational students in the CMU and CU samples taken separately.27

---

27 In the CMU sample, there are 114 vocational and 86 non-vocational students. Therefore, in this sample, N equals 200 (114+86). In the CU sample, there are 80 vocational and 20 non-vocational students. Therefore, in this sample, N equals 100 (80+20). See footnotes Nos. 18 and 21 in this chapter for the basis on which students enrolled in these two universities are divided into vocational and non-vocational categories.
Table 54

Chi-Square Results Showing Difference or Lack of Difference) in Answers Between Vocational and Non-Vocational Students

<table>
<thead>
<tr>
<th>Questions</th>
<th>$X^2$ Values</th>
<th>Significant Differences</th>
<th>No Significant Differences</th>
<th>Questions</th>
<th>$X^2$ Values</th>
<th>Significant Differences</th>
<th>No Significant Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2.99</td>
<td>/</td>
<td></td>
<td>3</td>
<td>2.87</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2.4361</td>
<td>/</td>
<td></td>
<td>4</td>
<td>5.5917</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2.25</td>
<td>/</td>
<td></td>
<td>5</td>
<td>1.0912</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>9.5971*</td>
<td>/</td>
<td></td>
<td>6</td>
<td>3.0445</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>10.8836*</td>
<td>/</td>
<td></td>
<td>8</td>
<td>2.49</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>4.3487</td>
<td>/</td>
<td></td>
<td>9</td>
<td>4.8895</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>.6056</td>
<td>/</td>
<td></td>
<td>10</td>
<td>2.0638</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>4.8235</td>
<td>/</td>
<td></td>
<td>11</td>
<td>.5919</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>6.7430</td>
<td>/</td>
<td></td>
<td>12</td>
<td>14.0116*</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>2.6865</td>
<td>/</td>
<td></td>
<td>13</td>
<td>.3621</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>2.4717</td>
<td>/</td>
<td></td>
<td>14</td>
<td>.2936</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>7.4639</td>
<td>/</td>
<td></td>
<td>15</td>
<td>38.075**</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1.7672</td>
<td>/</td>
<td></td>
<td>16</td>
<td>2.7115</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>6.5488</td>
<td>/</td>
<td></td>
<td>17</td>
<td>10.41*</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>2.4050</td>
<td>/</td>
<td></td>
<td>18</td>
<td>9.4236</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>9.6060*</td>
<td>/</td>
<td></td>
<td>19</td>
<td>3.0395</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>4.7241</td>
<td>/</td>
<td></td>
<td>20</td>
<td>5.8797</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>2.2420</td>
<td>/</td>
<td></td>
<td>22</td>
<td>1.2913</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>8.7855</td>
<td>/</td>
<td></td>
<td>29</td>
<td>3.1512</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>4.0204</td>
<td>/</td>
<td></td>
<td>30</td>
<td>4.3655</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>3.9087</td>
<td>/</td>
<td></td>
<td>32</td>
<td>1.9444</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>4.5793</td>
<td>/</td>
<td></td>
<td>33</td>
<td>5.1798</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>.7432</td>
<td>/</td>
<td></td>
<td>34</td>
<td>3.3692</td>
<td>/</td>
<td></td>
</tr>
</tbody>
</table>

Note: * means significant at $\alpha = .05$ (5 %)
** means significant at $\alpha = .01$ (1 %)
A look at Table 54 discloses that there is no significant difference in answering the questionnaire between vocational and non-vocational students in both samples except for the responses to Questions 6, 8, 19 in the CMU sample and for the responses to Questions 12, 15, 17 in the CU sample. There are significant differences in answering these six questions (i.e., 6, 8, 19 and 12, 15, 17) between vocational and non-vocational students in these two samples. Let us first suggest why such differences exist with regard to Questions 6, 8, 19 in the CMU sample.

As to the responses to Question 6 the significant differences may probably be due to whether these vocational and non-vocational students are more self-motivated to come to the university on their own or whether these vocational and non-vocational students attend the university mainly at the instigation of their parents rather than on their own.

The significant differences that exist in scoring the responses to Question 8 presumably may be due to the manner in which the students answered the questionnaire. Sub-analysis of the responses to this question tells us that out of the 114 vocational students in the CMU sample 86 (i.e., about 75.43% of the total number of vocational students in this sample) have stated that they regard their own university courses as helping them substantially in the promotion of their future career. Eleven students (or about 9.64%) have said that they do not regard their own courses as helping them in their career. Another seventeen students (or about
14.91 %) have answered that they neither agree nor disagree with the statement of the question that "I regard my own university courses as helping me substantially in the promotion of my future career."

Out of the 86 non-vocational students in the same sample 68 (i.e., about 79.06 % of the total number of non-vocational students in this sample) have regarded their courses as helping them substantially in the promotion of their career. Ten students (or about 11.62 %) have not regarded their courses as helping them in their career. Another eight students (or about 9.30 %) have neither agreed nor disagreed with the statement of the question.

Strangely enough, in terms of percentages more non-vocational students than vocational students (79.06 % compared with 75.43 %) have reported that they regard their courses as helping them in their career promotion. Courses in vocational education ordinarily should have been regarded as more beneficial to career promotion than courses in non-vocational education. The fact that the students have reported differently may perhaps partly be attributed to the ambiguity of the contents of the question asked. As stated elsewhere in this chapter, this question may embody two concepts. One is that university courses help future career because they award a university degree which is considered as an admission ticket into professional careers. The other is that university courses, vocational as well as non-vocational, may possibly embody a content of intrinsic advantage.
to be utilized within the careers of the students. We admit that this is a weakness in the design of the content of this question.

Significant differences also exist in the responses to Question 19 between vocational and non-vocational students in the CMU sample. It is assumed that such differences may conceivably be due to different conceptions of teacher-student relations held by vocational and non-vocational students.

Let us now turn to see why significant differences exist in scoring the responses to Questions 12, 15, 17 between vocational and non-vocational students in the CU sample.

Regarding the responses to Question 12, significant differences may presumedly be due to the students' evaluations of achievement and ascriptive criteria. Vocational and non-vocational students may perhaps differ in attributing a measure of significance to the roles achievement and ascription are expected to play in bringing about success in their future lives.

Significant differences in responding to Question 15 may perhaps be owing to the different degrees of involvement that vocational and non-vocational students would anticipate to share in such an important policy matters as academic affairs of the university.

As to the responses to Question 17 significant differences in scoring the answers may probably well reflect a difference in perceptions that vocational and non-vocational
students tend to hold about presumed effectiveness of lectures and seminars despite the fact that the two methods of teaching and learning have to be used jointly.

The results of the chi-square tests ($X^2$) on each individual questions (there are 23 questions in all) we have already tabulated have shown that except in six cases there are no significant differences in answering the questionnaire between vocational and non-vocational students in the two samples taken separately. That is, except in those six cases we have to reject research hypotheses ($H_1$) and accept null hypotheses ($H_0$). On the contrary, in those six cases (i.e., in the cases of the responses to Questions 6, 8, 19 in the CMU sample and of the responses to Questions 12, 15, 17 in the CU sample) where significant differences exist in answering the questionnaire between vocational and non-vocational students we have to reject null hypotheses ($H_0$) in order to accept research hypotheses ($H_1$).

Having stated chi-square results ($X^2$) on individual questions to see whether there is a difference (or lack of difference) in answering the questionnaire in each separate sample (i.e., CMU sample and CU sample), it would also be worthwhile to check whether there will be a difference (or lack of difference) in answering the same questionnaire between vocational and non-vocational students in those two samples when we lump them together (i.e., when $N$ equals 300). Chi-square results on twenty-three individual questions to see whether there is a significant difference or lack of
significant difference in the amalgamated CMU and CU samples will be shown in the following table. 28

28 There are 194 vocational students and 106 non-vocational students in the amalgamated CMU - CU sample. Hence, in this sample N equals 300 (194 + 106). See also footnote No. 31 for a breakdown of vocational and non-vocational students in each separate sample.
**Table 55**

Chi-Square Results Showing Difference (or Lack of Difference) in Answers Between Vocational and Non-vocational Students in the Amalgamated CMU - CU Sample.

<table>
<thead>
<tr>
<th>Questions</th>
<th>( X^2 ) Values</th>
<th>Significant Differences</th>
<th>No Significant Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0.1667</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4.8410</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>8.777</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>9.0553</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>11.8283*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>5.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1.172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2.6543</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>5.7641</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>2.1551</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1.6167</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>9.3794</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>4.2505</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>8.6084</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>2.920</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>6.9746</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>7.9475</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>1.4231</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>9.3520</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>5.3777</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>3.0915</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>1.9298</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>1.4920</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *means significant at \( \alpha = 0.05 \) (5 %)
Data presented in Table 55 have shown that there is no significant difference in the responses to the questionnaire between vocational and non-vocational students in the combined CMU - CU sample of 300 student respondents except for the responses to Question 8. There is a significant difference in answering this question between vocational and non-vocational students. We may perhaps suggest why there is such a significant difference in the responses to Question 8.

Sub-analysis of the responses to Question 8 in the CU sample reveals that a somewhat different pattern of responses has emerged when compared with the pattern of responses to this same question in the CMU sample already sub-analyzed. In the case of the CU sample, 61 students (or about 76.25% of the total number of 80 vocational students in this sample) have reported that they regard their university courses as helping them substantially in the promotion of their career. Thirteen students (or about 16.25%) have neither agreed nor disagreed with the statement of Question 8, while another six students (or about 7.5%) have denied the statement of this question. Out of the total number of 20 non-vocational students in this same sample 14 (or about 70.00%) have replied that their university courses are regarded as helping them substantially in the promotion of their career. Five students (or about 25.00%) have remained indifferent to the statement of Question 8, while only one
student (or about 5.00 %) have denied the statement of the question.

What all this indicates is that contrary to the pattern of responses in the CMU sample more vocational students in terms of percentages (i.e., 76.25 %) than non-vocational students (i.e., 70.00 %) have considered their courses at the university as helping them substantially in the advancement of their career. This pattern of responses in the CU sample seems to be usual and could ordinarily be expected presumably because courses in vocational education (e.g., engineering, medicine, etc.) should naturally be rendered more beneficial and useful to careers than courses in non-vocational education (e.g., arts, political science, etc.). That Question 8 may possibly embody two concepts and these may be interpreted by the students who answered the questionnaire would provide additional ground for our assumption. We assume that the students either understand that university courses award degrees or university courses embody contents of intrinsic advantage to be utilized or applied directly to the pursuit of the students' careers. But the problem of why significant differences exist in scoring the responses to Question 8 when we combine the CMU and CU samples together seems difficult to answer. Perhaps the ambiguity which, as already mentioned, is the weakness of Question 8 may partly be a possible reason for the significant differences that are found in the pattern of scoring the answers to Question 8.
We have so far shown chi-square results on each individual question to see whether there are significant differences or lack of significant differences in answering the 23 questions of the questionnaire between vocationally-oriented students and non-vocationally oriented students first in each separate sample (i.e., CMU and CU) and then in the amalgamated samples of CMU and CU. In the cases of some questions (i.e., Questions 6, 8, 19 in the CMU sample and Questions 12, 15, 17 in the CU sample as well as Question 8 in the amalgamated samples of CMU and CU) where significant differences exist we have suggested some reason why we think such significant differences are found. We may now turn to look at the chi-square results which will show significant differences or lack of significant differences in answering each individual question of the questionnaire between the 1st, 2nd, 3rd and 4th year students in the amalgamated samples of CMU and CU. These chi-square results are given in the table below.
Table 56

Chi-Square Results Showing Significant Differences (or Lack of Significant Differences) in Answers Between the 1st, 2nd, 3rd and 4th Year Students in the Amalgamated Samples of CMU and CU.

<table>
<thead>
<tr>
<th>CMU-CU Samples Lumped Together (1st, 2nd, 3rd, 4th Year Students)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions</td>
<td>X² Values</td>
<td>Significant Differences</td>
</tr>
<tr>
<td>3</td>
<td>11.9536</td>
<td>/</td>
</tr>
<tr>
<td>4</td>
<td>10.03</td>
<td>/</td>
</tr>
<tr>
<td>5</td>
<td>1.41</td>
<td>/</td>
</tr>
<tr>
<td>6</td>
<td>1.876</td>
<td>/</td>
</tr>
<tr>
<td>8</td>
<td>25.2436*</td>
<td>/</td>
</tr>
<tr>
<td>9</td>
<td>11.3682</td>
<td>/</td>
</tr>
<tr>
<td>10</td>
<td>10.8692</td>
<td>/</td>
</tr>
<tr>
<td>11</td>
<td>17.6118</td>
<td>/</td>
</tr>
<tr>
<td>12</td>
<td>9.78</td>
<td>/</td>
</tr>
<tr>
<td>13</td>
<td>11.0763</td>
<td>/</td>
</tr>
<tr>
<td>14</td>
<td>10.0308</td>
<td>/</td>
</tr>
<tr>
<td>15</td>
<td>9.5007</td>
<td>/</td>
</tr>
<tr>
<td>16</td>
<td>13.9107</td>
<td>/</td>
</tr>
<tr>
<td>17</td>
<td>8.6182</td>
<td>/</td>
</tr>
<tr>
<td>18</td>
<td>16.1458</td>
<td>/</td>
</tr>
<tr>
<td>19</td>
<td>14.7663</td>
<td>/</td>
</tr>
<tr>
<td>20</td>
<td>9.2994</td>
<td>/</td>
</tr>
<tr>
<td>22</td>
<td>19.0712</td>
<td>/</td>
</tr>
<tr>
<td>29</td>
<td>10.3644</td>
<td>/</td>
</tr>
<tr>
<td>30</td>
<td>12.8716</td>
<td>/</td>
</tr>
<tr>
<td>32</td>
<td>7.7108</td>
<td>/</td>
</tr>
<tr>
<td>33</td>
<td>10.6038</td>
<td>/</td>
</tr>
<tr>
<td>34</td>
<td>9.8777</td>
<td>/</td>
</tr>
</tbody>
</table>

Note: * X² table = 21.03
Significant at $2 = .05$ (5%)
Table 56 above demonstrates that significant differences are found in the responses to Question 8 between the 1st, 2nd, 3rd and 4th year students in the amalgamated samples of CMU and CU, whereas no significant differences at all are found in those students' responses to all the other 22 questions of the questionnaire. As in the other two previous cases of this same question we have already encountered, Question 8 again presents significant differences this time in the scoring of the responses between the 1st, 2nd, 3rd and 4th year students. Such significant differences are presumably due to the ambiguity inherent in the statement of the question itself. Question 8 tends to be ambiguous probably because, as noted before, it may embody two concepts. One concept is that university courses give a degree which is considered as a ticket to admit degree holders to a profession of their choice. The other concept is that university courses may embody contents of intrinsic advantage that may possibly be utilized in the career pursuits of the students. Because of this it may be possible for the 1st, 2nd, 3rd and 4th year students to variously interpret the contents of Question 8. We may therefore suggest that these different interpretations of the students would perhaps account for the significant differences that are found in the responses. Furthermore, it may also be presumed, for example, that 1st year students and 4th year students may probably diverge in their own interpretations of the statement of Question 8.
Since significant differences in the students' scoring of the responses are found only in Question 8, it would be appropriate to conduct another chi-square analysis on this very question. We shall this time do chi-square analysis on six different pairs, namely, 1st and 2nd year students, 1st and 3rd year students, 1st and 4th year students, 2nd and 3rd year students, 2nd and 4th year students and 3rd and 4th year students, in order to see whether or not there will be significant differences (or lack of significant differences) in the responses to Question 8 between the students in these years of study we have paired. Following is the table that shows chi-square results of those six different pairs.
Table 57

Chi-Square Results Showing Significant Differences (or Lack of Significant Differences) in Answers Between 1st and 2nd, 1st and 3rd, 1st and 4th, 2nd and 3rd, 2nd and 4th, and 3rd and 4th Year Students in the Amalgamated Samples of CMU and CU

<table>
<thead>
<tr>
<th>Questions</th>
<th>$X^2$ Values</th>
<th>Significant Differences</th>
<th>Varying Number of N</th>
<th>Years of Study of the Students Paired</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>9.4277</td>
<td>/</td>
<td>92</td>
<td>1st and 2nd</td>
</tr>
<tr>
<td>8</td>
<td>6.3011</td>
<td>/</td>
<td>145</td>
<td>1st and 3rd</td>
</tr>
<tr>
<td>8</td>
<td>14.1753**</td>
<td>/</td>
<td>149</td>
<td>1st and 4th</td>
</tr>
<tr>
<td>8</td>
<td>11.2951*</td>
<td>/</td>
<td>151</td>
<td>2nd and 3rd</td>
</tr>
<tr>
<td>8</td>
<td>3.9116</td>
<td>/</td>
<td>155</td>
<td>2nd and 4th</td>
</tr>
<tr>
<td>8</td>
<td>7.0199</td>
<td>/</td>
<td>208</td>
<td>3rd and 4th</td>
</tr>
</tbody>
</table>

Note: ** $X^2$ significant at $\alpha = .01$
* $X^2$ significant at $\alpha = .05$

According to the data presented in Table 57 above, there are significant differences in scoring the responses to Question 8 between the 1st and 4th year students and also between the 2nd and 3rd year students in the amalgamated samples of CMU and CU. In the case of the 1st and 4th year students it appears that significant differences in scoring the responses between them are even greater (i.e., $X^2$
significant at \( z = .01 \) than in the case of the 2nd and 3rd year students (i.e., \( X^2 \) significant at \( z = .05 \)). No significant differences are found in the scoring of the responses between the four other pairs of the students according to their years of study (i.e., 1st and 2nd, 1st and 3rd, 2nd and 4th and 3rd and 4th year students), as the table has shown.

To suggest why the 1st and 4th year students as well as the 2nd and 3rd year students have scored differently the responses to Question 8, it may be useful to refer to Howard S. Becker's concepts of "situational adjustment" and "commitment". Let us first take it for granted that Question 8 is ambiguous because it may embody two concepts, namely, university degrees and course contents of intrinsic advantage to careers. This ambiguity of Question 8 has already been indicated before. Perhaps the concept of "situational adjustment" may be of some relevance to suggest why the 1st and 4th year students as well as the 2nd and 3rd year students have differed among them in scoring the responses to Question 8. Latter year students such as the 3rd and 4th year students who approach the end of their university careers usually tend to be concerned with values and problems of the outside world at the expense of the values considered desirable within the university campus. So it is possible that these students may begin to accept the values of the larger society in which they think many other things will be

\[29\] For detailed explanation of the two concepts, see Howard S. Becker, "Personal Change in Adult Life" Sociometry, 27, 1964, pp.40-53; see also Howard S. Becker, "Notes on the Concept of Commitment" The American Journal of Sociology Vol.66, 1960, pp.32-40.
more valued than when they are preoccupied with university-specific values such as grades, offices in campus organizations, friendship with fellow students and so on. Once these students have turned their attention towards the outside world they may have better perspectives than when they were students who just began their university career like those 1st and 2nd year students. This may well contribute to the latter year students' better judgment of the courses they are taking at the university. Consequently, the 3rd and 4th year students tend to differ from the 1st and 2nd year students in scoring their responses to Question 8, presumably because the 3rd and 4th year students may interpret the statement of this question in the light of what they perceive will happen to them when they leave the university. The 1st and 2nd year students may perhaps have no such perspective to enable them to foresee what will happen to them another two or three years ahead before they leave the university.

Becker's concepts of "situational adjustment" and "commitment" may also be of some relevance for suggesting whether or not the student's attitudes during their four-year university experience reflect the attitudes of their parents. This is the case of Question 6 of the questionnaire which asks whether the students come to a university mainly to satisfy their parents' desire for them to gain social recognition and status. To this question less than half of the respondents
in the CMU sample (i.e., 41.5%) have responded that they agree, whereas to this same question less than half of the students in the CU sample (i.e., 42.0%) have responded that they do not agree. That is to say, less than half of the respondents in the CMU sample tend to acknowledge their parents' influence in coming to a university but, on the contrary, less than half of the respondents in the CU sample tend to distance themselves from their parents' influence. This seems somewhat paradoxical since in the chapter dealing with the demand for university education of the parents/children group, this parents/children group is assumed inviolate. It may be argued rightly or wrongly that in actuality it is the students who have confused themselves and as a result have confused us too. Perhaps Becker's concepts of "situational adjustment" and "commitment" may be helpful in seeing whether the attitudes these students have expressed in Question 6 have undergone a change or have remained stable. We may perhaps argue that in the case of the 41.5% of the students in the CMU sample the concept of "commitment" may be applicable, whereas in the case of the 42% of the students in the CU sample the concept of "situational adjustment" may be relevant. Those students in the CMU sample may be "committed" in the sense that a consistent line of activity they pursue at the university would serve them well in the pursuit of the goal. By this we mean that if those students reflect their parent's influence that would serve them well in their goal. As regards those
students in the CU sample, the concept of "situational adjustment" applies because regardless of whether their parents may think they come to a university to satisfy the parents' desire for social status the social structure of the university and its patterned effects on those students will have something to do with why they say they do not reflect their parents' influence. And in this case we do not have to consider elements of those students' personality or their values. That those students in the CU sample do not reflect their parents' influence in attending a university is because, according to Beckers' "situational adjustment", they may adjust to what the social structure of the campus would require them to believe or do what is important to them during their university career. When the social structure of the campus requires development of patterns of belief and action considered important to the students at the university and they have adjusted to such patterns it becomes natural that those students will not reflect their parents' influence. Therefore, those students in the CU sample do not agree that they come to the university mainly to satisfy their parents' desire for social status regardless of whether or not such a desire is acknowledged.

We have now come at length to the end of our analysis of the questionnaire data. Since this is a long chapter it would be appropriate to summarize the findings of the questionnaire survey and to draw some of the conclusions for this chapter.
Summary and Conclusion

The analysis of the data from the written questionnaire survey we have done in this chapter is based chiefly upon Pearson product-moment correlation coefficients (including the overall correlations) to find the relationships that may exist between the students' responses and upon chi-square tests to test the discrimination in replying to the questionnaire between vocational and non-vocationally oriented students. What the overall results tend to demonstrate can be summarized as follows.

1) The students appear to have three major objectives in mind when they come to the university, namely, to receive intellectual knowledge for its own sake, to receive a professional training of their choice, and to raise their social status.

2) The students have shown a primacy of achievement criteria associated, for example, with university admission, professional careers, and courses of study. This primacy of achievement criteria appear to relate to an importance of social activities of the university campus as well as to the prestige of the university teaching profession, reflecting as it does the traditional social value of Sanuk and the value of status and social prestige of the intellectuals.

3) The students tend to prefer the liberalization of the educational process and of the academic policy-making process of the university. Such a liberalization concerns
such things as methods of teaching and learning, personalization of teacher-students relations and policy-making on academic matters of the university.

4) The students tend to acknowledge the usefulness to professional careers of courses in the humanities and to ask for current problems and needs of Thai society as well as a preservation of traditional Thai culture to be included as a major priority of university courses.

The four points set out above appear to relate to one another. Chi-square results have shown no significant differences in the responses to the questionnaire between vocational and non-vocational students in the two university samples with the exception, notably, of the responses to Question 8 which pertains to the utility of courses in career advancement.

Apart from those four points already stated, what appears to be significant responses of the questionnaire may also be summarized as follows.

1) The students tend to consider a university degree as "fairly essential" to their career advancement.

2) The students would prefer to have a voice in the administrative affairs of a university.

3) The students tend to think that they should feel free in classes to disagree with their lecturers.

4) The students tend to prefer to choose most or all of the subjects in their programme of study at the university.
5) The students tend to prefer that their university courses should be "more specialized than general".

6) The students tend to prefer that their university courses should be "equally useful both for careers and for their own sake."

7) The students tend to prefer that the emphasis of their university courses should be "more applied than pure".

8) Social sciences, medicine and agriculture appear to be the three major fields of study that the students regard as most useful to Thailand in terms of national development.

9) The production of job-trained specialists is regarded by the students as more significant than the production of graduates of culture and distinction.

The nine points listed above do not appear to relate to one another since correlation coefficients cannot be found between them.

In order to contribute to an understanding of the origins of demand as well as to understand some of the characteristics of student demand, it would be essential for us to do a sub-analysis of some data in relation, for example, to backgrounds of the student respondents, their chosen courses of study, socio-economic status of the fathers of vocational students and non-vocational students, professional employments of the students' fathers, and the like.
In the two questionnaire samples comprising a total of 300 students there are altogether 194 vocational students and 106 non-vocational students. So, about 64.66% are vocational students while about 35.33% are non-vocational students. Since the fathers of 119 students are employed in private business and industry and the fathers of another 91 students are employed in the government service, it can be said that a majority of the students, vocational as well as non-vocational, are drawn from an urban middle-class section of the population. Of the 194 vocational students, 93 come from the families where fathers are employed in private business and industry while fathers of the other 57 vocational students are employed in the government service. This may suggest that demand tends to originate more from the families where fathers are professionally employed in private business and industry than from the families where fathers are employed in the government service. Of the 106 non-vocational students, 50 come from the

30 The fathers of the rest of the students are manual workers or are engaged in farming and gardening and so forth, but these constitute only a small percentage. A breakdown of the occupations of the students' fathers is given in Appendix B at the end of the thesis.

31 The fathers of the rest of the vocational students (i.e., 44 students) are employed as manual workers or are engaged in farming and gardening or are deceased and so on. These constitute only a small percentage.
families where fathers are employed in private business and
industry while fathers of the other 37 non-vocational students
are employed in the government service. This may again
suggest that demand for non-vocational courses tends to
originate more from the families where fathers are
professionally employed in private business and industry than
from the families where fathers are employed in the government
service.

Courses of study chosen by vocational students are, for
example, civil and electrical engineering, medicine,
accounting, business administration, commerce, chemical
engineering, money and banking, architecture, pharmacy,
agriculture, dentistry, medical technology, and so forth.
Courses of study chosen by non-vocational students are, for
example, modern languages (English, French and so on),
literature, philosophy, economics, political science, history,
geography, sociology and anthropology and the like.

These vocational and non-vocational students appear
to have backgrounds which are rather homogeneous. As to their
socio-economic backgrounds, the fathers of a majority of these
students are white-collar professionals serving in private
business and industry as well as in the government service.

32 The fathers of the rest of the non-vocational students
(i.e., 19 students) are either employed as manual workers or
are engaged in farming and gardening or are deceased and so
on. These constitute only a small percentage.
With respect to financial support for their university study, 223 students (or about 74.33% of a total of 300 vocational and non-vocational students) are financially supported in their university education by their parents only (For reference, see Appendix B). In educational backgrounds, an overwhelming majority of the students graduated with M.S. 5 School Certificates from academic secondary schools (For reference, see Appendix B). This is their formal pre-university education. Regarding their religious beliefs, an overwhelming majority of the students are Theravada Buddhists (For reference, see Appendix B). In terms of the students' career objectives, government, private business and industry are most preferred as potential employers the students plan to work for after their graduation (For reference, see Appendix C). Insofar as such would-be employers are concerned, these partly reflect the traditional career objectives which a large majority of the students have shared in common. And in fact the students' career objectives would seem to follow the pattern of careers being pursued by their fathers.

In this chapter we have studied the various demands which vocational as well as non-vocational students in the two university samples have generated upon the university education system. Although many of the demands tend to be closely interrelated, yet it may be suggested that these demands appear to come into conflict with one another at the point of their interface. For example, the demand for intellectual knowledge for its own sake which appears to be
interrelated with the demand for professional training may probably conflict with each other at the point of their interface. And while these demands appear to be related in turn with the demand for a higher social status, all these demands may presumably come into conflict with one another again at the point of their interface.

Since demands are apt to be naturally influenced by social and cultural values of the society in which such demands are made, one question that may be raised by the demands studied in this chapter is that of a value conflict and hence a conflict of demands which may occur among many of the demands of the students themselves and among many of the demands generated by the general Thai society (represented mainly as it were by members of the urban middle class of this society), by the business enterprises, by the government and also by the students. It would perhaps seem that these conflicting values and demands may become incorporated into the demands of the students. But more significantly, all this expresses a major dimension of the conflicts which are usually present within the process of modernization that a traditional society such as Thailand has currently been undergoing. It expresses these conflicts in values and hence in demands at the point of their interface between the members of the younger generation who are moving into a modernized society as Thailand is today and the traditional structures which have persisted for a long period
of time. Perhaps this thesis would help to enlighten such a central question — a question of the conflicts in values and demands between the students and the traditional nature of the system. As an example to illustrate such conflicts between traditional cultural values and structures and the modernization that has occurred in a traditional society like Thailand, it would be well to take into account an interesting observation of present-day Thai society which Alan E. Guskin has made in the following words.

"Aspirations toward modernism clash with reactions of those who cling to cherished status. Achievement vies even more strongly with ascription as the basis for social status and economic reward."

Conflicts in values between the students and the traditional nature of the system in which they find themselves will be referred to in the conclusion of the thesis.

CONCLUSION

In previous chapters we have described the demands for university education as made by the various social groups, namely, the urban and middle-class parents/children group, the industrial and commercial enterprises, the government bureaucracy and the university students themselves. It has been argued that the traditional socio-cultural Thai/Buddhist values and the secularized expression of these values have tended to more or less influence these groups in making their respective demands upon the university education. It has also been hinted that perhaps the historical, administrative as well as curricular context of this university education may have helped to structure the perceptions of these social groups about the demand for university education.

Since this thesis deals with a complex of the Thai social and cultural values that tend to influence the demand for university education, it comes closely towards recognizing and analyzing one of the significant contemporary issues characteristic of a developing society like present-day Thailand. This is concerned with the conflict of values at the point of their interface between traditional Thai/Buddhist values, their secularized expression, ascriptive status and modernization. Because of this, the thesis could be a significant contribution to an understanding of such a conflict of values as will occur within an emergent society currently undergoing the process of modernization.

On the basis of the data that have actually been presented within the thesis it may be possible to argue the
following conclusions for this thesis:

First, that traditional Thai/Buddhist values have influenced demand for university education, but more on the form of this education and the qualification university education can provide rather than on the content of this education and the appropriateness of this content to subsequent professional experience of the students. All this is reflected in our discussion prior to analysis and also in the nature of the paradoxical replies given by the students in the two questionnaire samples. The status value of university education is reflected in university degrees as such which are considered as a status symbol in their own right. It also seems paradoxical that the Thai tend to accept the social status gained through university education but at the same time overlook the contents of this education, regardless of whether or not such contents can be utilitarian, applicable or problem-solving. In this modernizing society great respect is still paid to university-educated persons with degrees whose knowledge and skills may be of non-utilitarian intellectual value and may not be put to immediate practical use. Consequently, insofar as university education is in demand by the urban middle-class parents/children group and the students themselves the form of this education and the qualification it provides tend to be of more significance than the contents and the relevance of these contents to professional careers. All this is perhaps due to the influence that traditional Thai social values can exercise upon the attitudes of the groups who make their demand. And although these groups have held that they
demand university education because it can provide professional training, intellectual knowledge for its own sake as well as a higher social status, this again seems paradoxical on the grounds that their value orientations towards university education appear to conflict at the point of the interface. It does not seem clear that university education as a professional training can be interpreted in terms of contents or in terms of university degrees which represent the form of this education as well as the paper qualification it provides. Even though such orientations towards those values of university education as already mentioned seem to be intermixed in varying magnitudes, this demonstrates a conflict of values at the point of their interface. The value of university education as a professional training is perhaps a secularized expression of this value whereas it may be said that the value of university education as providing intellectual knowledge and social status remains traditional. From the results presented within the thesis it is very interesting to note that students do not fully subscribe to a traditional system of Thai university education which produces graduates with degrees but with very little real qualification for their subsequent professional employment.

Secondly, on the whole Thai universities have not oriented their training towards serving vocational interests of the students but rather have reflected the form of traditional Thai social and cultural values within the structure of courses. This is more so in the case of non-vocational courses being
taught in non-vocational faculties than in the case of vocational courses being taught in vocational faculties. Generally speaking, this also directly conflicts with policy-type statements reported both from university administrators and the official documents concerned. In its statement of policy regarding professional training to be provided in the universities, the government has made it clear that one of the functions of a university is to offer instructions in the high-level professional knowledge and skills that can be rendered useful for the students' subsequent professional employments.¹ Judging from this broad statement of policy made by the government, it is realized that in actuality what the universities have done in this matter of professional training seems to be in conflict with what the government has stated as its policy. To understand such a conflict it is suggested that we would have to use the elements of sociological imagination (both historic and more comprehensive and contemporary analysis) to move behind the facade which the government (through the university administrators) appears to be presenting. But unfortunately it is beyond the capacity of the author of this thesis to use those elements of sociological imagination primarily because he is totally unschooled in this very kind of thing and thus what is known as sociological imagination is...

unintelligible to him. And although attempts have been made by him to rely for help upon the Western-trained sociologists at Chiangmai University and to find out in the books what sociological imagination technically is, the attempts failed because no such sociologists know what it is and none of the books on sociology treats of sociological imagination. Consequently, this author regretfully admits that he is unable to move behind that facade. The government through the universities will have as yet to reorient the training towards better serving vocational interests of the students irrespective of whether they are enrolled in vocational or non-vocational courses and faculties. At any rate, the government should try to live up to its expectations.

Indeed, even vocational courses have not yet adequately oriented their contents towards serving the vocational interests of the students. Data presented within the thesis have indicated that both vocational and non-vocational courses should orient their contents, for example, towards the study of the current problems and needs of Thai society. Course contents of both vocational and non-vocational faculties should be specialized, applied and useful for careers. In developing countries such as Thailand it would be more worthwhile if university graduates with a Bachelor's degree are well equipped with the knowledge and skills that are professionally relevant to the jobs they want to be employed in. In other words, university education in a modernizing society may not avoid being a preparation for a
professional career. However, this sounds paradoxical in the
sense that the influence of traditional Thai social values with
respect to education is reflected in the general negation of
vocationally-oriented education. So, while the students' demand
is for vocationally-oriented courses traditional Thai/Buddhist
values appear to be in disfavour of such courses.

Thirdly, commercial and industrial enterprises are
interested in university graduates who have functional competence,
but to a large extent these graduates are not being produced in
adequate number, particularly because of a disproportionate
number of the "humanities" and "social sciences" students who
obtain their degrees within the university education system.
That the student intake in the humanities and the social sciences
is large is presumably because it is cheaper for the government
and the universities to cater to the demand for these courses
than to provide a professional training in courses like medicine,
engineering, sciences or other scientific-technological courses.
Here again the traditional Thai/Buddhist values generally tend to
exercise some influence. The humanities and the social sciences
are courses of study better suited to serve the interests of
university graduates in these fields to enter into the traditional
career preference for being government bureaucrats.

Fourthly, within the government we find a paradox. On
the one hand, the government consists of "people" who have come
through and are used to the traditional Thai educational system.
In view of their status and values-attachment to a traditional
system within the Thai government bureaucracy, they have no particular concern to employ university graduates who may well be functionally more competent than themselves. Consequently, as has been pointed out within the thesis, personnel within the government bureaucracy are differentiated, not by specific functions they are to be assigned to, but by the possession of university degrees which alone seems to be a predominant criterion for employment. Counter to this, the government, as a government, must structure its policy in relation to the achievement of planning objectives. Consequently, as a government exhortations are made for the universities to move towards more vocational training. The paradox to this is also expressed in decisions which the government has actually made in the establishment of new universities. This is a paradox that we shall have to explore somewhat further.

This paradox is perhaps still unresolved in the Thai government bureaucracy and is difficult to explore. That functions and technical competence are relegated to a low place in contrast to degrees as paper credentials which are unduly given too much significance is presumably because such "people" in the bureaucracy tend to subscribe to the form of the traditional Thai value of education rather than its contents. They are, so to speak, used to placing undue emphasis upon the form of education represented by degrees. Because just this situation exists at a time when Thailand tries to implement its socio-economic development plans, those tradition-bound and conservative "people"
cannot help presenting a facade by saying that in order to modernize the country the universities must be urged to provide more in terms of vocational training. In their view this seems both logical and fashionable and theoretically is in line with development planning objectives. But in practice they find it difficult to accept technical and functional competence that is the product of more vocational training they wanted the universities to provide. The foregoing also applies to the case of establishing several new universities especially those set up in the 1960's and the early 1970's. The "people" who run the bureaucracy feel a need to urge the universities to provide more vocational training while they themselves shun such a vocational training and thus are not in a position to employ graduates trained to be functionally more competent than themselves. After all it is the government staffed mainly by those "people" that has found it necessary to present such a facade. To them functional and technical competence through vocational training appears in principle to be more responsive to the needs of the modernizing society. But because they are so used to the form rather than the contents of university education they tend not to believe it is in practice. The paradox is then actually found within the government — a paradox that we assume may be attributed to the facade those "people" in the bureaucracy have presented and perhaps still maintained.

Fifthly, a conflict of values at the point of the interface is unavoidable in such a transitional society as Thailand
where traditional Buddhist values are under pressure of being secularized through the influence of modernization and development the country has currently embarked upon. This conflict of social and cultural values at the point of their interface has resulted in a considerable measure of conflict in demands which the various relevant social groups have generated upon the university education system. The evidence already examined within the thesis has suggested that many of the demands made tend to come into conflict with one another at the point of the interface. The following gives an example of conflicting demands resulting from conflicting values to which the various demand groups have been exposed and which have in turn influenced such demands.

(1) The demands made by the urban middle-class parents/children group in Thai society to serve the purposes of acquiring intellectual knowledge, of professional training for subsequent careers, and of raising a social status appear to come into conflict not only with one another but also these demands appear to conflict with the demands made by the government and the industry and commerce. These latter two demand groups have made demands for manpower personnel of various categories, notably the scientific-technological manpower and other professional personnel trained in fields of study being taught in the universities such as agriculture, engineering, medicine, sciences, education, social sciences, humanities, and so forth.

(2) The demands made by the university undergraduate students also appear to be in conflict with one another at the
point of the interface. As examples we may suggest the following demand conflicts. The students' demand for intellectual knowledge for its own sake seems inevitably to conflict with their simultaneous demand for a professional training as well as with their demand for a raising of their own social status. The demand for courses in the humanities as useful to careers conflicts with the demand for courses whose main priority should be to deal with current problems and needs of Thai society. All these demands may in turn conflict with the students' demand for the liberal and democratic educational process of a university.

(3) All the students' demands already referred to above again seem to come into conflict with the demand made by the industrial and commercial enterprises for high-level manpower personnel of various categories, be it the scientific-technological personnel, professional personnel or even administrative and managerial personnel which the universities do not produce directly. Because of the interactions between the traditional social values and the influence of modernization and development, many traditional Thai values have changed or become secularized. Change and secularization of traditional values have occurred with varying degrees of acceptance and accommodation. Students who belong to the younger generation are perhaps socialized to the change and secularization of values to a greater extent than other groups since university students are themselves major agents of change in the society. As a result, a conflict of values has occurred where degrees of acceptance of and accommodation to
value change and secularization vary among different groups in the society including the institutions of the universities which to some extent have remained more traditional than modernized. The paradoxical nature of the replies to the questionnaire given by the students has perhaps demonstrated such a conflict of values at the point of the interface that has happened between the students who are more receptive to modernization and change than the structure of the universities which have remained more tradition-bound. The students' preference for a close and personalized teacher-student relations and for a share in policy-making on academic matters of the universities would perhaps serve to illustrate the conflict of values at the point of the interface between the more modernized group of the students and the more traditional structure of the universities which has still persisted.

Sixthly, there is an overall tendency for the four major social groups who make their respective demands upon the university education system (namely, the urban middle-class parents/children group, the industrial and commercial enterprises, the government bureaucracy and the undergraduate students) to utilize university education mainly for serving their utilitarian and pragmatic purposes. These purposes have implied the utilitarian and pragmatic values of university education being subscribed to by all the demand groups. Such utilitarian and pragmatic values of university education are reflected in the following demands:
1. Demand for knowledge pertinent to a practice of professional careers.

2. Demand for intellectual knowledge for its own sake.

3. Demand for a higher social status.

4. Demand for scientific-technological manpower and for professional personnel of various categories.

5. Demand for university admission, professional careers and courses of study that are associated with the achievement-orientation criteria.

6. Demand for the liberalization of the educational process and of the academic policy-making process of the university.

7. Demand for the usefulness to careers of courses in the humanities and for the current problems and needs of Thai society as well as a preservation of traditional Thai culture to be incorporated into the university teaching programmes.

8. Demand for social and extracurricular activities of the university campus.

9. Demand for university degrees as "fairly essential" to the student's career advancement.

10. Demand for a voice in the conduct of the university's administrative affairs.

11. Demand for a freedom of the students to argue or disagree with their teachers.

12. Demand for the students' freedom to choose most or all of the courses of study in their programmes of study at the university.
13. Demand for the contents of the courses of study to be more "specialized".

14. Demand for the contents of the courses of study to be equally useful for careers and for their own sake.

15. Demand for the contents of the courses of study to be more applied.

16. Demand for the university's production of job-trained specialists.

17. Demand for the three major disciplines of social sciences, medicine and agriculture on the basis of their utmost usefulness to the socio-economic development of Thailand.

In view of the manifold utilities and practical relevance of university education, there appears to be an irreversible trend for the demand for this education to continually increase, as evidenced partly by the actual figures of the applicants for university admission compared with the total number of those admitted in each academic year.²

Seventhly, a weakness has been found in the administration of the university education system, especially in the area of finance. This weakness has stood in the way of the universities trying to function efficiently as required by their responsibilities

² In the academic year 1978-79, of the total of about 90,000 applicants for university admission, only about 20,000 applicants or so were actually admitted to the ten universities through the Joint University Education Entrance Examination administered by the Bureau of the Universities in Bangkok.
and goals. The fact that the government's administration of the universities in this important area is too centralized has done much to complicate rather than facilitate the conduct of the routine academic and administrative affairs of the universities. For example, strict control usually exercised over the expenditure of the universities and the cut, sometimes drastic, on the amount of the universities' annual budget allocations have doubtless deprived the universities of their freedom and autonomy to cope with many of their problems which require a large sum of money to spend — problems such as the expansion of physical plants and facilities, the financing of major research projects, the institution of vocational training programmes which require the purchase of expensive tools and equipment and the like. Indeed, for the Bureau of the Budget, which is the final authority to make the budget appropriations, to be able to reach rational decisions concerning the actual amount of the budgets to be appropriated, it should rely upon some predetermined criteria to guide it and should take into consideration such factors as the size of student enrolments and staff, plans for future growth of the universities and so on. Moreover, relevant suggestions should be allowed to come from the academic departments which are the real functioning units of the universities. If the government's administration of financial affairs of the universities does not present problems of such a magnitude, the universities will be better able to carry out their works in many diverse areas which are fundamental to their
progress. The setting up of new faculties and departments, the construction of libraries and laboratories, the purchase of text books and teaching aid and equipment, the appointment and promotion of teaching and administrative personnel or even the implementation of newly-adopted curricula, for example, are among the universities' works which incur a lot of expenses to be met by the universities' budgets. In case the universities can manage these affairs without difficulty this will have far-reaching good consequences for the universities to respond to the many structures of demand emanating from outside. Therefore, as long as the universities are still subjected to such undue restrictions and controls in these financial matters, they will surely be prevented from efficiently discharging their responsibilities and from fulfilling their goals.

Having argued the many conclusions to be drawn for this thesis, it would be appropriate now to analyze the context of the goals of the Thai universities to see the framework within which the universities are formally allowed to function. This will also throw some light upon the manner in which the universities are supposed to respond to the demands made upon them and how some of the goals of the universities may conflict with one another in much the same way as many of the values and thus demands for university education have come into conflict at the point of their interface.

As a formal organization, one of the distinctive characteristics of a university is that it has been formally
established for the explicit purpose of achieving certain specific goals. According to the policy guidelines set forth by the Thai government, the universities are structured to serve a set of four major organizational goals. They are:3

1. To provide professional training at an advanced level so that graduates may pursue careers of their own choice. The quantity of a graduate production will be determined in accordance with the guidelines laid down in the national economic and social development plans.

2. To provide basic general education (i.e., sciences, the humanities and social sciences) so that students can broaden their knowledge and interests.

3. To discover new knowledge and provide an atmosphere conducive to learning and the seeking of truths. To carry out research which could train students in a critical and creative thinking as well as in imagination.

4. To become an extension agency charged with a responsibility for transmitting and disseminating knowledge, art and culture in local and regional communities of the country.

Underlying these specific organizational goals of the universities is the National Scheme of Education of B.E. 2503 (A.D. 1960) which officially states the broad goals of Thailand’s

---

educational system. This Scheme has made it clear that the country's educational system as a whole (of which the universities are an integral part) will function to serve the demands of the individuals as well as those of the society. And insofar as the two broad goals of the educational system underlying the four specific goals of the universities can become linked and coordinated with one another, Thai universities tend to develop the "societal" rather than the "scholastic" view of the universities. The "societal" view of the universities means essentially that university education is provided to serve Thai society as a whole rather than just a section of it. This "societal" view of the universities can function in two ways. As McGrath has pointed out, "For the individual it offers opportunity to move as far intellectually as his abilities will take him; for the society it undertakes to supply any type of trained individual required."  

The educational system of Thailand is of a four-tiered structure. The four consequential levels are: pre-primary, elementary, secondary and higher education. The system is regarded as a 7 - 5 - 4 one in terms of the number of years required for study at each level (pre-primary enrolments being too small to be included). Higher education is provided in the ten universities, colleges and other institutions of higher learning. For further details, see Thamrong Buasri, "Thailand", in T.W.G. Miller (ed.), Education in South-East Asia (Sydney: Ian Novak, 1968), pp. 146-147.  

If the four major organizational goals of the Thai universities are construed within the framework of the two functions of the "societal" view of the universities already referred to above, it may be suggested that Thai universities are formally structured to respond to the demands of the urban middle-class parents/children group, the industrial and commercial enterprises, the government and the university students. To the extent that Thai universities are formally structured to respond to the conflicting demands of those social groups, the universities are assumed to respond to such demands within the formal context of their goals. However, some of these goals of the universities are, to a large extent, conflicting and contradictory. For example, the professional manpower-training goal of the universities seems difficult to reconcile with the universities' goal of the transmission and dissemination of traditional Thai culture and art. In other words, a provision of professional manpower training in scientific and technological knowledge and skills will presumably conflict with the teaching of the traditional cultural values of Thai society.

The foregoing has been our attempt to arrive at some of the conclusions for this thesis. It is hoped that these attempted conclusions will be of some usefulness to the participants in university education, namely, the university administrators, the faculty members, the students and the government. The thesis hopefully may also be of some interest to the urban middle-class parents/children group and the business sector of the economy.
As will be realized, university education is itself so big a research problem for this thesis to help find a solution to. It is because of this that the author of this thesis is fully aware of whatever defects and weaknesses the thesis will inevitably suffer.
BIBLIOGRAPHY

Books


, Challenge to Education. Sydney: Angus and Robertson, 1946.


Li, Choh-Ming (ed.), Asian Workshop on Higher Education. Hong Kong: Chinese University of Hong Kong, 1969.


JOURNALS


Lind, Andrew, "Higher Education - Perspective from Southeast Asia", Teachers College Record, Vol. 64, No. 6 (March 1963), pp. 487-492.


Government Publications


Faculty of the Social Sciences Catalogue, 1969. Chiangmai, Thailand: Office of the Secretary to the Faculty, 1969. (in English).

Chulalongkorn University, Seminar on Problems and Roles of Thai Universities. Bangkok: Faculty of Political Science, Chulalongkorn University, 1964. (in Thai).


Other Works


Siam Rath, "Objections to an Appointment of Students as Members of the University Council", Vol. 22, No. 7720 (Monday, 17th April, 1972).
APPENDIX A

Questionnaire to Students

Cover Letter

Department of Political Science, University of Tasmania, Hobart, Tasmania, Australia.

Dear Student,

Enclosed is a questionnaire designed as part of a research project on "Social, Cultural and Vocational Aspects of Demand for University Education in Thailand". The questionnaire aims to find out the attitudes of students at Chiangmai and Chulalongkorn Universities and is conducted in connection with a Master's degree research project in the Department of Political Science, University of Tasmania, Australia.

In brief, the major purpose of this study is to measure the attitudes and opinions of students towards various aspects of their demand for university education. For example, the questionnaire will be concerned with reasons for coming to a university, intellectual and professional utility of courses, social and academic activities, teacher-student relationships and so on. It is part of a wider survey of the university education system in Thailand.

This project has been approved by the Rectors of both Universities who have given permission for this questionnaire to.
be distributed. It also has been approved by the Department of Political Science, University of Tasmania, Australia, who are responsible for supervising my M.A. work. May I assure you that all the information obtained from this questionnaire will be treated as strictly confidential. Individual attitudes will not be disclosed. Please understand that evaluation of results will only be concerned with aggregates and general trends.

Thank you very sincerely for filling in this questionnaire.

Yours sincerely,

Mr. Sansern Chareonphongse.
Instructions for Answering the Questionnaire (Part I)

(1) Read carefully each question and the answers which follow.

(2) Indicate the answer which comes closest to your own opinion by circling the item giving the answer of your choice or by writing the desired information. Mark only one alternative for each item, unless a ranking order is required.

(3) Please give your opinion on every question or statement.

(4) Remember that this questionnaire is anonymous. Do not sign your name. Individual answers will be kept strictly confidential.

Questionnaire : Part I

(1) After my graduation I would like to work for (circle as many as you are willing to consider and rank them in order of preference):

(a) Government

(b) Private business and industry

(c) State enterprise

(d) University

(e) Own business

(f) Other (specify)

[Ranking order]
(2) The professions I would like to enter are (choose at least three and as many others as you might be willing to consider. Rank them in order of preference):

<table>
<thead>
<tr>
<th>Ranking order</th>
<th>Profession</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Journalist</td>
</tr>
<tr>
<td>(b)</td>
<td>Business man</td>
</tr>
<tr>
<td>(c)</td>
<td>Soldier</td>
</tr>
<tr>
<td>(d)</td>
<td>Farmer</td>
</tr>
<tr>
<td>(e)</td>
<td>Engineer</td>
</tr>
<tr>
<td>(f)</td>
<td>Accountant</td>
</tr>
<tr>
<td>(g)</td>
<td>Lawyer</td>
</tr>
<tr>
<td>(h)</td>
<td>University teacher</td>
</tr>
<tr>
<td>(i)</td>
<td>Social welfare worker</td>
</tr>
<tr>
<td>(j)</td>
<td>Scientist</td>
</tr>
<tr>
<td>(k)</td>
<td>Doctor</td>
</tr>
<tr>
<td>(l)</td>
<td>Artist</td>
</tr>
<tr>
<td>(m)</td>
<td>Architect</td>
</tr>
<tr>
<td>(n)</td>
<td>Psychologist</td>
</tr>
<tr>
<td>(o)</td>
<td>Administrator</td>
</tr>
<tr>
<td>(p)</td>
<td>School teacher</td>
</tr>
<tr>
<td>(q)</td>
<td>Police officer</td>
</tr>
<tr>
<td>(r)</td>
<td>Other (specify)</td>
</tr>
</tbody>
</table>


(3) The most important reason for coming to a university is to acquire intellectual knowledge for its own sake:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

(4) The main objective of university education should be to train students for their careers:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

(5) I come to a university mainly to raise my social status:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

(6) I come to a university mainly to satisfy my parents' desire for me to gain social recognition and status:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly
(7) To what extent do you consider a university degree as essential to an advancement in your career life?
(a) Very essential
(b) Fairly essential
(c) Can't say
(d) Not very essential
(e) Not at all essential

(8) I regard my own university courses as helping me substantially in the promotion of my future career:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

(9) In selection of students for universities, ability to mix socially is just as important a criterion as academic ability:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

(10) Members of old Thai families who fail to gain admission to universities through lack of formal qualifications should nonetheless be admitted since they would represent a definite social asset to the universities:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

11. I think that knowledge gained from a university education is of more value than any subsequent material success in the form of wealth:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

12. Success in my future life will depend more upon university degrees than upon wealth and family status:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

13. Success in my future life ought to come more from academic and other career achievements rather than from wealth and family status:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly
(14) During a university career, social activities should be as important as academic studies:
   (a) Agree strongly
   (b) Agree
   (c) Neither agree nor disagree
   (d) Disagree
   (e) Disagree strongly

(15) Students should not have a say in a university's policy-making on academic matters:
   (a) Agree strongly
   (b) Agree
   (c) Neither agree nor disagree
   (d) Disagree
   (c) Disagree strongly

(16) Students should have a voice in the administrative affairs of a university:
   (a) Agree strongly
   (b) Agree
   (c) Neither agree nor disagree
   (d) Disagree
   (e) Disagree strongly

(17) Lectures are more effective than seminars as a method of teaching and learning:
   (a) Agree strongly
   (b) Agree
   (c) Neither agree nor disagree
   (d) Disagree
   (e) Disagree strongly
(18) Obedience is more important than friendship in teachers' relations with their students:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

(19) In my opinion, if teachers maintain close personal contacts with students this is likely to lead to a weakening of discipline:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

(20) Students should always feel free in classes to disagree with their lecturers:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

(21) In my programme of study, I would prefer to (circle one):
(a) Choose all the subjects myself
(b) Choose most of the subjects myself
(c) Choose half of all the subjects myself and let my teachers choose another half of them for me
(d) Let my teachers choose most of the subjects for me
(e) Let my teachers choose all the subjects for me

(22) University teaching is a profession of high prestige in Thai society:
(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

Please comment on reasons for your answer

(23) On the whole, what is your judgment of the content of the courses you are now taking?
(a) More general than specialised
(b) More specialised than general
(c) Both equally
(d) Can't say

(24) I prefer that my courses should be:
(a) More general than specialised
(b) More specialised than general
(c) Both equally
(d) Can't say
(25) In my view, the courses I am now engaged in are:
(a) More useful for careers than for their own sake
(b) More useful for their own sake than for careers
(c) Both equally
(d) Can't say

(26) I would prefer that my courses should be:
(a) More useful for careers than for their own sake
(b) More useful for their own sake than for careers
(c) Both equally
(d) Can't say

(27) On the whole, I think the emphasis of my course is
(circle one):
(a) More applied (i.e., oriented towards applications
    and problem-solving) than pure (i.e., concerned with
    essential principles)
(b) More pure than applied
(c) Equally with both pure and applied
(d) Mainly applied
(e) Mainly pure

(28) I prefer that the emphasis of my course should be
(circle one):
(a) More applied than pure
(b) More pure than applied
(c) Equally with both pure and applied
(d) Mainly applied
(e) Mainly pure
Courses in the humanities (e.g., philosophy, languages, history, literature and classics, etc.) are not useful to students' careers and thus should not be included in the curriculum:

(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

Courses should not so much fulfil career needs of students but rather be geared towards satisfying their intellectual interests as such:

(a) Agree strongly
(b) Agree
(c) Neither agree nor disagree
(d) Disagree
(e) Disagree strongly

In your opinion, which of the following major fields of study are more useful to Thai society in terms of national development (rank them in order of usefulness)?

(a) Social Sciences (e.g., sociology, economics, political science, and anthropology) .................
(b) Humanities (e.g., philosophy, fine arts and music, history, languages, literature and classics) .................
Ranking order

(c) Physical sciences (e.g., mathematics, geology, physics, chemistry, statistics)

(d) Biological sciences (e.g., biology, botany, zoology)

(e) Business administration

(f) Education

(g) Engineering

(h) Agriculture

(i) Law

(j) Medicine

(32) The main priority of university courses should be to deal with the current problems and needs of Thai society:

(a) Agree strongly

(b) Agree

(c) Neither agree nor disagree

(d) Disagree

(e) Disagree strongly

(33) It is more important for a university to produce graduates of culture and distinction than job-trained specialists:

(a) Agree strongly

(b) agree

(c) Neither agree nor disagree

(d) Disagree

(e) Disagree strongly
(34) Preservation of traditional Thai culture should be a major priority of university courses:
   (a) Agree strongly
   (b) Agree
   (c) Neither agree nor disagree
   (d) Disagree
   (e) Disagree strongly

(35) How would you compare the academic standard at this university with that at other universities in Thailand?
   (a) Higher
   (b) Lower
   (c) About the same
   (d) Can't say

(Many thanks for your help)
Questionnaire: Part II

Personal Information

(1) Name of the university in which you are presently enrolled:

(2) Name of the faculty in which you are now studying:

(3) Your current year of study:

(4) Highest level of formal education you have completed before being enrolled in this university:

(5) Did you have an occupation before coming to this university?
   Yes ______ No ______
   If yes, please state:
   (a) The nature of your former occupation:
   ____________________________
   (b) The number of years or months you worked in that occupation:
   ____________________________

(6) Sex: Male ______ Female ______

(7) Religion: ____________________________

(8) Your father's major occupation: ____________________________
    Your mother's major occupation: ____________________________
    (If your mother is also professionally employed)
(9) Source(s) of your major financial support:

(a) Parents ________ (b) Relatives ________
(c) Scholarship(s) ________ (indicate source(s))
(d) Self supporting ________
(e) Other (specify) ________

(10) Are you now working part-time to help earn your way?

Yes ________  No ________

If yes, please indicate the type of paid job you are now doing ____________________________________________
APPENDIX B

Basic Data of the Questionnaire Respondents

(1) **Current year of study**

A majority of the respondents in both samples (i.e., 69% at CMU and 70% at CU) are in their 3rd and 4th years of study.

A breakdown of the respondents according to the current year of their study is as follows:

<table>
<thead>
<tr>
<th></th>
<th>CMU sample</th>
<th>CU sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st year</td>
<td>32</td>
<td>11</td>
</tr>
<tr>
<td>2nd year</td>
<td>30</td>
<td>19</td>
</tr>
<tr>
<td>3rd year</td>
<td>66</td>
<td>36</td>
</tr>
<tr>
<td>4th year</td>
<td>72</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

*Two fifth-year students were represented in the CU sample. They were drawn from the Faculty of Architecture, the only faculty in which a Bachelor's degree programme takes five years of study to complete.*
(2) **Highest level of formal education completed prior to university enrolment**

An overwhelming majority of the respondents in the CMU sample (i.e., 92%) and all the respondents in the CU sample graduated with M.S. 5 School Certificates.

A breakdown of the respondents according to the highest level of their formal education is as follows:

(a) **CMU sample**

<table>
<thead>
<tr>
<th>Certificate Type</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathayomsuksa 5</td>
<td>184</td>
</tr>
<tr>
<td>Higher Teacher's Certificates</td>
<td>11</td>
</tr>
<tr>
<td>Higher Vocational Certificates</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

(b) **CU sample**

<table>
<thead>
<tr>
<th>Certificate Type</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathayomsuksa 5</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

(3) **Previous occupation before entry to a university**

An overwhelming majority of the respondents in both samples (i.e., 91.5% at CMU and 97% at CU) did not have an occupation before coming to their universities.

A breakdown of the respondents according to their answers "Yes" or "No" and, in the case of "Yes", according to the

---

**Those graduating from academic secondary schools with such certificates become eligible as candidates for admission to a university since M.S. 4 and 5 (Mathayomsuksa 4 and 5) are two terminating grades preparing students especially for university and college education.**
nature of the occupations and the number of years or months the respondents worked in their occupations is as follows:

(a) CMU sample

<table>
<thead>
<tr>
<th></th>
<th>CMU sample</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>respondents</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>183</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

Nature of the occupations in the case of "Yes"

<table>
<thead>
<tr>
<th>Employees in miscellaneous jobs</th>
<th>9 respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
</tr>
</tbody>
</table>

The number of years or months spent on the occupations
This ranges from 2 months to 10 years.

(b) CU sample

<table>
<thead>
<tr>
<th></th>
<th>CU sample</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>respondents</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Nature of the occupations in the case of "Yes"

<table>
<thead>
<tr>
<th>Employees in miscellaneous jobs</th>
<th>respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
</tr>
</tbody>
</table>
The number of years or months spent on the occupations
This ranges from 3 months to 1 year.

(4) Sex

A majority of the respondents in the CMU sample (i.e., 54.5%) are female while a majority of the respondents in the CU sample (i.e., 57%) are male.

A breakdown of the respondents according to their sexes is as follows:

(a) CMU sample
   Female 109 respondents
   Male 91
   Total 200

(b) CU sample
   Male 57 respondents
   Female 43
   Total 100

(5) Religion

An overwhelming majority of the respondents in both samples (i.e., 96% at CMU and 93% at CU) are Buddhists.

A breakdown of the respondents according to their religions is as follows:

(a) CMU sample
   Buddhism 192 respondents
   Christianity 6
   Islam 2
   Total 200
(b) **CU sample**

<table>
<thead>
<tr>
<th>Religion</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buddhism</td>
<td>93</td>
</tr>
<tr>
<td>Christianity</td>
<td>5</td>
</tr>
<tr>
<td>Islam</td>
<td>1</td>
</tr>
<tr>
<td>Not indicated</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

(6) **Fathers' and mothers' major occupations**

A majority of the fathers of the respondents in both samples are either employed in or own private business and industry (i.e., 43% for CMU and 33% for CU) and employed in the government service (i.e., 30% for CMU and 31% for CU).

A majority of the mothers of the respondents in both samples are either unemployed (i.e., 46% for CMU and 60% for CU) or are engaged in private business of their own and of other employers (i.e., 34.5% for CMU and 20% for CU).

A breakdown of the respondents according to the major occupations of their fathers and mothers is as follows:

(a) **CMU sample**

<table>
<thead>
<tr>
<th>Fathers</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private business and industry</td>
<td>86</td>
</tr>
<tr>
<td>Government service</td>
<td>60</td>
</tr>
<tr>
<td>Manual workers</td>
<td>23</td>
</tr>
<tr>
<td>Not indicated</td>
<td>14</td>
</tr>
<tr>
<td>Farming and gardening</td>
<td>12</td>
</tr>
<tr>
<td>Deceased</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>
Mothers

<table>
<thead>
<tr>
<th>Employment Category</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not employed - home duties</td>
<td>92</td>
</tr>
<tr>
<td>Private business of their own</td>
<td></td>
</tr>
<tr>
<td>and of other employers</td>
<td>69</td>
</tr>
<tr>
<td>Government service</td>
<td>25</td>
</tr>
<tr>
<td>Farming and gardening</td>
<td>10</td>
</tr>
<tr>
<td>Manual workers</td>
<td>2</td>
</tr>
<tr>
<td>Miscellaneous trades</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

(b) CU sample

<table>
<thead>
<tr>
<th>Employment Category</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private business and industry</td>
<td>33</td>
</tr>
<tr>
<td>Government service</td>
<td>31</td>
</tr>
<tr>
<td>Manual workers</td>
<td>19</td>
</tr>
<tr>
<td>Deceased</td>
<td>9</td>
</tr>
<tr>
<td>Farming and gardening</td>
<td>5</td>
</tr>
<tr>
<td>Not indicated</td>
<td>2</td>
</tr>
<tr>
<td>Pensioner</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Mothers

<table>
<thead>
<tr>
<th>Employment Category</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not employed - home duties</td>
<td>60</td>
</tr>
<tr>
<td>Private business of their own</td>
<td></td>
</tr>
<tr>
<td>and of other employers</td>
<td>20</td>
</tr>
<tr>
<td>Government service</td>
<td>10</td>
</tr>
<tr>
<td>Farming and gardening</td>
<td>4</td>
</tr>
<tr>
<td>Manual workers</td>
<td>4</td>
</tr>
<tr>
<td>Deceased</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
(7) **Source(s) of major financial support**

A large majority of the respondents in both samples (i.e., 75.5% at CMU and 72% at CU) are financially supported in their university education by their parents only.

A breakdown of the respondents according to the sources of their major financial support is as follows:

(a) **CMU sample**

<table>
<thead>
<tr>
<th>Source of Financial Support</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents only</td>
<td>151</td>
</tr>
<tr>
<td>Relatives only</td>
<td>16</td>
</tr>
<tr>
<td>Parents plus relatives</td>
<td>14</td>
</tr>
<tr>
<td>Parents plus scholarships</td>
<td>8</td>
</tr>
<tr>
<td>Self-supporting</td>
<td>5</td>
</tr>
<tr>
<td>Scholarships only</td>
<td>3</td>
</tr>
<tr>
<td>Parents plus relatives plus scholarship</td>
<td>1</td>
</tr>
<tr>
<td>Self-supporting plus scholarship plus parents</td>
<td>1</td>
</tr>
<tr>
<td>Self-supporting plus parents</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>200</td>
</tr>
</tbody>
</table>
(b) **CU sample**

<table>
<thead>
<tr>
<th>Category</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents only</td>
<td>72</td>
</tr>
<tr>
<td>Parents plus scholarships</td>
<td>9</td>
</tr>
<tr>
<td>Parents plus relatives</td>
<td>7</td>
</tr>
<tr>
<td>Relatives only</td>
<td>6</td>
</tr>
<tr>
<td>Parents plus relatives plus self-supporting</td>
<td>2</td>
</tr>
<tr>
<td>Self-supporting plus scholarship</td>
<td>1</td>
</tr>
<tr>
<td>Self-supporting plus parents</td>
<td>1</td>
</tr>
<tr>
<td>Parents plus relatives plus scholarship</td>
<td>1</td>
</tr>
<tr>
<td>Relatives plus scholarship</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

(8) **Part-time jobs**

An overwhelming majority of the respondents in both samples (i.e., 91.5% at CMU and 86% at CU) are not working part-time to help earn their way.

A breakdown of the respondents according to their answers "Yes" or "No" and, in the case of "Yes", according to the types of paid jobs they are now doing is as follows:

(a) **CMU sample**

<table>
<thead>
<tr>
<th>Category</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>183</td>
</tr>
<tr>
<td>Yes</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>
Types of jobs in the case of "Yes"

<table>
<thead>
<tr>
<th>Work Type</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miscellaneous work</td>
<td>11</td>
</tr>
<tr>
<td>Teaching</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
</tr>
</tbody>
</table>

(b) CU sample

<table>
<thead>
<tr>
<th>Yes/No</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>86</td>
</tr>
<tr>
<td>Yes</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Types of jobs in the case of "Yes"

<table>
<thead>
<tr>
<th>Work Type</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>8</td>
</tr>
<tr>
<td>Miscellaneous work</td>
<td>4</td>
</tr>
<tr>
<td>Work to which university courses are useful</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
</tr>
</tbody>
</table>
APPENDIX C

Answers to Some Uncorrelated Questions of the Questionnaire

Question 1

On the whole, government and private business and industry are most preferred as employers the respondents in both samples would like to work for after their graduation.

A breakdown of the results of Question 1 is as follows:

(a) CMU sample

Employers being ranked first

Government is ranked first most often (i.e., by 79 respondents).

Next to government private business and industry is ranked first most often (i.e., by 54 respondents).

Employers being ranked second

Private business and industry is ranked second most often (i.e., by 48 respondents).

Next to private business and industry government is ranked second most often (i.e., by 46 respondents).

Employers being ranked third

State enterprise is ranked third most often (i.e., by 47 respondents).

Next to state enterprise government is ranked third most often (i.e., by 37 respondents).
(b) CU sample

**Employers being ranked first**

Private business and industry is ranked first most often (i.e., by 27 respondents).

Next to private business and industry government is ranked first most often (i.e., by 21 respondents).

**Employers being ranked second**

Government is ranked second most often (i.e., by 31 respondents).

Next to government private business and industry is ranked second most often (i.e., by 21 respondents).

**Employers being ranked third**

State enterprise is ranked third most often (i.e., by 26 respondents).

Next to state enterprise private business and industry is ranked third most often (i.e., by 19 respondents).

**Question 2**

On the whole, university teachers, business men, administrators, school teachers and engineers are most preferred as the professions the respondents in both samples would like to enter.

A breakdown of the results of Question 2 is as follows:

(a) CMU sample

**Professions being ranked first**

University teachers are ranked first most often (i.e., by 31 respondents).
Next to university teachers business men are ranked first most often (i.e., by 25 respondents).

Next to business men administrators are ranked first most often (i.e., by 24 respondents).

Professions being ranked second

University teachers are ranked second most often (i.e., by 40 respondents).

Next to university teachers school teachers are ranked second most often (i.e., by 30 respondents).

Next to school teachers business men are ranked second most often (i.e., by 29 respondents).

Professions being ranked third

Social welfare workers are ranked third most often (i.e., by 25 respondents).

Next to social welfare workers university teachers are ranked third most often (i.e., by 24 respondents).

Next to university teachers business men are ranked third most often (i.e., by 22 respondents).

(b) CU sample

Professions being ranked first

University teachers are ranked first most often (i.e., by 20 respondents).

Next to university teachers engineers are ranked first most often (i.e., by 14 respondents).

Next to engineers administrators are ranked first most often (i.e., by 13 respondents).
Professions being ranked second

Business men are ranked second most often (i.e., by 23 respondents).

Next to business men administrators are ranked second most often (i.e., by 23 respondents).

Next to administrators university teachers are ranked second most often (i.e., by 15 respondents).

Professions being ranked third

Administrators are ranked third most often (i.e., by 20 respondents).

Next to administrators business men are ranked third most often (i.e., by 18 respondents).

Next to business men university teachers are ranked third most often (i.e., by 15 respondents).

**Question 6**

A majority of the respondents in both samples (i.e., 31.5% at CMU and 34% at CU) disagree with the statement of the question that "I come to a university mainly to satisfy my parents' desire for me to gain social recognition and status."

A breakdown of the responses to Question 6 in order of percentages is as follows:

(a) **CMU sample**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>31.5%</td>
</tr>
<tr>
<td>Agree</td>
<td>29.5%</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
<td>19.5%</td>
</tr>
<tr>
<td>Agree strongly</td>
<td>12.0%</td>
</tr>
<tr>
<td>Disagree strongly</td>
<td>7.5%</td>
</tr>
</tbody>
</table>
Question 7

A large majority of the respondents in both samples (i.e., 61% at CMU and 67% at CU) replied that they consider a university degree as "fairly essential" to an advancement in their career life.

A breakdown of the responses to Question 7 in order of percentages is as follows:

(a) **CMU sample**

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairly essential</td>
<td>61.0%</td>
</tr>
<tr>
<td>Very essential</td>
<td>16.5%</td>
</tr>
<tr>
<td>Not very essential</td>
<td>11.5%</td>
</tr>
<tr>
<td>Can't say</td>
<td>10.0%</td>
</tr>
<tr>
<td>Not at all essential</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

(b) **CU sample**

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairly essential</td>
<td>67.0%</td>
</tr>
<tr>
<td>Very essential</td>
<td>16.0%</td>
</tr>
<tr>
<td>Can't say</td>
<td>9.0%</td>
</tr>
<tr>
<td>Not very essential</td>
<td>8.0%</td>
</tr>
<tr>
<td>Not at all essential</td>
<td>0.0%</td>
</tr>
</tbody>
</table>