

ROOM USE ONLY

ROOM USE ONLY

-----

## ABSTRACT

### AN ANALYSIS OF DIFFERENCES IN BACKGROUNDS, ACTIVITIES, AND ATTITUDES AMONG FULL TIME, PART TIME, AND EXTENSION STUDENTS IN EDUCATIONAL ADMINISTRATION

by Alton B. Sheridan

The purpose of this study is to identify, describe, and compare selected characteristics of students who completed course work for their Master's degree in Educational Administration at Michigan State University. Specifically, the problem is concerned with similarities and differences which might exist among full time, part time, and extension students as to academic, occupational, and personal characteristics.

There has been much recent criticism of part time and extension graduate study. Many cite inadequacies in the quality of such programs. This criticism has been in the nature of opinion, and there has been little research concerning part time and extension programs at the graduate level.

The sample for this study was drawn from those persons who received the Master's degree in educational administration from the College of Education at Michigan State University during the years 1954 to 1958 inclusive. A

questionnaire of thirty-eight items was designed to gather information in four general areas: academic characteristics, occupational characteristics, personal and social background, and opinions held about the Master's degree program at Michigan State University. In addition, Michigan State University records were utilized as a source of academic data. Completed questionnaires were received from ninety-five per cent of the graduates in the sample.

Of the one-hundred fifty-eight graduates studied, forty-three were classified as full time students, eighty-four as part time students, and thirty-one as extension students. Contingency tables were constructed and the chi-square test was used to determine association.

No significant differences were found among the groups in, academic background, academic achievement while a Master's student at Michigan State University, or plans for further academic study.

Full time students did not differ from part time and extension students in occupational characteristics. However, full time students had significantly less teaching experience at the beginning of their Master's degree program than the other two student groups.

In personal and social characteristics full time students differed significantly from part time and extension students in four areas. The full time student is less

likely to be married, is less likely to have children, is more likely to finance his Master's study from other than his own income, and his father is more likely to have attained a higher level of education as compared to the other two student groups.

All three groups of students indicated favorable opinions about their Master's program at Michigan State University. Most students were enthusiastic about the type of program in which they were enrolled whether it was full time, part time, or extension.



AN ANALYSIS OF DIFFERENCES IN BACKGROUNDS,  
ACTIVITIES, AND ATTITUDES AMONG FULL TIME,  
PART TIME, AND EXTENSION STUDENTS IN  
EDUCATIONAL ADMINISTRATION

By

Alton B. <sup>unpublished</sup> Sheridan

A THESIS

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF EDUCATION

College of Education

1965

636128  
2-21-66

## ACKNOWLEDGMENTS

The author is deeply indebted to his major advisor, Dr. Donald J. Leu, chairman of his advisory committee, for his help and encouragement. Appreciation is also expressed to the members of the guidance committee, Dr. J. Allen Beegle, Dr. Clyde M. Campbell, and Dr. Harold J. Dillon for their help in formulating the problem.

Finally, many thanks to my wife, Vivian, for her constant inspiration.

## TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS . . . . .	ii
LIST OF APPENDICES . . . . .	v
Chapter	
I. THE PROBLEM . . . . .	1
Statement of the Problem . . . . .	1
Importance of the Study . . . . .	1
Assumptions of the Study . . . . .	5
Definition of Terms . . . . .	6
Hypothesis . . . . .	9
Limitations of the Study . . . . .	9
Plan of the Study . . . . .	10
Summary . . . . .	11
II. REVIEW OF THE LITERATURE . . . . .	12
Introduction . . . . .	12
Development of Part Time and Extension Work . . . . .	12
Some Characteristic Differences in the Learning Situation of Part Time and Full Time Students . . . . .	21
Review of Studies Concerned with the Relation- ship of Part Time and Full Time Study . . . . .	47
Summary . . . . .	55
III. PROCEDURES AND TECHNIQUES OF THE STUDY. . . . .	56
Preliminary Activities . . . . .	56
The Sample . . . . .	56
The Instrument. . . . .	60
Statistical Techniques . . . . .	65
Operational Hypothesis . . . . .	70
Summary . . . . .	71
IV. ACADEMIC CHARACTERISTICS . . . . .	72
Introduction . . . . .	72
Academic Background . . . . .	72
Reasons for Seeking a Master's Degree in Educational Administration at Michigan State University . . . . .	75

Chapter	Page
Educational and Cultural Activity While a Graduate Student . . . . .	76
Master's Degree Grade Point Averages . . . . .	81
Summary . . . . .	81
V. OCCUPATIONAL INFORMATION . . . . .	84
Introduction . . . . .	84
Summer, Military, and Other Non-educational Employment . . . . .	85
Occupational and Educational Aspirations . . . . .	86
Reported Educational Position, Experience, and Salary . . . . .	87
Summary . . . . .	89
VI. PERSONAL AND SOCIAL CHARACTERISTICS OF STUDENTS . . . . .	90
Introduction . . . . .	90
Sex, Age, Marital Status, and Number . . . . .	90
Sources of Financial Support for Master's Program . . . . .	91
Father's Occupation, Father's and Mother's Educational Level and Size of Community Where Youth Was Spent. . . . .	92
Summary . . . . .	95
VII. OPINIONS ABOUT THE MASTER'S DEGREE PROGRAM AT MICHIGAN STATE UNIVERSITY . . . . .	96
Introduction . . . . .	96
Opinions About the Master's Degree Program . . . . .	96
Additional Comments by Students . . . . .	97
Summary . . . . .	101
VIII. FINDINGS, CONCLUSIONS, AND IMPLICATIONS FOR FURTHER RESEARCH . . . . .	103
Findings. . . . .	103
Results of Testing the Operational Hypothesis . . . . .	103
Conclusions. . . . .	107
Implications for Further Research . . . . .	109
BIBLIOGRAPHY . . . . .	110
APPENDICES. . . . .	117

## LIST OF APPENDICES

Appendix	Page
A. PILOT QUESTIONNAIRE. . . . .	118
QUESTIONNAIRE USED IN MAIN STUDY . . . . .	126
B. ATTENDANCE AT MICHIGAN STATE UNIVERSITY ATHLETIC CONTESTS. . . . .	130
BREAKDOWN OF POPULATION SAMPLE . . . . .	131
BREAKDOWN OF SAMPLE BY TYPE OF STUDENT DURING MASTER'S DEGREE PROGRAM. . . . .	132
TYPE OF INSTITUTION GRANTING THE BACHELOR'S DEGREE . . . . .	133
UNDERGRADUATE ACADEMIC GRADE AVERAGE . . . . .	133
SCHOLASTIC RANK IN HIGH SCHOOL GRADUATING CLASS. . . . .	134
MAJOR FIELD OF EMPHASIS IN UNDERGRADUATE WORK . . . . .	134
MAJOR REASON FOR SEEKING A MASTER'S DEGREE . . . . .	135
MAJOR REASON FOR CHOOSING MICHIGAN STATE UNIVERSITY FOR THE MASTER'S PROGRAM. . . . .	136
REASON FOR CHOOSING SCHOOL ADMINISTRATION AS THE GRADUATE FIELD OF EMPHASIS . . . . .	136
MEMBERSHIP IN STUDENT ACTIVITY GROUPS DURING GRADUATE ENROLLMENT . . . . .	137
ACTIVITIES ATTENDED OR ENGAGED IN AT MICHIGAN STATE UNIVERSITY . . . . .	137
ATTENDANCE AT MICHIGAN STATE UNIVERSITY ATHLETIC CONTESTS. . . . .	138
ATTENDANCE AT MICHIGAN STATE UNIVERSITY LECTURE SERIES . . . . .	138
ATTENDANCE AT MICHIGAN STATE UNIVERSITY TRAVEL SERIES . . . . .	139

Appendix	Page
ATTENDANCE AT MICHIGAN STATE UNIVERSITY CONCERT SERIES . . . . .	139
ATTENDANCE AT FORUMS ON EDUCATIONAL TOPICS .	140
ATTENDANCE AT EDUCATIONAL CONFERENCES . . .	140
ATTENDANCE AT MEETINGS WITH SPECIAL SPEAKERS ON EDUCATIONAL TOPICS. . . . .	141
PARTICIPATION IN MICHIGAN STATE UNIVERSITY ACTIVITIES . . . . .	141
NUMBER OF EDUCATIONAL BOOKS READ DURING THE LAST YEAR. . . . .	142
NUMBER OF PERIODICALS READ DURING THE LAST YEAR . . . . .	142
THE AFFECT LACK OF MICHIGAN STATE UNIVERSITY LIBRARY FACILITIES WOULD HAVE HAD ON THE STUDENT'S GRADUATE PROGRAM . . . . .	143
USE MADE OF OTHER THAN MICHIGAN STATE UNIVERSITY LIBRARY FACILITIES . . . . .	143
USE MADE OF LIBRARIES OTHER THAN MICHIGAN STATE UNIVERSITY LIBRARY FOR GRADUATE WORK.	144
EMPLOYMENT OR ACTIVITIES OF GRADUATES DURING THE SUMMER . . . . .	144
MILITARY SERVICE AT THE BEGINNING OF THE MASTER'S DEGREE PROGRAM . . . . .	145
YEARS OF MILITARY SERVICE COMPLETED AT THE BEGINNING OF THE MASTER'S DEGREE PROGRAM .	145
YEARS OF NON-EDUCATIONAL WORK BETWEEN HIGH SCHOOL GRADUATION AND THE BEGINNING OF THE MASTER'S DEGREE PROGRAM . . . . .	146
THE TIME INTERVAL BETWEEN RECEIPT OF THE BACHELOR'S DEGREE AND THE BEGINNING OF THE MASTER'S DEGREE PROGRAM . . . . .	146
CLASSROOM TEACHING AS A PART OF FUTURE PLANS.	147
PRINCIPALSHIP AS A PART OF FUTURE PLANS . .	147

Appendix	Page
POSITION OF SUPERVISION OR DIRECTOR AS PART OF FUTURE PLANS . . . . .	148
SUPERINTENDENCY AS A PART OF FUTURE PLANS . .	148
A COLLEGE POSITION AS A PART OF FUTURE PLANS .	149
A POSITION OUTSIDE OF EDUCATION AS A PART OF FUTURE PLANS . . . . .	149
TYPE OF POSITION HELD BY GRADUATES DURING SCHOOL YEAR 1959-1960 . . . . .	150
SIZE OF SCHOOL SYSTEM WHERE GRADUATE WAS EMPLOYED DURING SCHOOL YEAR 1959-1960* . .	150
SALARY REPORTED BY GRADUATES FOR THE SCHOOL YEAR 1959-1960 . . . . .	151
GRADUATE'S PLANS FOR TAKING COURSES BEYOND THE MASTER'S DEGREE. . . . .	151
TYPE OF COURSE PROGRAM GRADUATES PLAN TO TAKE BEYOND THE MASTER'S DEGREE . . . . .	152
NUMBER OF YEARS OF TEACHING EXPERIENCE AT THE BEGINNING OF THE MASTER'S PROGRAM . . . .	152
OCCUPATIONAL PLANS OF THE INDIVIDUAL FIFTEEN YEARS HENCE . . . . .	153
OPINION ON THE VALUE OF TEACHING EXPERIENCE AS A PREREQUISITE FOR MASTER'S DEGREE WORK . .	153
YEARS OF TEACHING EXPERIENCE DESIRABLE BEFORE BEGINNING THE MASTER'S DEGREE PROGRAM. . .	154
OPINION ON TIME SPENT SETTING UP THE MASTER'S DEGREE PROGRAM . . . . .	154
OPINION ON THE FLEXIBILITY OF MASTER'S DEGREE COURSE REQUIREMENTS. . . . .	155
SEX OF GRADUATES . . . . .	155
AGE OF STUDENT AT THE BEGINNING OF THE MASTER'S PROGRAM. . . . .	156
MARITAL STATUS OF STUDENT AT THE BEGINNING OF THE MASTER'S PROGRAM . . . . .	156

Appendix	Page
NUMBER OF CHILDREN STUDENT HAD AT THE BEGINNING OF THE MASTER'S PROGRAM . . . .	157
NUMBER OF PROFESSIONAL ORGANIZATIONS IN WHICH GRADUATE HOLDS MEMBERSHIP. . . . .	158
CURRENT EARNINGS AS A SOURCE OF FUNDS FOR MASTER'S DEGREE PROGRAM EXPENSES . . . . .	158
SAVINGS AS A SOURCE OF FUNDS FOR MASTER'S DEGREE PROGRAM EXPENSES . . . . .	159
SPOUSE WORKING AS A SOURCE OF FUNDS FOR MASTER'S DEGREE PROGRAM EXPENSES . . . . .	159
GOVERNMENT SUBSIDY AS A SOURCE OF FUNDS FOR MASTER'S DEGREE PROGRAM EXPENSES . . . . .	160
FATHER'S OCCUPATION . . . . .	160
COMPARISON OF FATHER'S OCCUPATION BY TYPE OF STUDENT WITH MALE OCCUPATIONAL DATA FOR THE STATE OF MICHIGAN (1960). . . . .	161
EDUCATION COMPLETED BY FATHER OF THE GRADUATE.	162
EDUCATION COMPLETED BY MOTHER OF THE GRADUATE.	162
TYPE OF COMMUNITY WHERE GRADUATE SPENT HIS YOUTH . . . . .	163
COMMENTS OF STUDENTS COMPARING FULL TIME STUDY WITH PART TIME AND EXTENSION STUDY. .	163



## CHAPTER I

### THE PROBLEM

#### Statement of the Problem

The purpose of this study is to identify, describe, and compare selected characteristics of students who completed course work for their Master's degree in Educational Administration at Michigan State University. Specifically, the problem is concerned with similarities and differences which might exist among full time, part time, and extension students as to academic, occupational and personal characteristics.

#### Importance of the Study

The quality of the graduate program in education, particularly at the Master's degree level, has been a source of much discussion for almost half a century. The government subsidization of veterans following World War II and the almost universal monetary recognition given to graduate degrees in the salary schedules of school systems has influenced great numbers of students to enroll for graduate work in the field of education. To handle this large influx of students, certain trends have been evident

in graduate schools. McCullock mentions at least six trends which he found in visiting ten North Central Association institutions. These trends were:

1. Much work is being given off campus.
2. The thesis is being replaced by course work.
3. Graduate courses enrolling teachers have of necessity been much like undergraduate courses; in reality, they have been an extension of the four year college program.
4. Workshops have become a regular part of graduate instruction for teachers and administrators.
5. The foreign language requirement has all but disappeared.
6. The traditional requirement of an undergraduate B average for admission to graduate work has been modified almost everywhere.

To many university authorities the above trends represent deterioration of graduate education. The blame has generally been laid to the increased numbers of students taking graduate courses part time or in extension centers. Many of these authorities suggest that increasing the amount of on-campus, regular session, work required for the Master's degree would improve the quality of the program.

The Michigan State University committee on the future of the university took this position when they stated:

---

<sup>1</sup>Robert W. McCullock, "The Role of Graduate Schools in Teacher Education: A Study of Ten Graduate Programs," North Central Association Quarterly, 30: 211-212 (October, 1955).

Off-campus education and evening graduate courses pose problems in maintaining standards of quality. The committee suggested that the colleges should strengthen and maintain residence requirements for graduate degrees sufficient to ensure program quality and continuity.<sup>2</sup>

Taking another point of view are many educational administrators and other educational practitioners. These persons point out that the Master's degree in education is becoming a necessity for the professional teacher and administrator. The Master's degree is now the minimum preparation requirement in some school systems. As a result, some suggest even greater use of extension and off-campus work than is now being utilized.

Dent<sup>3</sup> in reviewing a study conducted by the Citizen's Fact-Finding Commission in Connecticut, and Winters<sup>4</sup> in a description of a program at Syracuse University, point out that teacher colleges and schools of education can no longer limit their activities to the campus but must seek effective ways of providing field services to meet the needs of teachers on the job.

Thus, we find one group advocating tighter graduate education controls and another group suggesting that

---

<sup>2</sup>Committee on the Future of the University, "Graduate Program Important for the Future," Michigan State News, East Lansing, October 14, 1959.

<sup>3</sup>Charles H. Dent, "If Colleges Asked the Teachers," Educational Leadership, 9:22-26 (October, 1951).

<sup>4</sup>Clifford L. Winters, "Off Campus Graduate Centers: A Problem of University Adult Education," Adult Education, 10:2 (Winter, 1960), pp. 94-100.

progress in education means large numbers seeking higher degrees. While the two goals are not imcompatable, they are difficult to arrive at simultaneously. It is generally agreed that the greatest problem involved in reconciling the two positions is the factor of the part time student. The conflict of interests and the many demands made upon the students' time, as well as evening hours and administrative control difficulties on the part of the universities, tend to make the control of part time instruction more lax than that of full time on-campus work.

Part time work does not constitute the entire problem, and its elimination in all probability would not end criticism of the program. Koch,<sup>5</sup> in describing the Graduate programs in education at the University of Michigan, draws the conclusion that the Master's degree in Education is deteriorating through mass production, and that the pressure of numbers at that level coupled with dubious motivation of the student is the cause of this deterioration. Merely requiring the work to be done as full time on-campus work will not solve the problem of numbers or motivation.

Despite the widely and strongly held views on the problem, almost all of the thinking is based on observation

---

<sup>5</sup>Harlan C. Koch, "Graduate Programs in Education at the University of Michigan," Graduate Study in Education, National Society for the Study of Education, 50th Yearbook, Part I, University of Chicago Press, Chicago, 1951, pp. 234-239.

or discussion with others. There is almost no objective research on the part time student at the graduate level.

This study is an attempt to learn more about the part time student and to discover whether he differs from the full time student. A great number of the part time students are enrolled in the field of educational administration, a field which already trains far more people than the available administrative positions can absorb. This certainly results in some wastage of effort for the people who do not take administrative positions. Perhaps some of these persons should have been encouraged to take their degree in another field of work. Because of the large numbers of students available for study, this investigation is particularly related to the students who took their graduate work in educational administration.

#### Assumptions of the Study

In a study of this type, where only specific data is used, certain assumptions must be made if conclusions are to be drawn. In dealing with complex subjects such as training and vocations, it is necessary to limit the items for consideration. There are many factors which affect either or both of the above. Therefore, selected items are used to determine achievements. This selection prevents ambiguity and enables simplified statistical treatment of the problem.

1. Occupational or vocational achievement can be determined by: the position one holds, the relative size of the enrollment of the school system where employed, and the salary received. The movement up the hierarchy of administration would indicate position achievement. Salary has been widely used as an achievement factor both in educational pursuits and other occupations.

2. The records kept in the offices of the College of Education at Michigan State University are sufficiently accurate and complete for purposes of the present study. Also, the records in the University registrar's office are sufficiently accurate for securing data.

3. The grade-point average which a student received for all of his Master's degree work can be used as an indicator of his academic achievement. The grade-point average has generally been accepted as the best indicator of scholastic achievement despite its subjective weaknesses.

4. The father's occupational position and the educational level he attained can be used as an indicator of the socio-economic or class background of an individual. The use of these factors for this purpose has been indicated by several sociological studies.

#### Definition of Terms

For the purposes of this study, selected terms are given the following meanings:

1. Full time student: A person who earned at least two-thirds of the credits for his Master's degree at Michigan State University, who was enrolled for nine or more term hours of credit in on-campus courses per term, and whose main occupation was that of student while so enrolled.

2. Part time student: A person who earned at least two-thirds of the credits for the Master's degree at Michigan State University, who was enrolled for six or less term hours of credit on campus per term, and whose main occupation was other than student while so enrolled.

3. Extension student: A person who earned at least two-thirds of the credits for the Master's degree at Michigan State University while enrolled in courses given at places other than the East Lansing, Michigan, campus of Michigan State University.

4. Occupational achievement: Occupational achievement is defined in terms of three aspects:

- a. The relative size of enrollment and the classification of the school system where employed.
- b. The type of position held, such as teacher, principal, or superintendent.
- c. The salary the person receives.

5. Academic achievement: Academic achievement is defined in terms of the university grade point average for all course work applied to the Master's degree.

6. Grade point: Points are assigned to letter grades at Michigan State University in order to facilitate calculations. Four points are assigned for each credit of A. Three points are assigned for each credit of B. Two points are assigned for each credit of C. One point is assigned for each credit of D. An F is classified as a zero.

7. Grade point average: The grade point average is a number found by dividing the total points earned during a period of school enrollment by the total credits carried during the same period.

8. Administrative personnel: Any person in a leadership role who was concerned with the execution of any part of the educational plan of a school system is included in administrative personnel. They can usually be classified under one of the following titles which would be appropriate for their job assignment:

- a. Superintendent
- b. Principal
- c. Supervisor
- d. Director
- e. Coordinator

9. School class size in Michigan: High Schools in Michigan were rated for interscholastic competition purposes according to the following plan during the period covered in this study.<sup>6</sup>

---

<sup>6</sup>Michigan High School Athletic Association Bulletin, Vol. 34, No. 6 (February, 1960), p. 271.



Enrollment less than 200	Class D
Enrollment 200 through 399	Class C
Enrollment 400 through 899	Class B
Enrollment 900 and over	Class A

### Hypothesis

The general hypothesis of this study is: Full time, part time, and extension students will not differ in selected characteristics. More specifically the hypothesis can be stated:

Full time, part time and extension students will not differ in:

1. Selected academic characteristics.
2. Selected occupational characteristics.
3. Certain personal and social background characteristics.
4. Opinions held about the Master's degree program at Michigan State University.

### Limitations of the Study

The following limitations are inherent in this study, and the value of its findings are restricted accordingly.

1. The gathering of data by means of a questionnaire is subject to the usual fallacies inherent in a subjective approach for obtaining information. It must be assumed that the person answering the questionnaire has given the most objective information.

2. The students selected for the study are those who completed work for the Master's degree at Michigan State University. Thus, the findings are more applicable at this institution than at any other.

3. The graduate students studied were limited to present residents of Michigan. This factor would also tend to make the findings regional in nature.

4. The grade point average is the result of instructors' grades which often lack objectivity.

5. The study was based on students enrolled during a limited time span. Due to changing programs, the findings of this study are applicable only in so far as other programs have generally similar characteristics and offer part time study.

#### Plan of the Study

This thesis is divided into eight chapters:

Chapter one includes a statement of the problem, importance of the study, definition of terms, and limitations of the study.

In the second chapter a review of the literature concerned with part time instruction is made. In addition, the background of part time education is reviewed.

Chapter three contains a description of the methodology of the study and the procedures used in analyzing the data. The sample population and the design of the instrument are also discussed in this chapter.

Chapters four, five, six, and seven contain an analysis of the data. Questions concerning academic characteristics are examined in chapter four, those concerning

occupational characteristics are examined in chapter five, those relating to social characteristics in chapter six, and opinions about the Master's degree program are found in chapter seven.

A final chapter is devoted to the testing of the hypothesis, findings, conclusions, and implications for further research.

### Summary

This study is concerned with a comparison of full time, part time, and extension students at the graduate level of education. There is not a concensus of opinions as to the value of the type of training each of these groups receive.

The hypothesis is stated and assumptions, limitations, definition of terms, and plan of the study are detailed. The study was designed to identify in what ways, if any, full time, part time, and extension students differ on the basis of selected characteristics.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

Much has been written on the subject of part time education. Most of this literature is concerned with adult education and ranges from courses in English for immigrants to post-graduate instruction at the university level. A majority of part time instruction falls into three main categories: high school continuation type courses offered by local school systems, agricultural extension work, and evening colleges. The graduate area of instruction is usually a part of the evening college offering. However, other types of part time work have contributed to the development of the evening college in its present form.

The review of literature presented here will be concerned with the background of part time instruction, some characteristic differences in the learning situation of part time and full time students, and a review of studies related to part time work at the graduate level.

#### Development of Part Time and Extension Course Work

The history of university extension and part time work is very complex and covers many fields. Several

writers have traced the backgrounds of various phases such as agricultural extension, adult education, continuation school, evening college, and correspondence work. Such a complete history is beyond the scope and need of this report. This section will attempt to point out some of the important events that have resulted in the development of the present university evening college and extension department.

The university extension movement had its beginnings in England and was imported into the United States during the latter part of the last century. Preceding university extension were the Chautauqua, the Lyceum, and agricultural extension, the later being generally rural in character.

In reference to the history of the evening college, Dyer states:

The first period would be from some date in the last quarter of the nineteenth century to 1939. This may well be classified as the period of origins, a period which is the despair of the historian who tries to fasten on something specific which he may use as a point of departure. There is no place on the map on which one may put his finger and say that this is where evening college education began, and no date on the calendar from which one may reckon the exact time. One must, therefore, begin with the generalization that evening college education as it exists today is the unforeseen culmination of a half century of effort on the part of many different types of educational organizations whose purposes were to carry education to the masses of the people.<sup>1</sup>

---

<sup>1</sup>John P. Dyer, Ivory Towers in the Market Place (Indianapolis: Bobbs-Merrill Co., Inc., 1956), p. 31.

The first recorded effort to train teachers on a part time or extension basis was the Chautauqua Normal School of Languages which inaugurated a "Teacher's Retreat" for the training of "secular teachers" in educational methods during the summer of 1879.<sup>2</sup> Although Harvard and some other schools had inaugurated summer schools previously,<sup>3</sup> the successful summer schools at Chautauqua did much to spread this educational innovation among the colleges and universities. In 1889 Teacher's College (later incorporated with Columbia University) was announcing extension courses for teachers of New York City and the neighboring towns and cities.<sup>4</sup> As early as 1876 Michigan Agricultural College (now Michigan State University) held institutes in different communities for the purpose of enlightening farmers.<sup>5</sup>

At the turn of the century the University of Chicago and the University of Wisconsin gave extension its

<sup>2</sup>J. L. Hurlbut, The Story of Chautauqua (New York: C. P. Putman's Sons, 1921), pp. 160 ff.

<sup>3</sup>Paul Monroe, editor, A Cyclopedia of Education (New York: The Macmillan Company, 1925), I, p. 451.

<sup>4</sup>L. E. Reber, "University Extension in the United States," U. S. Bulletin of Education, Bulletin 19, 1914.

<sup>5</sup>William J. Beal, History of Michigan Agricultural College (East Lansing: Michigan Agricultural College, 1915), p. 158.

initial impetus and organization and set the pattern for university service to adults in this country.<sup>6</sup>

The University of Wisconsin has usually been considered as the institution which typified the extension movement in the United States. In 1906 the University of Wisconsin began its now famous effort to make the boundaries of the University campus coterminous with the boundaries of the State of Wisconsin.<sup>7</sup> Prior to this date, many American universities had carried on what would now be called "adult education." The action of the University of Wisconsin in 1906, however, marked the beginning of the university extension as we know it today.

The University of Chicago is probably the best example of an urban university serving the needs and people of its community through the evening college approach. In 1892 the University of Chicago was inaugurated, and university extension was included as an integral unit of the University. In 1912 the extension department was reorganized, and the main emphasis was centralized in the Chicago area.<sup>8</sup> The University of

---

<sup>6</sup>Mary L. Ely, editor, Handbook of Adult Education in the United States (New York: Teacher's College, Columbia University, 1948), p. 215.

<sup>7</sup>Paul H. Sheats and others, Adult Education (New York: The Dryden Press, 1953), p. 176.

<sup>8</sup>Reber, op. cit., p. 10.

Chicago offered a wide range of courses, and it has been notable for its tendency to adopt varied, informal, and dynamic methods of education so that adults might study for general cultural purposes in the spirit of freedom.<sup>9</sup>

Between the years of 1906 and 1913, Stephen<sup>10</sup> reports that as many as twenty-eight institutions organized university extensions, and twenty-one institutions re-organized their extension work under separate departments or administrative units.

As early as 1919 the trend toward the incorporation of extension into the university was well enough accepted that Bittner described the coming university thus:

University- The true University should have both open gates and cloistered libraries, both practical, itinerate messengers and theoretical, isolated servants. Iviwed walls and dusty laboratories may be legitimately and picturesquely, part of the same university building that houses the office of the correspondence study department.<sup>11</sup>

Following World War I there was an increased emphasis on learning in this country, particularly at the adult level. This factor and the urbanization of America, which was taking place at the same time, influenced the founding of many municipal colleges or universities. To meet the

---

<sup>9</sup>Ibid., p. 11.

<sup>10</sup>A. Stephen Stephen, "University Extension in America," Harvard Educational Review, 18: 99-108, Spring, 1948.

<sup>11</sup>W. S. Bittner, "The University Extension Movement," Bureau of Education Bulletin, No. 84, 1919 (Government Printing Office, 1920), p. 6.



need of the adult population, many urban universities offered evening classes. This resulted in a gradual separation of the extension movement and the evening college movement.<sup>12</sup>

The extension movement has remained largely rural or a service to small towns. The evening college has become urban except for the extension centers which have been established by some universities; even these centers are usually in urban areas.

The State of Michigan clearly demonstrates this trend in the two decades following World War I. Michigan State University (then Michigan Agricultural College and later Michigan State College) concerned itself mainly with agricultural and home demonstration activities. Activities were held both on and off the campus, but most of them were taken to the people and were of a non-credit nature.<sup>13</sup>

In discussing the first farmer's institutes, Beal states: "This inauguration of farmer's institutes was one of far reaching and striking importance. It was one of the milestones of progress for the Michigan Agricultural College."<sup>14</sup> This was followed by the Cooperative Extension

---

<sup>12</sup>Dyer, op. cit., p. 37.

<sup>13</sup>Madison Kuhn, Michigan State: The First Hundred Years 1855-1955, (East Lansing: Michigan State University Press, 1955), pp. 137-141.

<sup>14</sup> Beal, loc. cit.

Service which was established in 1914 when Congress passed the Smith-Lever Act. Cooperative extension has been primarily concerned with three areas of instruction: agriculture, home demonstration, and 4-H club work. Michigan State University has been actively and vigorously engaged in all phases of extension work.

In contrast the University of Michigan, more urban in scope and appeal, began campus credit programs in the 1920's and followed these by extension centers in populous urban areas. The majority of the early students were school administrators living close to Ann Arbor. An Encyclopedic Survey of the University of Michigan describes the beginning:

The custom of providing late afternoon and Saturday classes for part time students began in 1925. . . . Generally speaking these late afternoon and Saturday classes have been elected by. . . teachers regularly engaged in educational work in cities and towns situated within a radius of approximately a hundred miles of Ann Arbor. Most of these individuals have been graduate students seeking advanced degrees. . . . The Field Course in Education was first instituted in 1933. . . the field course met in conveniently located centers throughout the state but was open for credit only to graduate students.<sup>15</sup>

After World War II the University of Michigan had established resident centers for graduate credit in several Michigan cities. In 1948 Michigan State College established a Continuing Education Department which did not take the place of its established extension services

---

<sup>15</sup>Walter A. Donnelly, editor, The University of Michigan--An Encyclopedic Survey (Ann Arbor: University of Michigan Press, 1953) Vol. III part VI, p. 1083.

but rather sought to make university type courses available to the people of Michigan. Michigan State College was then able to offer evening courses on campus and extension courses through established area centers. The majority of students were enrolled in education courses.

Wayne State University, originally a municipal university, has also been very active in the evening college movement in Michigan.<sup>16</sup>

By 1953 nine public colleges or universities were offering evening or extension work in Michigan. In addition courses were being offered by private institutions. In the early 1950's a study was undertaken to determine if duplication existed in the extension offerings of public institutions in Michigan. The investigation found few cases of duplication and in those cases it was felt the duplication was necessary to meet the needs of students. The report indicated that effort was reasonably and fairly expended without undue competition between institutions.<sup>17</sup> During the 1952-53 school year 456 credit courses in professional education were offered by the nine

---

<sup>16</sup>Hamilton Stillwell, "Detroit's Merger in Adult Education," Adult Leadership, 9: 2 (June, 1959), pp. 34-36.

<sup>17</sup>The Michigan Council of State College Presidents, Field and Extension Services of the State Supported Institutions of Higher Learning in Michigan (Ann Arbor: J. W. Edward, 1956).

institutions.<sup>18</sup> Graduate courses were now available to any person in Michigan regardless of his place of residence.

Michigan's public institutions of higher learning are offering educational opportunity in many fields to persons unable to attend full time. These institutions, together with the private colleges, agricultural extension, and adult education sponsored by local school systems, certainly live up to the famous passage from the Northwest Ordinance of 1787. "Religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged."<sup>19</sup>

The implementation of facilities and opportunities for adult study is not sufficient to guarantee a successful adult education program. A successful program will require knowledge of the characteristics of the participants in such a program. The next section will describe some of the factors which should be considered in developing a program for adult part time students.

---

<sup>18</sup>Ibid.

<sup>19</sup>Quoted in Henry S. Commoger, Documents of American History (New York: F. S. Crofts and Company, 1934), pp. 121-122.

Some Characteristic Differences in the  
Learning Situation of Part Time and  
Full Time Students

Introduction

To the casual observer it would appear that there is little difference between the evening and the day student classes. Both types of classes often use the same course number and catalog description. They are often taught by the same instructor and the credits when finally earned have the same value. There are, however, certain basic differences in both the learning situation and the individuals enrolled.

This section is concerned with the learning situation as it is applied to extension or evening colleges in general, and it does not specifically mirror the situation as found at Michigan State University which is the source of the sample for the study. The discussion, of necessity, must be concerned with the "typical" student as described from various studies. Certainly we can find young and/or immature persons who have never been engaged in educational work taking evening and extension courses. Some of these individuals may be interested in an educational career while others may just be seeking an additional degree. On the other hand we may find a fifty year old man who has been a practicing administrator for some years returning to the campus full time because he

feels the need for additional university work. Such individuals will be the exception and will not fit the general remarks about the groups.

No attempt will be made in this report to discuss the process of learning. There are many excellent works on this subject generally available. Among the earlier contributors in this field was Thorndike<sup>20</sup> whose works are "classic" and still valuable as an aid in determining how we learn. Since that time there have been many more contributions to this field. Many of these works are basic and are concerned with animal or simple human skill learnings.

There has been very little research carried out on learning at the graduate level. It has generally been assumed that learning here will be more or less similar to learning at the lower levels of schooling. Such research as has been carried on has been mainly the result of efforts in the field of adult education, of which part time study may be considered a part. Many of the earlier works were attempts to prove that adults could learn. The pioneer and fundamental research in this field is E. L. Thorndike's Adult Learning.<sup>21</sup> This study is too well known

---

<sup>20</sup>E. L. Thorndike, Adult Learning (New York: The Macmillan Company, 1928).

<sup>21</sup>Ibid.

to require elaborate summary. It did show that adults can learn even though at a diminishing rate. Thorndike's study was primarily concerned with the rate of learning. Coming at the threshold of the adult education movement, it gave much impetus to that movement in the United States.

Since Thorndike's study there have been numerous studies on adult education.<sup>22,23</sup> However, many of these works would not be considered research even if a very broad definition of that term were to be used. In discussing this problem Brunner states:

Works which seem to be merely statements of philosophy based on the author's personal experience and his inevitably limited knowledge of the experience of others are freely included. So are descriptive or narrative accounts of specific projects, programs or agencies. While these may be suggestive to practitioners, and some even imply possible hypotheses for exploration, they hardly meet the accepted canons of social science or educational research.<sup>24</sup>

However, several studies involving adult learning are research studies and some of these will be mentioned later. Other areas often involve facets in which there is a general consensus of opinion. This, however, does

---

<sup>22</sup>Malcolm S. Knowles, The Adult Education Movement in the United States (New York: Holt Rinehart and Winston Inc., 1962), pp. 301-316.

<sup>23</sup>Renee and William Peterson, University Adult Education (New York: Harper and Brothers, 1960).

<sup>24</sup>E. D. Brunner et al., An Overview of Adult Education Research (Chicago: Adult Education Association of the U.S.A., 1959), p. 6.

not suggest that there is a agreement in all areas. On the contrary, because of the complex nature of learning and the inability to control all of the variables, many studies seem to develop conflicting points of view.

Another factor which has affected research in this field is the feeling of "being on the defensive" by many writers. Many university staff members feel strongly that adult education or evening colleges are not of the same caliber as regular day classes.<sup>25</sup> As a result many studies on the evening college are written with a view to defend rather than to compare. Thus, the regular day student is taken for granted while the evening college student is defended, analyzed, and excused.

#### The Learning Process

There seems to be little question as to the ability of adults to learn. Age alone is not an important factor. Freeman, in characterizing adult learning, has this to say:

Although there is a very slight decline between the ages of approximately thirty and fifty, the loss is not very serious; and, it may be argued, the loss is perhaps more than compensated for by accrued experience, better organization of intellectual behavior, and improved judgement.<sup>26</sup>

Others have indicated approximately the same findings.<sup>27</sup>

---

<sup>25</sup>Dyer, op. cit., p. 133.

<sup>26</sup>Frank S. Freeman, Individual Differences (New York: Henry Holt and Company, 1934), p. 287.

<sup>27</sup>Irma T. Halfter, "The Comparative Academic Achievement of Women," Adult Education, Vol. 12, No. 2 (Winter, 1961), p. 106.



There are, however, other factors related to adulthood. Adulthood as used here is thought of in terms of maturity and responsibility rather than sheer chronological age. The part time or extension student with family responsibility, full time employment, and community obligations would be considered an adult for all practical purposes.

Among the phenomena important in adulthood, identified by Kuhlen<sup>28</sup> are:

1. Inertia: Adults do not readily change their habits or attitudes. They do not seem as ready to accept a new theory or idea. This would seem to indicate that part time or evening college students will be less ready to change their thinking or accept new ways of doing things in their jobs.

2. More realism: Part time students want their course work realistically related to the daily problems they face. They often indicate a desire for courses that will let them work on their own particular "pet" problem or allow them to relate their problem to the course in some way.

3. Conflicting pressure: Part time students generally face financial and family responsibilities which

---

<sup>28</sup>Raymond G. Kuhlen et al., The Psychological Studies of Human Development (New York: Appleton--Century--Crofts, Inc., 1962).

affect their participation in evening or extension classes. The same individual may experience pressure to secure an advanced degree for salary improvement and at the same time feel the need to spend more time with his family.

4. Tendency to be threatened: Adults seem to be more easily threatened by change and by tests of a rating nature than do younger students. This leads them to avoid change. They feel secure in the familiar way of doing things. They will strongly defend their beliefs and often describe anything new as unworkable. They grow apprehensive over tests, marks, and comparisons with others. They enjoy the security of an "automatic B grade" for all students in a course.

Thorndike<sup>29</sup> points out that adult learning is limited not by age but by the persons themselves. They underestimate their power to learn due to attitudes and values which they hold, lack of confidence in themselves, and the disuse of powers rather than the lack of them.

Several factors in the learning process should be looked at more closely and individually. Some of the more important to this study are reviewed below.

Retention is an important factor in the learning process. It is not only important for passing the course examination, but retention is important if we are to have the necessary memory items on hand to help us with present

---

<sup>29</sup>Thorndike, loc. cit.

or future work. Underwood<sup>30</sup> and Deese<sup>31</sup> point out that forgetting is the result of interference or competition of other things that the person learns or is involved with. Forgetting is not strictly a time factor of disuse, although this does play a part.

The part time student with outside employment will have competition from much material unrelated to his work as a student. This should put him at a disadvantage because he will have many things vying for a place in his memory. In addition the extended time required to complete his course work will bring into play the factor of disuse or at least the lack of reinforcement. The full time student will have the advantage of more regular and immediate reinforcement of material learned. This reinforcement can come about through more frequent class meetings for the same course; and related learnings may take place in other courses for which the student has enrolled. The full time student is usually enrolled for three or more courses each term while the part time student usually takes one course each term.

Another factor which may affect full and part time students differently is the transfer of training. While

---

<sup>30</sup>B. J. Underwood, "Interference and Forgetting," Psychological Review, 64: 49-60 (January, 1957).

<sup>31</sup>James Deese, The Psychology of Learning (New York: McGraw Hill Book Company, 1958), p. 267.

no attempt will be made to settle the polar argument of the existence of transfer of training, many studies have shown that at least some transfer does take place.<sup>32,33</sup> The full time student taking two similar courses concurrently would benefit from the likeness of general principles common to both courses. The part time student who takes one course a particular term and a similar course the term following would benefit from transfer of principles from the first to the second only. The transfer of training involved should benefit the full time student to a greater degree.

A second and probably more important facet is the "learning how to learn" aspect of the transfer of training.<sup>34</sup> Because learning is the major occupation of the full time student, his psychological mechanisms are geared to study.<sup>35</sup> His learning should be better organized and more efficient. The types of tasks will be similar whether they involve rote learning, organizing material, written expression, or oral expression. Rapp<sup>36</sup>

---

<sup>32</sup>Deese, op. cit., p. 213.

<sup>33</sup>Alber Rapp, "The Experimental Background of the Problem of Learning," The Classical Journal, 40: No. 8 (May, 1945), pp. 467-480.

<sup>34</sup>Deese, op. cit., p. 227.

<sup>35</sup>Rapp, loc. cit.

<sup>36</sup>Rapp, loc. cit.

indicates that transfer of common principles from subjects which are similar to one another is helpful in learning. Although transfer of training will be applicable to both full time and part time students, the full time student is in a position to gain more of the benefits available.

The length of the class period or learning period has been found to have an affect on the learning taking place. Kingsley indicates this view when he states that, "Several studies support the view that distributed effort in learning yields better retention than the same amount of effort expended in massed learning."<sup>37</sup>

Because the part time student at Michigan State University takes almost all of his course work in the evening, he receives most of his instruction in three hour time blocks. The full time student often has classes of one hour each on three separate days. Thus, the full time student would seem to benefit most from the distributed learning periods. However, experiments conducted with rote learning indicate that permanent retention is about the same for distributed and massed learning.<sup>38</sup> The full time student should have an advantage for such things as course examinations, but the long range affect may be little.

---

<sup>37</sup>Howard L. Kingsley, The Nature and Conditions of Learning (New York: Prentice Hall, Inc., 1955), p. 466.

<sup>38</sup>B. J. Underwood, "Studies of Distributed Practice," Journal of Experimental Psychology, 45: 253-259 (April, 1953).

## Motivation

Psychologists have long made a distinction between the things we learn and the things which prompt us to learn. Motivation is an invented concept used to describe something not directly observable. In other words it can be described as concerned with the incentives which cause us to want learning of a particular type. Motivation, being a very complex construct, is very difficult to analyze or manipulate. Most of the experimental work on motivation has been concerned with incentive value and is not particularly relevant to the question of the relationship between motivation and learning.<sup>39</sup> However, certain theories have been advanced and general studies conducted on the problem. The large number of students taking graduate training in education certainly indicates motivating factors are at work. One of the overall motivating factors is the high value placed on education in our society. This particularly affects teachers since they generally come from the middle and lower classes of our society. These classes look to education as a means of gaining status.<sup>40</sup>

Although the graduate programs in educational administration are primarily vocational in nature, many individuals are enrolling in these courses without definite

---

<sup>39</sup>Deese, op. cit., p. 114.

<sup>40</sup>W. Lloyd Warner et al., Who Shall Be Educated? (New York: Harper and Brothers Publishers, 1944), pp. 98-109.

plans for employment in this field. The full time student is usually enrolled with the definite plan of future employment in his specific field of preparation. He sees graduate education as an investment which will bring dividends in future job advancement. The part time student may possess these same desires and feel that he cannot enroll full time because of financial or other reasons. However, many part time students will not have the specific vocational objectives of their graduate program as their primary reason for enrollment.

A study by the staff of the Center for the Study of Liberal Education for Adults<sup>41</sup> in Chicago summarizes the question of motivation by outlining the principal factors under two areas: (a) social factors and (b) vocational factors.

Under social factors are included such things as social conformity or the desire to be doing what the peer group is doing. Some persons take courses because they feel inferior if they are not working toward a Master's Degree. Many of these individuals have no strong desire for a particular area in education, and administration seems to be a logical choice. Another factor is the desire for new experiences. A man or woman may be bored or lonely and feel that taking evening courses may bring

---

<sup>41</sup>A Study by the Staff of the Center for the Liberal Education for Adults, cited by J. P. Dyer, op. cit., p. 2.

some new interest into life. He may even be seeking a way to meet new friends. Finally, the irrational and compulsive element should be considered. In some instances the person may be seeking support for their ideas, or the taking of courses may seem like a good idea. Such persons seldom finish the work for a degree.

Vocational factors are those basically concerned with making money or "getting ahead." To many of these students, a degree in school administration will open the door for vertical job mobility. Traditionally, administration has been looked on as the way to "get ahead" in the teaching profession. Another factor is delayed and undirected mobility. This condition is indicated by the person who wants the degree in administration for no immediate or specific purpose, but who feels that it would be nice to be prepared in case an opening should occur. This may be an important factor for many part time students choosing educational administration as an area of graduate specialization. Finally, persons with administrative responsibility may feel the need for economic role fulfillment. This individual will be taking courses to better fit him in his present position.

Grinnell<sup>42</sup> uses a different method of classifying the underlying motivation of graduate students:

---

<sup>42</sup>John E. Grinnell, "The problem of the Mediocre Graduate Student," Peabody Journal of Education, 35: 131-142 (November, 1957).



1. Those who come for more education and like the task of learning.
2. Those who come to keep up with the Jones.
3. Those who want to be supervisors. (They have a desire to feel important.)
4. Those who are required to satisfy the front office or state law.<sup>43</sup>

He concludes that the part time student is more often found in the last three categories and that extension students are more interested in who the instructor will be than in what course is being offered.

Of the many factors suggested for motivating forces in learning, vocational considerations have been found to be the most important.<sup>44</sup> For many teachers or educators this can be basically considered to mean higher income. The policy of paying extra salary increments for advanced degrees is quite universally accepted in the United States; yet many of these increments do not require areas of specialization related to the present job. This has induced many students to specialize in educational administration who should be specializing in a teaching field. Such persons often allow the degree to take precedence over learning as the end product of advanced education.

---

<sup>43</sup>Grinnell, loc. cit.

<sup>44</sup>D. Nicholson, "Why Adults Attend School--An Analysis of Motivating Factors," University of Missouri Bulletin, 56: No. 30, 1954.

Despite the fact that more material has been written about motivation than any other psychological topic, we still know little about what causes one person to attend school and another not to enroll.<sup>45</sup> Also, we know little about the motivations that influence staying in school or dropping out. The school setting and the instructor certainly play a part. Proper teaching methods can increase persistence of enrollment. The part time student is more sensitive to proper teaching and educational setting than is the full time student. The former can drop course work without a major upset in his daily routine. The full time student would be confronted with major life changes if he dropped his course work.<sup>46</sup>

Love,<sup>47</sup> in a depth type study, found education to be a source of satisfaction, happiness, and success to the educationally motivated. This last factor may be one of the major forces that causes one individual to attend full time classes with a financial sacrifice required and the other individual to avoid all advanced training. Between these two will be individuals with varying degrees of motivation.

---

<sup>45</sup>Deese, op. cit., p. 113.

<sup>46</sup>M. C. Wilson and Gladys Gallup, "Extension Teaching Methods," U. S. Department of Agriculture Extension Circular No. 495, 1955.

<sup>47</sup>Robert Love, "The Use of Motivation Research to Determine Interest in Adult College Level Training," Educational Record, 34: 210-218 (July, 1953).

### The Effects of Attitudes and Interests on Learning

Due to educational experiences and other factors, the graduate students will tend to hold widely divergent views on issues, attitudes, and ways of behaving. These differences will be especially apparent in liberal and social science areas.<sup>48</sup> Attitudes are especially important in the field of education because they form the frame of reference which is used to evaluate new materials or new situations.<sup>49</sup> All new learning is evaluated in terms of past learnings or past experiences.

Levine and Murphy,<sup>50</sup> in a study involving the learning of controversial material, found that the amount of learning was greater and forgetting less when the groups were exposed to material congenial to their previous attitudes. Thus, it can be safely assumed that biases can retard or foster learning.

Because the part time student usually has had more work experience in the field of education and is often

---

<sup>48</sup>Brunner, op. cit., p. 49.

<sup>49</sup>Muzafer Sherif and Hadley Cantril, "The Psychology of Attitudes," Psychological Review, Part I, 52: 295-319 (November, 1945).

<sup>50</sup>Jerome Levine and Gardner Murphy, "The Learning and Forgetting of Controversial Material," Readings in Social Psychology, Maccaby, Newcomb, Hartley, editors (New York: Henry Holt and Company, 1958), 151.

older than the full time student, he is more likely to have fixed attitudes and interests. These attitudes can affect learning in many ways. The student may take the attitude that all new ideas are impractical with the result that he closes his mind to improved ways of doing things. He may seek specific areas for study and avoid all areas in which he may find differences of view. This can result in a poorly planned course program. This has been viewed by many educators as a definite weakness of the part time program: an unbalanced program as a result of students having greater freedom in selecting courses within a limited range of offerings. The full time student more often lacks professional experience and is therefore more willing to rely on his counselor for advice in determining his course program.

Attitudes can have a positive value and can motivate persons to study a certain area with enthusiasm.<sup>51</sup> In this situation the developed attitudes of the part time student may give him the drive to study more effectively or may even have been responsible for his enrollment in graduate work.

---

<sup>51</sup>Muzafer Sherif and Carolyn Sherif, An Outline of Social Psychology (revised edition; New York: Harper and Brothers, 1956), p. 207.

### The Physical Setting for Learning

The learning situation is affected by many factors which are outside the learning materials and the learner's mental state. Because the full time student is involved in a program which has evolved as specifically designed for learning, he has an advantage compared to his part time counterpart.

One of the characteristics of evening and extension classes is heterogeneity. In these classes will be found persons with widely varying ages, job experiences, interests, abilities, and backgrounds.<sup>51</sup> These same classes will often include underclassmen, recent college graduates, experienced teachers, and administrators with Master's degrees and several years of experience. There will be persons interested in learning and people interested in simply getting a degree. One cause of heterogeneity is the requirement of many institutions that evening and extension courses "pay their way." In order to build the classes large enough to be self-supporting, it is necessary to make the class available to a wide range of students. Dyer indicates the wide-spread requirement of evening colleges being self-supporting when he states: "Ninety-six per cent of the evening colleges report that year in and year out their income is greater than their expenditures."<sup>52</sup>

---

<sup>52</sup>Dyer, op. cit., p. 43.

Commuting distance often limits the area to be served, and as a consequence extension classes suffer the most in regard to heterogeneity since they are more likely to be held in less densely settled areas.

Many evening and extension classes offer dual enrollment to either graduate or undergraduate students. While this situation is found in day classes, it is more characteristic of part time classes. The span of educational backgrounds is wide in such classes. The requirement of an extra term paper for graduate students does not turn the course into one of graduate caliber. Chiappetta speaks out against these mixed classes when he states:

More collegiate work would enrich all of us, but to label such additional work graduate merely because it occurs after the completion of the baccalaureate degree, needlessly confuses the functions of university level institutions.<sup>53</sup>

Class size has long been recognized as an important factor in learning. The affect of small classes as a definite aid to learning improvement is too well accepted to need documentation. One of the important measures or criteria used to judge educational institutions has long been teacher pupil ratio. This factor has been especially emphasized at the graduate level. Both full and part time students will of necessity be enrolled in large classes, but the part time student often has limited opportunity

---

<sup>53</sup>Micheal Chiappetta, "Higher Education, Graduate or Undergraduate," School and Society, 77: 308-310 (May 16, 1953).

to enroll in seminars of small size. Yet, these seminar type classes are considered by most faculty members to be very helpful, and they give personal communication between student and instructor. Berelson, in his definitive work on graduate education, indicates the positive relationship of teacher-pupil contact and success in the graduate program.<sup>54</sup> Active participation and discussion are important to the learning process.<sup>55</sup> In general, discussion is in an inverse ratio to class size. The part time student will very likely miss much of the small group discussion opportunity with its valuable exchange of ideas. Outside the classroom the part time student often lacks the opportunity to study with other members of the class or engage in enlightening discussions with others concerning educational issues. Such discussions help to broaden the outlook of the participants and reinforce learning.

Teacher-pupil communication is also very important to the learning process. In discussing the intercommunication of teachers and students Dyer states:

If one accepts the philosophy that the teacher should know and understand his individual students the matter of student teacher contacts outside the formal classroom strikes at the very heart of intercommunication. . . . Here the particular problems of the student come to light, and the best possible type of counseling may take place. Mutual teacher-student adjustments may well be achieved in a face to face situation in

---

<sup>54</sup>Bernard Berelson, Graduate Education in the United States (New York: McGraw Hill Book Co. Inc., 1960).

<sup>55</sup>Deese, op. cit., p. 202.

the quietness of the teacher's study or office. This is the sort of thing which is so conspicuously absent in the average evening college.<sup>56</sup>

The library facilities play an important part in learning at the university level, yet the part time and especially the extension student is severely handicapped in the use of library materials. The extension student, because of his remoteness from the campus, is often unable to gain access to materials other than those specifically required. On occasion the instructor may bring library materials with him. Because these materials are limited, they will be most directly connected with the class being taught. The evening college student, although physically able to visit the university library, is hampered by overnight reserves and other restrictions. This removes a great number of books from his active use.

In a study conducted at the University of Illinois,<sup>57</sup> extra mural students were polled as to their opinions about the adequacy of library facilities. Thirty-four per cent thought the library facilities were adequate, forty-four per cent of the students thought the library facilities were not adequate, and twenty-two per cent were uncertain.

The full time student is usually able to study and do research in a setting in which library materials are

---

<sup>56</sup>Dyer, op. cit., p. 131.

<sup>57</sup>Gerald C. Carter et al., "Characteristics of Extra Mural Students," Adult Education, Vol. 12, No. 4 (Summer, 1962), pp. 223-230.



readily available. Although the library is the main research tool for the graduate in education, other devices and materials are sometimes used. These are more likely to be available for effective use to the full time student. Sorensen<sup>58</sup> mentions dependence upon fees for sole support, lack of research facilities, lack of library services, long class periods, and the lack of student study time as being severe handicaps to the part time student.

Counseling for the selection of courses is often on a casual basis for the part time student. All too often the counseling he gets is received at the rush of registration. This affords little opportunity to really fit the course pattern to the needs of the individual. The extension student sometimes receives less than this; he takes whatever courses become available in his area. This often results in substitutions in the course plan with a collection of courses rather than a curriculum.<sup>59</sup> Many studies of counseling indicate that more and better counseling would be of real benefit to these part time students.

In reference to the role of the faculty in the learning situation, Dyer<sup>60</sup> mentions some of the problems

---

<sup>58</sup>Herbert Sorensen, Adult Abilities (Minneapolis: University of Minnesota Press, 1938), pp. 107-111.

<sup>59</sup>Brunner, op. cit., p. 40.

<sup>60</sup>Dyer, op. cit., pp. 112-137.

that face the faculty and staff of the evening college.

Among these are:

1. Downright hostility on the part of some day college instructors.
2. The loss of the evening which they would like to spend with the family.
3. Evening college instruction is looked down on as something to be avoided and is often given to junior faculty members. (This is especially true of extension courses.)
4. Isolation from the university at large, and fellow faculty members because of the hours of class meetings.<sup>61</sup>

The administration of evening colleges and the formulation of a program is often permitted to develop with little or no direction. In many institutions there is no clearly defined authority or policy. E. B. Norton in a report on university services states:

. . . of 180 institutions . . . surveyed, only 55 institutions reported that definite objectives for inservice and field service programs had been developed. One hundred sixteen institutions reported no objectives had been formulated."<sup>62</sup>

Some universities have attempted to solve the problem of inequality of instruction by offering part time instruction at the campus on Saturday mornings. These advocates feel that this causes the work to be of the same caliber as regular classes and eliminates the fatigue

<sup>61</sup>Ibid.

<sup>62</sup>E. B. Norton, Chairman, "Report of the Studies and Standards Committee, Field Services Program," American Association of Colleges for Teacher Education, Sixth Year-book, 1953, pp. 70-75.

often present when classes meet after the students have completed a day's work. Also the library becomes available to these students in the afternoon. Certainly there are some advantages to be gained by such a program. McCullock<sup>63</sup> feels that this is just a way to get more on-campus credit but fails to consider the problems generated by having many students drive long distances and lose a valuable part of their week-end.

There are many individual and personal problems that affect accomplishments in the field of learning. The part time student may have been out of school for some time and finds he lacks current knowledge in the field or has difficulty recalling past learning. The older student may be affected by sight and hearing decline. The conflict of job and social obligations may cause undue worry or pressure. This probably is a factor in the higher absenteeism and dropouts among part time students.<sup>64</sup>

Finally there is the dichotomy facing education: should the student be given what he wants or should the faculty determine what is best for him? These two points of view come into sharpest focus between the full time and part time student. The part time students have demanded, and

---

<sup>63</sup>Robert W. McCullock, "The Role of the Graduate School in Teacher Education," North Central Association Quarterly, 30: 216 (October, 1955).

<sup>64</sup>Kuhlen, op. cit., p. 427.

their instructors have seemed interested in, courses which fit practical needs and everyday problems. One of the areas of greatest strength for part time instruction has been this very practical approach to education. Meeting the needs of individuals has been emphasized with great success in evening colleges and adult education in general. The full time student has been under the more traditional approach of the entire university faculty. This has resulted in a rather formal lecture approach to education. The full time student often lacks practical experience and so is less able to determine what he wants or needs. Both approaches to the problem have strong and weak points.

This brings up a problem in the field of evaluation of graduate education. The goals for the same course may be different if taught in different settings even though the course number is the same. The advocates of the full time day university classes contend (with some justification) that the full time student better masters the course material. The adult education advocate is just as strongly contending that the part time student can better apply learning to the job situation.

Our conventional college work is basically evaluated on a knowledge of subject matter involved. This is usually accomplished by means of an examination. Limitations of time and workable techniques have ruled out many other types of evaluations for individual courses.

The concept of acceptance, rather than learning, has been used by sociologists as the final step in the process. Several studies cited by Brunner<sup>65</sup> report that the final step in learning is acceptance, adoption, or use of the material in a new situation. The true measurement of learning is only possible when it is used in a new situation. He further points out that:

Conventional tests not only are related to experiences, situations, and problems unrealistic from the adult point of view but they give little if any attention to the adult's ability to get along with others, or to the sociological forces.<sup>66</sup>

The maturity, biases, and desire for something practical from a learning situation together with slower functioning at the adult level, put the part time or older student at a disadvantage in timed subject matter or end of term tests. However, the above factors with more careful use of time and added experience will aid the part time student in making use of the things he does learn. He knows what he wants and how he hopes to use it.

The full time student is more likely to be motivated to learn in order to pass the course tests. He often has only a vague idea of how to use the material until he is in a job situation.

---

<sup>65</sup>Brunner, op. cit., pp. 13-17.

<sup>66</sup>Brunner, op. cit., p. 24.

### Conclusion

In analyzing the learning situation we find some factors favor the part time student, but most factors favor the full time, on campus, student. In one of the few studies directed specifically at the differential learnings of residential and non-residential students, Lacognata<sup>67</sup> found residential instruction tended to be the more effective learning situation. However, the experience and maturity of the part time student enable him to profit from his studies in a way which is not often available to the full time student.

Dyer probably sums up the differences in the two situations when he states:

The superior adult student is as good or better than the superior day student. The average students in both classifications are about equal. The poor student in the evening college is likely to be considerably poorer than his contemporary in the day college.<sup>68</sup>

Education is not a simple process and the effect of many factors are involved in the learning process.

---

<sup>67</sup>Angelo A. Lacognata, A Comparison of the Effectiveness of Adult Residential and Non-Residential Learning Situations, Center for the Study of Liberal Education for Adults (Chicago, 1961).

<sup>68</sup>Dyer, op. cit., p. 17.

Review of Studies Concerned with the  
Relationship of Part Time and Full  
Time Study

A review of the literature reveals many reports dealing either directly or indirectly with comparisons of college or university students, but few dealing specifically with differences between part time and full time students at the graduate level.

Numerous studies have been made, however, comparing various collegiate groups. Most of these studies involved undergraduate students and were conducted with a variety of criteria for determining the grouping. Occupational position, completion of college work, type of institution, and test data are among the most commonly used. Although these studies had little direct bearing on the present study, they were helpful in constructing a questionnaire and in determining the overall plan of the study.

Only a few reported studies attempted to directly compare the part time and the full time student. One of the studies directly relating to achievement of part time and full time students was a study by Anikeeff.<sup>69</sup> The problem with which he dealt was: "Should students receive regular college credit for work completed under an off campus extension program?"<sup>70</sup>

---

<sup>69</sup>Alexis M. Anikeeff, "Scholastic Achievement of Extension and Regular College Students," Journal of Applied Psychology, 38: No. 3 (June, 1954), pp. 171-173.

<sup>70</sup>Ibid.

An examination was administered to two groups of students in personnel management classes. One group was composed of male evening extension students. The other group consisted of regular day students. In both groups tests were conducted on two different occasions. The tests were especially refined for the purpose and followed accepted procedures. The two groups were matched for ability by pre-tests. In both test situations the regular day students scored significantly higher than the evening extension students. In view of the results obtained a question was raised about the advisability of granting college credit for work performed in evening off-campus extension courses.

Anikeeff suggests that differences in educational background, the fact that the extension courses came at the end of the day, fatigue of the instructor, and motivation toward daily job or education, are possible causes for the variation in test scores.<sup>71</sup> The sample for evening classes was composed of veterans receiving government subsidy, while the day class was composed of approximately twenty-five per cent veterans. Although this factor was not tested, it might have affected the potential and interest of students enrolled in the extension course.

---

<sup>71</sup>Ibid.



The second study involving part time and full time students was made at Roosevelt University by the staff of the Center for the Study of Liberal Education for Adults and reported by Dyer.<sup>72</sup> In this study twenty-four pairs of students were selected from the college records. The students were matched on the basis of sex, credit hours completed (sixty hours), and ACE Psychological Test total scores. Academic ability as measured by the ACE examination was held constant. Academic achievement was measured by the Educational Testing Service Sophomore Comprehensive General Culture Test, which tests knowledge and understanding of history, social studies, literature, fine arts, science, and mathematics. The average percentile rank, based on national norms, on this examination for both day and evening college students was seventy.

The second phase of the study involved performance in the classroom. Instructor's records for four courses were used. In each case objective type examinations were given to both day and evening college students. Only students completing courses were used in this part of the study. The results indicated no significant difference in achievement between day and evening students.

---

<sup>72</sup>Dyer, op. cit., pp. 18-19.

Four studies reported an attempt to compare students in terms of their mental abilities.

Herbert Sorenson<sup>73</sup> in 1933 at the University of Minnesota compared the mental ability of extension students with that of resident freshmen and found that measured abilities of the two groups were essentially equal. The lowest scoring extension students were sometimes lower than the lowest of the resident students, but the best extension students were a little more capable than the best resident students.

McGrath and Froman<sup>74</sup> found evening students at the University of Buffalo to be superior to resident freshmen but inferior to resident seniors.

Farnum<sup>75</sup> in a 1955 study compared students in the day and evening classes at the University of Rhode Island School of Business Administration. Extension or evening students scored both higher and lower than resident students in tests of comprehension, but there were no differences in mean scores.

---

<sup>73</sup>Sorenson, op. cit., p. 190.

<sup>74</sup>Earl J. McGrath and Lewis A. Groman, "College Aptitude of Adult Students," School and Society, 45: 102-104 (January 16, 1937).

<sup>75</sup>Hollis B. Farnum, "Comparison of Aptitude of Extension and Campus Students," Journal of Applied Psychology, 41: 63-65 (February, 1957).

Jane Zahn<sup>76</sup> in reporting on two studies conducted at the University of California, indicates that mental ability scores were related to the amount of college level work previously taken. Thus, she concludes that higher scores on mental ability tests are a function of the amount of formal education completed.

Two Michigan studies reported on the characteristics of evening college and extension students. Although not directly comparative in nature, the studies attempted to characterize the students.

Hagelberg<sup>77</sup> in a study of extension students in Northwestern Michigan, found it difficult to describe the typical extension student. Rather, the students represented a broad spectrum of characteristics. Three main reasons were indicated for taking the extension courses. One, they wanted to improve themselves; two, they wanted to earn a degree; and three, they wanted to secure a teaching certificate.

Taylor and Saupe<sup>78</sup> in a survey of evening college students at Michigan State University, reported that the largest group of students were education majors enrolled

---

<sup>77</sup>Milton J. Hagelberg, "A Study of the Goals and Characteristics of Extension Credit Students in Northwestern Michigan" (unpublished Ed. D. thesis, Michigan State University, 1960).

<sup>78</sup>Clair L. Taylor and Joe L. Saupe, A Survey of Evening College Students, Office of Institutional Research, Michigan State University, 1962.

at the Master's degree level. Most of these students were taking one course, had no other relationship with the university, planned to complete the requirements for the degree, and planned to continue in the evening school division.

Both of these studies point to the lack of involvement in university affairs of part time students. These students have definite goals and hope to obtain these goals with the least amount of other than course work involvement.

Marcus,<sup>79</sup> in a study of opinions toward off campus college credit courses, asked the opinions of students enrolled in off campus courses, instructors teaching off campus courses, and county superintendents of schools. The data was collected by the questionnaire survey method and included public higher education institutions in Michigan. Personal information was gathered but was not compared with full time students. The opinions of various persons and groups were tabulated into categories. The areas in which there was general agreement were reported as findings of the study. Among the more important findings were:

Experiences with off campus college credit courses tend to create a more favorable opinion toward these classes.

---

<sup>79</sup>J. D. Marcus, "A Study of Opinions toward Off Campus College Credit Courses" (unpublished Ed.D. thesis, Michigan State College, 1953).

Elementary and Secondary teachers generally changed their teaching methods as a result of having been enrolled in off campus courses.

Weaknesses of off campus instruction mentioned most frequently included: courses were impractical, instruction was inadequate, facilities and references were inadequate, and students were physically fatigued.

Strong points included: students obtained teaching skills and information, students are more mature and experienced, and there is practical application of subject matter.

In comparing college credit courses on campus and off campus: opinions were in general agreement that there were only slight differences between marks, difficulty of work, and testing used in the courses.

It was the opinion of many of these people that most college courses could be offered off campus as adequately as on campus, with slight modification in some cases.

No studies were found which reported comparisons of part time and full time graduate students. However, each of the reviewed studies have implications for such a study. The lack of agreement as to the differences between full time and part time college students and learning situations, points to the need for more study in this area. As the Master's degree in education takes on a different purpose and the nature and requirements of the degree change, the

classical arguments against part time and extension work may no longer be valid.

Carmichael<sup>80</sup> and Berelson<sup>81</sup> are among those who have indicated the changing nature of the Master's degree and particularly the Master's degree in education. Berelson states:<sup>82</sup>

Nor am I alarmed over the imminent prospect of off campus graduate work. For the present, that is limited to the professional fields of education and engineering, and I do not look for its extension to the arts and sciences, much less to the doctoral level.

No study of the literature could be concluded without making mention of Conant's book.<sup>83</sup> In his discussion and evaluation of Graduate Education for Teachers, Conant sees little good in part time course work. He states the standard arguments against part time work and suggests that graduate level education can only be effective in a full time, on campus situation. He recommends that teachers be given leaves of absence to enable them to secure graduate education on a regular basis as a full time student.

Conant's analysis of the supposed shortcomings of part time study is not supported by identified research.

<sup>80</sup>Oliver C. Carmichael, Graduate Education (New York: Harper and Brothers, 1961).

<sup>81</sup>Bernard Berelson, Graduate Education in the United States (New York: McGraw Hill Book Company, Inc., 1960)

<sup>82</sup>Ibid., p. 104.

<sup>83</sup>James Conant, The Education of American Teachers (Englewood Cliffs, New Jersey: Prentice Hall, 1963).

The support is again, as indicated in the previous review of the literature, one of opinion. However, due to the prestige of Conant, this opinion will be widely circulated and will in all probability form the basis for action in many schools and universities.

### Summary

While there is much descriptive literature dealing with part time education, there are few studies which relate part time study to full time study.

The literature concerned with the setting in which learning takes place seems to indicate that the full time student has many advantages. There is widespread belief (not necessarily supported by research) among writers that part time instruction is inferior to full time instruction. However, the limited research indicates that with extra effort and motivation the part time student can do as well as the full time student.

## CHAPTER III

### PROCEDURES AND TECHNIQUES OF THE STUDY

#### Preliminary Activities

After the topic of this study was suggested to the writer, it was necessary to determine if such a study was feasible. The topic was discussed with several staff members from the College of Education at Michigan State University. The study seemed to represent an area in which there was need for research.

A survey of the literature in the field revealed that little research had been done in this area. The graduates with Master's degrees in education from Michigan State University were then identified. Lists of these graduates from several past years were compiled. These investigations revealed that there were sufficient persons available for a study of the type contemplated.

#### The Sample

The sample for this study consisted of persons receiving Master's degrees in educational administration from the College of Education at Michigan State University during the years 1954 to 1958 inclusive, and who resided in Michigan at the time of the investigation.



The years 1954 to 1958 inclusive were used for two reasons. First, just prior to 1954 there had been a reorganization of the College of Education at Michigan State University. Students of prior graduation dates would not have completed their work under a program similar to those after 1954. The year 1958 represented graduates who would have had an opportunity to report a period of employment after receiving the Master's degree. Second, the graduates of this period furnished a sample sufficiently large to be statistically useful.

The sample was restricted to educational administration graduates because this constituted the largest group of Master's degree recipients in the College of Education at Michigan State University. It was felt that the sample should be related in as many ways as possible so as to rule out extraneous factors.

In order for the salary, job classification, and school system size factors to be meaningful for comparison purposes, it was necessary to restrict the group to one state. In one state the reporting of these items would be as nearly similar as would be practical. Although differences will be great in any state, the items are more related than if they had been drawn from the entire United States. Most of the Master's degree recipients from Michigan State University's College of Education find employment in Michigan. Therefore, Michigan was used for occupational data.

The sample, or population, as determined above was not subjected to partial sampling or matching techniques. Instead, the entire population was used. Recent studies indicate that matching and limited sampling may lose valuable portions of the population being studied. Norman<sup>1</sup> found the respondents to mailed questionnaires to be superior in intellectual and personal factors as compared with non-respondents. Matching, in particular, has a tendency to lose the extremes of the group being investigated. Although the extremes constitute a small part of the sample they may be significantly important.<sup>2</sup>

To avoid losses of significant data efforts were made to secure responses from the entire population being studied. For this reason the entire population was used as the sample.

The first step in determining the population was the drawing up of a list of all persons who received Master's degrees in educational administration from Michigan State University for the years 1954 to 1958 inclusive. This list was compiled from record folders on file in the office of administrative and educational services at the College of Education at Michigan State University. A total of

---

<sup>1</sup>Ralph D. Norman, "A Review of Some Problems Related to the Mail Questionnaire," Educational and Psychological Measurement, 8: 234-245 (Summer, 1948).

<sup>2</sup>Sidney Seigel, Nonparametric Statistics (New York: McGraw Hill Book Company, 1956).

296 students were listed. (Table 2.) (Tables 1 through 62 are found in Appendix B.) Current addresses for these persons were then obtained from the office of Alumni Relations and College of Education records. In order to satisfy the requirement that all persons being studied resided in Michigan, persons with other than Michigan addresses were discarded for this study. Fifty-one persons were thus eliminated from the total population. (Table 2.)

In as much as summer session work for all students is quite similar, summer session work was not considered in selecting students for the study. Summer session attendance consists of full time work for almost all students so enrolled, and the experiences are similar for all students. However, students with all or most of their work taken during the summer sessions were eliminated from the study. Forty-three students fitted this category and were thus eliminated from the study.

The criteria as established (see Chapter 1) required a student to have completed two-thirds of his work in a particular study category to be included in the study. It was found that twenty-nine students did not meet this established criteria and were eliminated from the study. The study categories are defined as: full time, part time, and extension. (Table 2.)

Questionnaires were sent to one hundred seventy-three students. Fourteen students were deceased, had moved, or did not respond to the questionnaire. One questionnaire

was unusable in the study. One hundred fifty-eight questionnaires were used in all. This represents ninety-five per cent of the possible respondents. Rathney and Mooren<sup>3</sup> indicate the need for approaching one hundred per cent return in educational follow-up studies. They also indicate return percentages below eighty per cent are not acceptable.

Of the one hundred fifty-eight students studied, forty-three were classified as full time students, eighty-four were classified as part time students, and thirty-one were classified as extension students. (Table 3.) This number and percentage of students provided sufficiently large groups to apply appropriate statistical techniques with relative confidence.<sup>4</sup>

#### The Instrument

The instrument used in this study was constructed especially for this study. The design and requirements of the investigation eliminated the possible use of generally available questionnaires.

The first step in the design of the study was a review of the literature concerning studies made of college student characteristics. Most of these studies were

---

<sup>3</sup>John W. M. Rothney and Robert L. Mooren, "Sampling Problems in Follow-up Research," Occupations, 30: 573-578 (Fall, 1952).

<sup>4</sup>Seigel, op. cit.

concerned with undergraduate students, but they furnished valuable helps both as to content and format.

Under headings of the characteristics to be studied (see Chapter I), lists of characteristics were devised from the literature in each appropriate area. In addition, characteristics were suggested by faculty members and fellow students at Michigan State University. From these rather lengthy listings, those characteristics which did not lend themselves to data gathering, either from university records or by questionnaire techniques were then eliminated. Next, overlapping or ambiguous items were eliminated.

The resulting lists of items were then grouped as to whether the data should be obtained from university records or by means of a questionnaire. Obviously, many kinds of data were not available from university records, and because of the dispersion of the population being studied, the mail questionnaire technique was the most feasible data gathering instrument.

In order to convert characteristics into effective questionnaire items, it was necessary to review the literature in the field of questionnaire construction. Norman,<sup>5</sup> Parten,<sup>6</sup> and the National Council on Measurements in

---

<sup>5</sup>Normon, op. cit.

<sup>6</sup>Mildred Parten, Surveys, Polls, and Samples (New York: Harper and Brothers, 1950).

Education Yearbook<sup>7</sup> were helpful in the development of questionnaire items.

The questionnaire items were then submitted to a graduate seminar at Michigan State University for evaluation. This group was of great help in clarifying and strengthening the questionnaire items consistent with the purpose of the study. The resulting list of approximately sixty items were then organized in a logical arrangement.

The resulting questionnaire was then duplicated and administered to a group of several teachers. The group consisted of teachers both with and without Master's degrees. These persons were asked to critically evaluate the questionnaire item by item and to make comments if they thought items were unclear. The purpose of this procedure was to insure clarity of the items and ease in understanding what was asked for by the various items. This resulted in simplification and revision of the instrument. The instrument was then reviewed by staff members at Michigan State University.

The resulting questionnaire consisted of some forty items. This instrument was duplicated and mailed to persons who received Master's degrees in Educational Administration from the College of Education at Michigan State University during 1958, and who lived in Michigan at the time the

---

<sup>7</sup>National Council on Measurements Used in Education, Sixteenth Yearbook, 1959, pp. 171-179.

questionnaire was mailed. (Appendix A.) This group consisted of sixty individuals. The persons in this group were also sent an enclosure asking them to indicate any unclear items and make any suggestions they might have. Very few comments were received, and the respondents appeared to have no difficulty in completing the questionnaire. In addition, the pilot group returns offered an opportunity to check the tabulation procedure of data taken from the questionnaire. This mailing resulted in a return of thirty-five questionnaires.

As originally planned the sample was to include only graduates for the years 1954 to 1957. However, as the pilot study revealed only minor changes to be necessary, the 1958 graduates were included in the sample population for study. The total number (N) of graduates available for the study was small. Inclusion of this group would add to the value and significance of the study. The 1958 graduates were sent follow-up letters similar to those sent to the 1954-1957 graduates, and the same efforts were made to get complete returns.

After making final changes the questionnaire was reproduced in folded four page form. (Appendix A.) The questionnaire and letter of explanation were then sent to all 1954 to 1957 graduates. This mailing, plus the pilot mailing for 1958 graduates, resulted in the return of ninety-five questionnaires. Three subsequent follow-up letters

were used at intervals of approximately three weeks. On the second follow-up a second copy of the questionnaire was included. The third follow-up consisted of a postal card reminder. The results of these follow-ups were successful in that ultimately approximately ninety-five per cent of the questionnaires were returned.

Approximately ten per cent of the respondents were interviewed to check the validity of the responses. Some items were also checked against university records. The items which were checked were undergraduate grade point average and per cent of course work taken as a full time, part time, and extension student. Discrepancies were observed in less than three per cent of the cases. Thus the responses to the questionnaire can be considered having been carefully answered.<sup>8</sup>

In addition, graduate grade point averages were recorded for ten students in each of the categories: full time, part time, and extension. Because of the press of business in the university registrar's transcript office, only a limited time was available for work on this study. Alphabetical ordering was used to determine the ten

---

<sup>8</sup>Robert Jackson and J. W. M. Rothney, "A Comparative Study of the Mailed Questionnaire and the Interview in Follow-up Studies," Personnel and Guidance Journal, 39: 569-571 (March, 1961).



students in each category. These names were presented and the records were made available in the transcript office of the university. Grade point averages for all Master's degree work for each of the students was determined. Due to the limitations of time available in the university transcript office, this was the only data secured from the students' official Michigan State University transcripts.

### Statistical Techniques

It would be possible to gain an impression of the relationship between part time and full time students by numerically determining the numbers who received various course grades and the types of employment they hold. While this procedure is relatively quick, it has several shortcomings. If only numbers are used for judging, they may be the result of chance distribution and thus indicate differences where none exists. In addition, it is extremely difficult with this procedure to compare such relationships as socio-economic background and occupational characteristics.

It might be well, at this point, to mention that the following discussion of the statistical techniques employed in this study presupposed a basic knowledge of statistics. A discussion and illustrations of the various

concepts used in this study may be found in many statistical textbooks.<sup>9, 10, 11</sup>

It will be observed from the data that type of student represents three categories: full time students, part time students, and extension students. In addition, the items on the questionnaire represent in most cases dichotomies or groupings which are not of the ranking or ordinal type.

A non-parametric test was required for the data as it was only classificatory in a nominal scale. Similar parametric tests require that the data must achieve at least interval measurement of the variable involved.

Basically, the question to be decided in this analysis was whether the several independent samples should be regarded as having come from the same population. Since the groups under study are independent and number more than two, a statistical test for  $k$  independent samples is called for. Since the data are in discrete categories, the  $\chi^2$  test is an appropriate one.

In order to apply the  $\chi^2$  test, one must first arrange the frequencies in a  $k \times r$  table. The Null hypothesis

<sup>9</sup>Sidney Siegel, Nonparametric Statistics (New York: McGraw Hill Book Company, 1956).

<sup>10</sup>John E. Walsh, Handbook of Non Parametric Statistics (Princeton, New Jersey, D. Van Nostrand Co., 1962).

<sup>11</sup>Quinn McNemar, Psychological Statistics (Third edition, New York: John Wiley and Sons, 1962).

states that the  $k$  samples do not differ among themselves and may be tested by applying the formula:

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^k \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

where  $O_{ij}$  = observed number of cases categorized in  $i$ th row of  $j$ th column

$E_{ij}$  = number of cases expected under the null hypothesis to be categorized in  $i$ th row of  $j$ th column.

$\sum_{i=1}^r \sum_{j=1}^k$  = directs one to sum over all cells.

Under the null hypothesis,  $H_0$ , the sampling distribution of  $\chi^2$  as computed from the formula above can be shown to be approximated by a chi-square distribution with degree of freedom  $df = (k-1)(r-1)$ , where  $k$  = the number of columns and  $r$  = the number of rows. Thus, the probability associated with the occurrence of values as large as an observed  $\chi^2$  is given in a Table of Critical Values of Chi-Square. If an observed value of  $\chi^2$  is equal to or larger than that given in such a table for a particular level of significance and for  $df = (k-1)(r-1)$ , then  $H_0$  may be rejected at that level of significance.

The data is normally entered in a table form. Such a table is called a contingency table and may consist of two or more items in each grouping. Contingency tables were constructed for each category to be tested. One of the tables from the study is shown in Table 1. (Appendix B.)

The choice of a confidence level, or level of significance, is to some extent an arbitrary matter. The lower the chosen confidence level, the greater certainty one has that the apparent association is not due to chance. On the other hand, there is always the risk of not rejecting the null hypothesis when indeed it deserves to be rejected. Thus, the investigator discards distributions in which a dependency or association actually exists. There is always this risk, and it must be recognized that some comparisons rejected in this study because of a low chi-square value may involve some degree of association.<sup>12</sup>

The 0.01 confidence level represents a compromise acceptable to this investigator between accepting a chance distribution and rejecting a valid association. Comparisons were rejected if they yielded values for chi-square which were below the 0.01 level of significance. The 0.01 level of confidence was used in testing the hypothesis as

---

<sup>12</sup>William B. Michael, "Selected Contributions to Parametric and Non-parametric Statistics," Review of Educational Research 33: 474-489 (December, 1963).

indicated; however, for reporting the significance of individual questions, the 0.05 level of confidence relationships are so indicated.

The  $X^2$  test requires that expected frequencies ( $E_{ij}$ 's) in each cell should not be too small. Cochran<sup>13</sup> recommends that for  $X^2$  test with df larger than 1 (that is, when either k or r is larger than 2) fewer than twenty per cent of the cells should have an expected frequency of less than 5, and no cell should have an expected frequency of less than 1.

Where these requirements were not met by the datum in the form in which it was collected, adjacent categories were combined so that fewer than twenty per cent of the cells had an expected frequency of less than five, and no cell had an expected frequency of less than one.

In a study of this nature the task of compiling the data accurately becomes one of great concern. Every effort was made to insure accuracy. Tally sheets were constructed for the compilation of the data from the questionnaires. Separate compilations were made by two individuals, and all discrepancies cleared. Contingency tables were constructed for each separate test of significance. All tables were double-checked by another individual. Computations were done by means of an electric calculator with all mathematical

---

<sup>13</sup>W. G. Cochran, "Some Methods for Strengthening the Common  $x^2$  Tests," Biometrics, 10: 417-451 (1941).

computations being double checked as a separate operation.  $\chi^2$  was checked (with the appropriate computed degrees of freedom) in a Table of Distribution of  $\chi^2$  in Hargood and Price<sup>14</sup> as adopted from the work of Fisher and Yates.

It must be remembered that the demonstration of statistical relationship is not, by itself, a proof of cause and effect relationship. However, cause and effect is a possible reason for a statistical relationship and will be so considered in those cases where statistical relationships are obtained.

#### Operational Hypothesis

With reference to the general statement of the hypothesis found on page nine, the hypothesis included for study may now be stated in operational terms. For purposes of analysis, the null hypothesis will be used.

The hypothesis will be divided into four main comparisons:

1. Full time, part time, and extension students will not differ in these academic characteristics:

- a. Academic background.
- b. Reasons for taking graduate education at Michigan State University.
- c. Educational and cultural activity while a graduate student.

2. Full time, part time, and extension students will not differ in these occupational characteristics:

---

<sup>14</sup>M. J. Hargood and D. O. Price, Statistics for Sociologists (revised; New York: Henry Holt and Company, 1957) (Appendix A.)

- a. Occupational background.
- b. Work resume.
- c. Future educational plans.

3. Full time, part time, and extension students will not differ in these personal and social backgrounds:

- a. Personal characteristics.
- b. Socio-economic background.

4. Full time, part time, and extension students will not differ in their opinions about the Master's degree program at Michigan State University.

#### Summary

This chapter has discussed the methods and procedures used in implementing the plans for the investigation. It has described the population studied, the sources of the data, the development of the study, and the procedures followed in collecting, classifying, tabulating, and analyzing the data. Also, the hypothesis has been stated operationally.

## CHAPTER IV

### ACADEMIC CHARACTERISTICS

#### Introduction

This chapter presents an analysis of data relative to the academic backgrounds and activities of graduates in the Educational Administration Curriculum at Michigan State University. One of the strongest arguments for full time study is the opportunity for "academic excellence." The pre-graduate preparation, the personal and situational motivation, and the impact of the total available facilities of the academic community all are considered important in development of the graduate scholar. Selected factors in each of these areas were investigated for this study.

#### Academic Background

Three items were considered in relationship to academic background. The first of these concerns the type of institution which granted the Bachelor's degree. In order to satisfy the statistical requirements for cell size in a chi-square table it was necessary to combine teacher's college and technical school categories. Bible College was included in the questionnaire as a category because many Bible College graduates



took work in the Administrative and Educational Services Division at Michigan State University. However, most of these graduates were apparently enrolled in the counseling field as there were no Bible College graduates reported by the questionnaire.

It is apparent from an examination of Table 4\* that extension students are heavily represented in the technical and teacher's college grouping and less heavily represented in the university grouping. Full time students are characterized by greater numbers in the university grouping and fewer in the technical and teacher's college grouping. Little difference was found between part time and full time students. The  $X^2$  for Table 4 was significant at the .05 level of confidence.

The conclusion that full time students are characterized by university background while extension students are characterized by teacher's college background as indicated by the data confirms the opinions of some educators. However, the fact that the university graduate is on campus and decides to continue immediately as a full time student may be a factor in explaining this finding.

The next item examined concerned the academic grade average earned for work taken for the Bachelor's degree.

---

\*all tables referred to in this and the following chapters are found in the appendix.

(Table 5.) Entrance to graduate school is selective and this factor was evidenced by the data of the study. Only two averages of "C" for undergraduate work were recorded: one was a full time student and one a part time student. All other grades reported were above C except for one full time student who did not report this item. There was no significant difference between type of student and grades earned for undergraduate work.

Rank in high school graduating class and type of student were not significantly related in this investigation. (Table 6.) Although one hundred twenty-eight of the one hundred fifty-three answering this item were in the upper one-half of their graduating class, the twenty-five in the lower one-half of their class indicated that a sizable number of persons who were relatively unsuccessful in high school succeeded at the baccalaureate and graduate program level.

The field of undergraduate emphasis was not a factor for discerning type of student. (Table 7.) This table indicates very few differences among the three types of students. An important finding is the low percentage of physical education majors receiving Master's degrees in administration at Michigan State University. This finding refutes a popularly held notion that large numbers of administrative graduates are physical education majors.

Reasons for Seeking a Master's Degree in  
Educational Administration at  
Michigan State University

Three questions were asked concerning the graduate's field of specialization, graduate education, and choice of Michigan State University. These questions attempted to determine differences in motivation for various aspects of the graduate program. In this area first, second, and third choices were considered.

The only significant finding (at .001 level) concerned the reason for choosing Michigan State University. (Table 9.) The reasons indicated by the various types of students indicate convenience was an important factor. The number of full time students strongly represented in the category of "received AB at Michigan State University" indicates they tended to continue on as a full time student at the same university. Part time students indicated that "close to place of employment" was often the deciding factor. Extension students most often indicated "close to extension center" as a reason for choosing Michigan State University. Interest in the courses was most frequently of concern to full time students, but it was not an important concern to part time or extension students.

The reasons for seeking a Master's degree were about evenly divided among five factors, and few differences were indicated. (Table 8.) Although no significant differences among students were indicated in the reasons for choosing

educational administration as a field of specialization, desire to be an administrator was the most important reason, listed by all three types of students. (Table 10.)

Educational and Cultural Activity  
While a Graduate Student

Participation in student activities is sharply limited for graduate students, and the group being studied was no exception. Six students indicated membership in student activity groups, and four of these were members of Phi Delta Kappa, a National Graduate Educational Fraternity. The number reporting membership was too small to compute  $\chi^2$  for this factor. (Table 11.)

Despite the lack of opportunity for membership in student activities at the graduate level, opportunities exist for attendance at various university functions. Respondents were asked to indicate which activities (of several listed) they attended.  $\chi^2$  tables were computed for the various activities, but they were grouped only by number and for each activity separately. (Table 13 through Table 20.) No significant differences were indicated by number of different activities attended, but on the question of whether any activities were attended there was a difference, significant at the .05 level. As would be expected, full time students differed from part time and extension students in that more full time students attended activities. Only one full time student indicated non-attendance at university

activities. When the activities were taken separately, the most highly significant difference occurred with athletic contests. (significant at the .001 level.) This can be explained by the cost factor. Full time students received free passes to athletic contests while part time students were required to pay, based on the number of credit hours taken, for tickets.

On questions involving attendance at educational lectures, forums, and speeches there was very little difference among the groups. This would seem to indicate that effort is made by part time and extension students to attend professional meetings at the Michigan State University Campus. This aspect of their education compared favorably with the full time students.

The only cultural activity which produced significance at the .05 level was attendance at lectures. Here again, full time students differed from part time and extension students in their higher percentage of attendance. The other cultural offerings indicated a trend in that direction, although they were not significant at the .05 level.

Cultural and professional offerings on campus are considered by many to be the intangible parts of an education. Here the part time and extension students appear to be at a disadvantage.

Graduates were asked to indicate the number of educational books and periodicals they read during the

the last year. Because of course requirements, such a question would not have indicated reading by choice during student enrollment. Therefore, the respondents were asked to use the last year as a period for measure. No significant differences were found. (Tables 21 and 22.) However, the number of educational books and periodicals read does not indicate very extensive use of this method of professional improvement by the respondents. Twenty-seven persons indicated that they read no educational books during the previous year, and seven indicated that they read no educational periodicals during the same period. Only twenty-two persons indicated they read six or more educational books during the year, while thirteen persons indicated they read (at least partially) six or more educational periodicals each month.

Graduates were also asked to indicate the number of professional education organizations in which they held membership. Professional membership may be considered as a measure of an individual's participation in educational activities beyond the local job level. As most administrative areas have specific professional organizations, the individual in the administrative area has a possible minimum direct interest in five or six organizations if the general, as well as the specific, educational organizations are included.

No significant differences were found among the three groups of students (Table 52) regarding their professional organization membership. It is interesting to note that eight respondents did not hold membership in any professional organization.

From the questions concerning three of the most common ways of continuing educational improvement, there were no significant differences found. The full time student apparently did not receive the motivation from the campus environment sufficient to differentiate his post-Master's professional improvement in these areas. Yet the area of continuing professional improvement is considered by some as those subtle motivating forces accruing to the full time student through his campus associations.

The library is generally considered by all measures of graduate education to be of major importance. Number of volumes, accessibility, and space within libraries are considered by accrediting agencies to be of major importance in determining the quality of an institution of higher learning. This is particularly true in the field of graduate education. One of the strong opinions held by many writers in the field of graduate education is that full time on campus education allows the student use of the university's library to a greater extent than is possible for the part time student. Many of the same writers consider the extension student so severely handicapped in the

area of library use that it is a factor often cited by graduate schools as a prime reason for limiting the hours of extension credit which will be applied to the requirements for an advanced degree.

There was no significant difference found among the three groups of students being studied as to their opinion about the importance of the library to their graduate study. (Table 23.) Thus, readily available library facilities do not appear to have the effect on the students' education that has long been held. This lack of library facilities for the part time and extension students probably was partially overcome by the measures various members of the faculty may have taken in restructuring courses to fit the situation. The faculty may consider the lack of library facilities to be more of a handicap than the student. However, the answers given by full time students seem to indicate that the Michigan State University Library was not, for many at least, an indispensable research tool. The wide use of other facilities, particularly the State Library by those attending classes on campus, indicates that their needs were often served by other than Michigan State University Library facilities. This may well be due to more liberal lending policies by other libraries, but the fact that other library facilities were used by more than two-thirds of the students studied, including sixty per cent of the full time students, indicates that merely



being physically on campus does not necessarily result in more adequate library opportunities. (Table 24.) Although Table 25 indicates significance in the direction of extension students making more use of local library facilities and less use of State Library facilities than the other two groups, this could be expected due to the State Library's proximity to the campus and its resulting availability to full and part time students. (The significance of Table 25 may be under suspicion due to failure of the table to meet statistical criteria.)

For the students questioned in this study, the evidence supports the position that the University Library is not an important consideration in determining the quality of the student's total education. Hours for use of library facilities, readings completed, and other such criteria may be more valuable as a guide to determining the value of the library to the student's education. Because many different library resources were used, part time and extension students would not appear to be severely handicapped in this important area of graduate education.

#### Master's Degree Grade Point Averages

The mean of the grade point averages for the Master's Degree work of ten of each of the categories of students was computed. As the nature of the data did not lend itself to the form of statistical treatment used in this

study, only arithmetic averages were computed for each of the three student categories. The grade point averages computed on the basis of  $A = 4.0$  are as follows:

Group	Mean of the Grade Point Averages
Full time students	3.35
Part time students	3.31
Extension students	3.32

Because of limited availability of student records, only ten students from each category were investigated. The grade point averages earned by the students studied did not vary markedly among the groups. Although full time students had slightly higher grade point average mean, it was not of sufficient magnitude to warrant further investigation of the grade point averages. It is also possible that different standards for grading existed among the different groups. However, because many instructors taught all three groups it will be assumed grading was consistent.

### Summary

This study finds little that distinguishes the full time from the part time and extension student in the area of academic background, academic achievement, choice of school, area of study, and activities as a student of Educational Administration. The "academic excellence" of full time students was not distinguishable from the other students. Reasons for attending Michigan State University followed expected patterns of convenience. Activities as

a student were limited in all groups, and this area was certainly not developed by the full time students in this study. The post-Master's professional improvement area found no significance differences among the student groups. The use of the University Library was not the important factor in the educational program of these students that it has long been thought to be by many writers in the field of graduate education. Those factors of academic, professional, and educational development considered by this study revealed little that would discriminate among full time, part time, and extension graduate students in the field of educational administration.

## CHAPTER V

### OCCUPATIONAL INFORMATION

#### Introduction

This section of the questionnaire is concerned with three general areas of information: first, the non-educational occupations of the respondents; second, the occupational aspirations of the respondent; third, the present position and salary of the respondent.

Two generally held opinions about full time and part time students were investigated in this section of the questionnaire. One was that full time students are characterized by more specific goal orientation (i.e. degree program) than are part time students. This should result in full time students entering their Master's program sooner after the Bachelor's degree than part time students. Their future plans should also represent more distinct goal orientation such as a principalship or superintendency. A second generally held opinion suggests that full time students, because of their closer associations with university professors and placement personnel, will be offered structurally higher and better paying jobs than will be offered to part time or extension students.

Summer, Military, and Other  
Non-educational Employment

The first section of this chapter concerns the student's summer and non-educational employment. To assess the student's educational or academic interest they were asked how they were engaged during the past summer. The question considered the student's status at least two years after receiving the Master's degree. The findings were statistically significant at the .02 level of confidence. (Table 26.) Full time students tended to be more actively engaged in study of some type, while part time students tended to be more highly engaged in non-educational employment.

Although military service was not a statistically significant factor, the number of years of military service completed was significant at the .05 level of confidence. (Tables 27 and 28.) Almost two thirds of the students had had military service. Extension students reported less military service than the other two groups both in percentage having served and in the number of years of service. Full time students reported a higher percentage of military service (four years or over) than did the other two groups. This finding indicates that a large number of full time students did not go directly into graduate school. This study did not attempt to discern whether these students would have gone directly from Bachelor's to the Master's study had military service not intervened.

Non-educational employment other than military service between high school graduation and the Master's program was not a statistically significant factor. (Table 29.) Although there were no significant differences among the groups, over two thirds of all students had had non-educational work experience excluding summer, military, and student status periods. The interval between the receipt of the Bachelor's degree and the beginning of the Master's degree was also not significant. (Table 30.) However, over two-thirds of all students had some interval between the two degree programs. Both of these reportings indicate a lack of continuity in the educational preparation of the educational administrators in this sample. This finding would indicate that criteria other than the full time--part time study division might be more indicative of well prepared school administrators.

#### Occupational and Educational Aspirations

Item nineteen on the questionnaire asked respondents to indicate what types of positions their future plans included. More than one position could be indicated. Contingency tables were constructed based on either the choice or lack of choice of a particular position. The five positions considered were classroom teacher, principal, supervisor, superintendent, college level work, and work outside of education. Only supervision was statistically

significant, and that at the .05 level of confidence. A higher percentage of full time students indicated a choice of this position than did the other two groups. (Table 31 through Table 36.) Full time students may be more aware of the opportunities for such supervisory employment because of university contacts.

In an attempt to identify the student's ultimate vocational goal, the respondent was asked to indicate what he would like to be doing fifteen years hence. (Table 43.) There was no statistically significant difference among the groups as to the type of jobs to which they aspire. Among all student groups the three positions of principal or supervisor, superintendent, and college level consultant held approximately equal numbers of aspirants. If full time students are more committed to academic scholarship, it is not borne out by the projected plans of the students in this study. (Tables 40 and 41.) There were no significant differences among the three groups as to whether they planned to take additional university work and apply this credit toward a Post-Master's degree or certificate. The future plans of all three groups in both educational and occupational categories are statistically not dissimilar.

Reported Educational Position,  
Experience, and Salary

Respondents were asked to indicate their job title, size of school system, and yearly salary for the last

three years. From this report statistical treatment was used to attempt to demonstrate promotional patterns for the three groups. Three years of employment did not provide a sufficient span of time for development of any statistically significant data. Therefore, only the data for the last reported year was included in the study. Three  $\chi^2$  contingency tables were prepared. (Table 37 through Table 39.) One Table describes position held, one lists salary received, and one indicates the relative size of school system. No statistically significant differences were found among the three groups for position held or salary reported.

Size of school system is a better indicator of the employment situation than size of school, as the size of individual schools may vary widely within a school system. In order to use some generally recognized criteria for size, the Michigan High School Athletic Association classification was used. The highest classification held by the highest classified senior high school in any school system determined that system's classification. Although this classification system is not fully adequate in all respects, it has the merit of being a widely used and understood system in Michigan. Particularly among smaller school systems, the classification has some prestige or ranking value. Moving to a system of a higher class is generally regarded as a "promotion" for administrators. Total



system enrollment, size of individual school enrollment, and other factors such as student-teacher ratio would provide less valid classification structures and would require knowledge of the enrollments not normally available to the respondents for accurate reporting.

Only those persons employed in K-12 school systems were included. (Table 38.) Size of school system was statistically significant at the .05 level of confidence. Full time students appeared more often than expected in the larger school systems while extension students exceeded frequency expectations for small school systems.

#### Summary

Few differences were found among full time, part time and extension students concerning their occupational endeavors. Significant differences at the .05 level were found in their summer employment, length of military service and interval between undergraduate and graduate study. Type of school system in which the student was employed and supervision as a future aspiration were also significant at the .05 level. No significant differences were found in the type of job held, salary received, or projected future plans.

## CHAPTER VI

### PERSONAL AND SOCIAL CHARACTERISTICS OF STUDENTS

#### Introduction

The educator at the public school level is generally recruited from the lower middle class and comes from a family background without the financial means for extended college or university enrollment.<sup>1</sup> The socio-economic factors were included in this study to determine if certain socio-economic factors influenced student status.

#### Sex, Age, Marital Status, and Number of Children

The first group of items concerned the individual's sex, age, marital status, and number of children. There were so few females in each of the three categories that it was not possible to test for significance. Out of a total of one hundred fifty-eight students only thirteen were females. (Table 48.)

Approximately two-thirds of the students were thirty or under at the commencement of their Master's degree program. The full time group contained a higher percentage

---

<sup>1</sup>Lloyd W. Warner, Robert J. Havighurst, and Martin B. Loeb, Who Shall Be Educated? (New York: Harper and Row, Publishers, 1944).

of students in the twenty-five or under group, but this was not statistically significant. (Table 49.)

For both marital status and number of children the  $X^2$  test indicates significant at the .001 confidence level. The direction of difference indicates that fewer full time students are married, and they have fewer children. The part time students exceed expected frequencies in the  $X^2$  Table both in numbers of children and probability of being married. Extension students fall between the other two groups both in marital status and numbers of children. (Tables 50 and 51.)

#### Sources of Financial Support for Master's Program

The next item concerns the student's sources of financial support for his Master's program. The commonly held assumption that the full time student has some "external" means of support while the part time and extension student are on a "pay-as-you-go" basis were supported by the study.

Of the four sources of support which could be tested, all were significant. Current earnings, savings, and government subsidy were significant at the .001 confidence level. (Tables 53, 54, and 56.) Spouse working as a source of support for the Master's program produced significance at the .02 confidence level. (Table 55.) Use of funds from parents, borrowing, and scholarships could not

be treated statistically due to the low number of responses in these categories.

Full time students relied on savings, government subsidy, and their own current earnings as principal sources of funds for study. Most of the part time and extension students utilized their own current earning for funding their Master's program.

One noteworthy item is that more than half of the full time students reported current earnings and past savings as sources of funds for their Master's program. This would seem to indicate that these full time students are not being fully financed by outside sources but are relying on their own income for a large portion of their Master's degree expenses. Part time and extension students are predictably using their own current earnings as the major funding source.

Father's Occupation, Father's and Mother's  
Educational Level and Size of Community  
Where the Student's Youth Was Spent

The last group of items included in this chapter are concerned with father's occupation, father's and mother's educational level, and size of community where the student's youth was spent.

Occupational categories from the decennial United States census were used to permit comparison of father's

occupation with 1960 Michigan census data.<sup>2</sup> For this comparison per cents were used. This prohibited the computation of a  $X^2$  Table. Table 58 gives the percentage occupational distribution of the student groups' fathers and data from the 1960 Michigan census. All three student groups report a higher percentage of fathers' occupations in the professional; technical; farmer, farm manager; manager, official, proprietor; classifications than the Michigan 1960 census indicates. Full time students also report a higher percentage of father's occupation in the craftsman and former categories than does the 1960 Michigan census data. Full time students report a smaller percentage of father's occupation as farmer or farm manager than the other two student groups. Almost ten per cent of the extension students report father's occupation as laborer while only slightly over two per cent of the full time students so report.

Although no statistical differences were found among the student groups (Table 57), full time students reported fathers generally higher in occupational level than did part time students. Extension students reported father occupations generally lowest in level for the three

---

<sup>2</sup>United States Bureau of the Census, Census of Population: 1960, Characteristics of the Population, Part 24, Michigan (Washington, D. C.: United States Printing Office, 1963).

student groups but much above the 1960 Michigan census data report.

Educational attainment by parents is generally an indication of favorable attitudes toward obtaining a high level of educational attainment for their children. Thus, the more highly educated parent would tend to encourage his child to pursue higher education on a full time basis and would be very likely to implement this with financial aid.

Full time students had fathers with statistically significant higher educational attainment than part time or extension students at the .02 level of confidence. (Table 59.) However, more than two-thirds of the students in the total sample reported fathers with less than a high school education.

Mother's educational attainment was not statistically significant (Table 60), although mothers had attained a generally higher level of education than had fathers. Full time students reported both a higher percentage of mothers with less than a high school education and a higher percentage with some college work than the other two groups used for comparison.

The size of community in which the student's youth was spent was not significant. (Table 61.) From the reports on occupational and residential data, it is very clear that educational administration students come from

rural farm or small city backgrounds. Only in the full time student group is there a higher than expected percentage from large city backgrounds. (Table 61.)

#### Summary

The three groups of students differed little in socio-economic characteristics. The significant areas of difference are marital status and number of children, financial resources used to finance the Master's program, and educational level of student's father. In all three categories, the full time student differed from the part time and extension student in that he is less likely to be married and less likely to have children; he is more likely to finance his Master's program from sources other than his own current earnings; and his father is more likely to have attained a higher level of education than the other two student groups.

## CHAPTER VII

### OPINIONS ABOUT THE MASTER'S DEGREE PROGRAM AT MICHIGAN STATE UNIVERSITY

#### Introduction

One section of the questionnaire was used for obtaining opinions about the Master's degree program at Michigan State University. Some specific questions were asked, and an evaluation of full time versus part time study was asked of those who had had both types of work.

#### Opinions About the Master's Degree Program

Students were asked three questions of a specific nature. Their opinion as to the need for practical teaching experience before beginning the Master's program was solicited. The answers to this question produced no significant differences among the three student groups. However, four-fifths of the students indicated such experience was desirable. There was less agreement as to the number of years of experience desirable. The median years of experience suggested by all student groups was two years of teaching before the beginning of the Master's degree. (Tables 44 and 45.)

Students were also asked their opinion as to the time spent for counseling, about the degree requirements,



and the flexibility of degree requirements. There were no significant differences among the groups on any of these items. (Tables 46 and 47.) Two-thirds of the students in each of the groups were satisfied with the counseling received. Five-sixths of the students in each group were satisfied with the flexibility of degree requirements. It is important to note that the percentages of satisfied students in all three groups is approximately the same on both opinions. This finding refutes the generally held opinion that full time students receive better and more thorough guidance for their program. This may well be a credit to the counseling at Michigan State University. The University's ability to offer effective counseling to all types of students is commendable.

#### Additional Comments by Students

At the end of the questionnaire space was provided for the writing in of general comments. Comments were added by twenty full time students, seventeen part time students, and eight extension students. The comments can be divided into three general categories. First, many students responded to personal problems or situations. These problems are outside the scope of this study. Second, some students indicated enthusiasm for their work at Michigan State University while others felt the program and/or courses were inadequate in many respects.

The third group of responses centered around the relationships of full time, part time, and extension study. It is this latter group of responses which directly relate to this study. Twelve full time students, ten part time students, and six extension students commented on the relationship of full time study to either part time or extension study. Most of these comments were made by students who had had experience in full time study and either part time study, extension study, or both.

The following comments were made by the students classified (for this study) as full time students:

On campus courses as a full time student seemed much more satisfying to me--probably because it involved much greater concentration and application to study.

Full time student classes required a bit more work and time spent in preparation.

The on campus summer school and full time student classes were of more value because of the facilities available to study in. The library was more accessible. The experiences of the part time student in discussions were of more value than those of the full time student.

On campus instruction is much more exacting and demanding.

Campus courses had more meat and interest on my part.

Full time courses were better organized, summer courses moved too fast for comprehensive coverage.

On campus full time program allow much greater detailed study and consequently have proven more useful. On the other hand, extension work allows one to work on problems which are real and therefore more meaningful.

I would compare both full time and part time extension work favorably. Similarity in requirements were experienced in both situations.

Very little difference between classes of full time or part time.

Instruction I received depended more on quality of teacher than quality of classroom, time or place.

The difference between full and part time depended on the instructor.

Part time training found to be best for me--kept me away from the 'ivory towers'--teachings can be quickly evaluated and tested--too many dreams disappear between summer and full time sessions and coming school year.

Students classified as part time (for this study) made the following comments:

Have often felt that I derived greater benefit from the night classes than from the regular daytime classes.

I am of the opinion that the extern classes have been the most valuable I have taken--next would be the summer sessions.

The part time and full time student has a different viewpoint. The part time student (teaching and taking courses) has the real problem to consider while the full time student must depend upon the guidance and resourcefulness of the instructor.

Very little difference as far as I could see between part time and full time courses.

Not much difference between full time and part time work.

Full time and part time work very much the same.

My part time work was in evening classes and my full time in summer school. The classes were of about the same value as to the manner in which they were conducted but I got more out of summer classes because I had more time to study.

Part time classes suffer in my opinion--it seems as if there is only time to superficially cover the offerings. Full time courses, more or less opposite of this.

Campus class work seems to be more helpful and meaningful than extension work.

I am quite certain it would have been more beneficial to have been enrolled as a full time graduate student on campus rather than on a part time basis. Professional contacts are very important.

Students classified as extension students (for this study) made the following comments:

Full time student--poor situation, felt like not wanted, was very unhappy, spent one term at Michigan State University. Part time student--more status, work was more meaningful. .

The courses off campus were conducted well.

The two types of classes are about the same, one gets out of any course only what he puts into it.

There was no real difference between on campus and off campus courses.

I say take the master's while you are at school. A person does not need teaching experience before the master's degree. The administrator or person on the college level who advocates that doesn't know what it is to work on a job and obtain your master's traveling fifty miles or more, lots of it evening work, etc.

There is considerable difference between full and part time study as far as value of the experience is concerned. Although part time study (off campus) usually has value in the people you are with in the classroom (teachers, administrators, etc.) I feel that campus work is more worthwhile because of the variety of resources and additional study time, besides the 'learning atmosphere' that a college campus provides.

Because additional comments evaluating programs of study were not included in every response, those responses relating to study programs have been included. Many of these comments were by students who had been enrolled as students in a full time and a part time or extension category. Of the twenty-eight students who commented on the relative merits of each type of study (Table 42) there is no consensus as to the value of either full or part time study. Although full time study was considered of the most value, the high proportion of those indicating other factors more important than type of program is noteworthy. These comments augment the other findings of this study in regard to differences in type of program.

### Summary

This chapter was concerned with opinions of students regarding the Master's degree program at Michigan State University. The opinions expressed were very consistent among the full time, part time, and extension student groups. The opinions expressed indicated experience prior to beginning the Master's degree is desirable. The results also indicated that counseling procedures and course requirements at Michigan State University were satisfactory for most students. Opinions expressed comparing full time and part time study slightly favored full time study; however, a sizable number expressed the opposite point of view. From the opinions expressed, a favorable feeling

toward Michigan State University is evident. Most students were also enthusiastic about the type of program in which they were enrolled whether it was full time, part time, or extension work.

## CHAPTER VIII

### FINDINGS, CONCLUSIONS, AND IMPLICATIONS FOR FUTURE RESEARCH

#### Findings

This chapter is concerned with the results of testing the hypothesis presented in Chapter I, and stated as an operational hypothesis in Chapter III. This chapter will also consider other findings, conclusions, and implications for further study.

#### Results of Testing the Operational Hypothesis

The general hypothesis of this study was stated in operational terms in Chapter III. The operational hypothesis was divided into four main comparisons. The  $X^2$  test was used to determine association (if any) among the student groups.

The first comparison states:

Full time, part time, and extension students will not differ in these academic characteristics.

- a. Academic background.
- b. Reasons for taking graduate education at Michigan State University.
- c. Educational and cultural activity while a graduate student.

Of the fourteen pertinent questions in this section of the study, three areas of significance were found with

a level of confidence of .01 or better. These areas were: reasons for choosing Michigan State University (Table 9), attendance at university athletic contests (Table 13), and type of library (other than Michigan State University) used (Table 25). All of these significant areas represent differences heavily weighted by personal convenience due to past or present physical location of the student. Therefore, the null hypothesis is supported as regards academic characteristics.

The second comparison states:

Full time, part time, and extension students will not differ in these occupational characteristics:

- a. Occupational background.
- b. Work resumé.
- c. Future educational plans.

Of the nine questions in this section of the study, only one area of significance with a .01 or higher level of confidence was found. This question concerned the number of years of teaching experience completed at the beginning of the Master's degree program. The responses to this question showed the full time students to have less experience than the other groups, and the extension students to have the most experience of the three groups. However, as this was the only significant finding in the occupational characteristics, the null hypothesis is supported.

The third comparison states:



Full time, part time, and extension students will not differ in these personal and social backgrounds:

- a. Personal characteristics.
- b. Socio-economic background.

Of the ten pertinent questions in this section, three questions produced areas of significance with levels of confidence at .01 or better. These areas were: marital status, number of children, and means of financing the Master's program. Full time students were less likely to be married and had fewer children than the other groups. Full time students depended upon government subsidy and savings for financing their Master's program to a much higher degree than the other two groups. The full time students, also, had a greater variety of sources of financial support for their programs than did the other groups. No areas of significance were found in regard to socio-economic background. The part of the hypothesis concerning socio-economic background is supported.

The part of the hypothesis concerning personal characteristics is not clearly supported, and except for age and sex factors this hypothesis must be rejected. From the data reported in this study, full time, part time, and extension students do differ in certain personal characteristics.

The fourth comparison states:

Full time, part time, and extension students will not differ in their opinion about the Master's degree program at Michigan State University.

Two areas of the questionnaire were concerned with students' opinions. One asked specific questions about the program. There were no areas of statistical significance differences among the student groups concerning their opinions about the program or counseling. The second area solicited responses comparing full time and part time study. It was not possible to treat these responses statistically, but there was no wide divergence of opinion among the groups. This part of the hypothesis concerned with personal characteristics is supported. Full time, part time, and extension students do not differ in their opinions about the Master's program at Michigan State University.

#### Acceptance of the Hypothesis

The findings of the study support the null hypothesis in all parts except one. The one part of the hypothesis unsupported states that full time, part time, and extension students will differ in personal characteristics. The findings are such that it can neither be accepted or rejected. Therefore, the general hypothesis can be stated as supported: That full time, part time, and extension students will not differ in regard to background, academic achievement, and vocational achievement. Second, type of student (full time, part time, extension) will not affect the vocational position held.

### Conclusions

The conclusions of this study are based on the groups studied in this investigation, and they apply, therefore, to students who received Master's degrees in Educational Administration at Michigan State University for the years 1954 to 1958 inclusive.

The following conclusions are apparent from this study:

1. The most important conclusion is the similarity of the students regardless of the type of study in which they were engaged. The popularly held opinion as to the inferiority of the students and conditions in part time study situations is refuted in this investigation.

2. Where differences among full time, part time, and extension students did exist, these differences were of a personal, experiential, preferential, or locational nature. These differences were not related to program, future plans, or type of study. Differences were due more to opportunism than deliberation or basic factors.

3. The values of full time study were not identifiable in the present study. Opportunities for extra curricular activities and study facilities were not utilized to a significantly greater extent by full time students. Part time and extension students made far greater use of local, regional and state library resources than is generally presumed.

4. All students showed a rather shocking lack of professional reading since completing the Master's degree program.

5. Students were basically satisfied with the type of study situation in which they were engaged, whether it was full time, part time or extension.

6. The principalship and/or the superintendency were the vocational objectives of most of the educational administration graduates. This refutes a popularly held concept that many students take the educational administration curriculum with no planned administrative job goal.

7. Most of the educational administration students originated from farm families or families where fathers were laborers or craftsmen. Also, the parents had little education. This finding agrees with the many studies made on the social class origins of teachers. Prospective administrators are apparently representative of teachers in regard to social background.

8. The program of studies and counseling in the educational administration curriculum at Michigan State University was very satisfactory as reported by full time, part time, and extension students. Thorough, adequate counseling indicates a planned effective program for working with students both on and off campus.

Implications for Further Research

1. A similar study should be conducted at another university and with other curriculums to test whether these findings are general or only apply to the educational administration curriculum at Michigan State University.
2. Other factors should be investigated. Significant differences may exist within factors not studied in this investigation. An intensive study of the situational factors for full time students might reveal educational values which accrue to full time students and not to the others.
3. A study should be conducted with Doctoral level students in an effort to establish whether the values of full time study become more critical at the post-Master's level.
4. A investigation into motivational factors involved in higher education might produce findings not available in the present study of situational factors.
5. The College of Education at Michigan State University should continue to identify and study full time, part time, and extension students for the purpose of identifying the relative values and shortcomings of each type of study program. Such a study should result in guide-lines for even more effective programs.

## BIBLIOGRAPHY

## BIBLIOGRAPHY

### Books

- Beal, William J. History of Michigan Agricultural College, East Lansing: Michigan Agricultural College, 1915, 519 pp.
- Berelson, Bernard. Graduate Education in the United States, New York: McGraw Hill Book Company, Inc., 1960, 341 pp.
- Brunner, E. D., et al. An Overview of Adult Education Research. Chicago: Adult Education Association of the United States of America, 1959, 275 pp.
- Carmichael, Oliver C. Graduate Education. New York: Harper and Brothers, 1961, 202 pp.
- Conant, James. The Education of American Teachers. Englewood Cliff, New Jersey: Prentice Hall, 1963, 275 pp.
- Commager, Henry S. Documents of American History. New York: F. S. Crofts and Company, 1934, 454 pp.
- Deese, James. The Psychology of Learning. New York: McGraw Hill Book Company, 1958, 398 pp.
- Donnelly, Walter A. (ed.) The University of Michigan: An Encyclopedic Survey. Ann Arbor: University of Michigan Press, 1953, 1367 pp.
- Dyer, John P. Ivory Towers in the Market Place. Indianapolis: Bobb-Merrill Co., Inc., 1956, 205 pp.
- Ely Mary L. (ed.) Handbook of Adult Education in the United States. New York: Teacher's College, Columbia University, 1944, 514 pp.
- Frankel, Charles. Issues in University Education. New York: Harper and Brothers, 1959, 175 pp.
- Freeman, Frank S. Individual Differences. New York: Henry Holt and Company, 1934, 335 pp.

- Hargood, M. J., and Price D. O. Statistics for Sociologists. revised. New York: Henry Holt and Company, 1957, 575 pp.
- Hurlbut, J. L. The Story of Chautauqua. New York: C. P. Putman's Sons, 1921, 374 pp.
- Kingsley, Howard L. The Nature and Conditions of Learning. New York: Prentice Hall, Inc., 1955, 579 pp.
- Knowles, Malcolm S. The Adult Education Movement in the United States. New York: Holt, Rinehart and Winston, 1962, 335 pp.
- Koch, Harlan C. Graduate Programs in Education at the University of Michigan. Graduate Study in Education, National Society for the Study of Education, 50th Yearbook, Part I. University of Chicago Press, 1951, 369 pp.
- Kuhlen, Raymond G., et al. Psychological Studies of Human Development. New York: Appleton-Century-Crofts, Inc., 1949, 533 pp.
- Kuhn, Madison. Michigan State: The First Hundred Years, 1855-1955. East Lansing: Michigan State University Press, 1955, 501 pp.
- Lacognata, Angelo A. A Comparison of the Effectiveness of Adult Residential and Non-residential Learning Situations. Chicago: Center for the Study of Liberal Education for Adults, 1961.
- Levine, Jerome, and Murphy, Gardner. The Learning and Forgetting of Controversial Material, Readings in Social Psychology, Maccaly, Newcomb, and Hartley (Editors), New York: Henry Holt and Co., 1958, 690 pp.
- McNemar, Quinn. Psychological Statistics. 3rd. ed. New York: John Wiley and Sons, 1962, 451 pp.
- Michigan Council of State College Presidents. Field and Extension Services of the State Supported Institutions of Higher Learning in Michigan. Ann Arbor: J. W. Edward, 1956.
- Monroe, Paul (ed.). A Cyclopedia of Education. New York: The Macmillan Company, 1925, 5 vol.
- National Council on Measurements Used in Education. Sixteenth Yearbook, 1959, 179 pp.



- Norton, E. B., Chairman. Report of the Studies and Standards Committee, Field Services Program. American Association of College Teacher Education, 6th Yearbook, 1953, 70-75 pp.
- Parten, Mildred. Surveys, Polls, and Samples. New York: Harper and Brothers, 1950, 624 pp.
- Peterson, William and Renee. University Adult Education. New York: Harper and Brothers, 1960.
- Sheats, Paul H., et al. Adult Education. New York: The Dryden Press, 1953, 505 pp.
- Sherif, Carolyn and Sherif, Muzafer. An Outline of Social Psychology (revised edition). New York: Harper and Brothers, 1956, 386 pp.
- Siegel, Sidney. Nonparametric Statistics. New York: McGraw Hill Book Company, 1956, 312 pp.
- Sorenson, Herbert. Adult Abilities. Minneapolis: University of Minnesota Press, 1938, 186 pp.
- Thorndike, E. L. Adult Learning. New York: The Macmillan Company, 1928, 335 pp.
- United States Bureau of the Census. Census of Population: 1960, Characteristics of the Population, Part 24, Michigan, Washington, D. C.: United States Printing Office, 1963, 675 pp.
- Walsh, John E. Handbook of Non Parametric Statistics. Princeton, New Jersey: D. Van Nostrand Co, 1962, 451 pp.
- Warner, W. Lloyd, et al. Who Shall Be Educated? New York: Harper and Brothers, 1944, 190 pp.

#### Periodical Articles

- Anikeeff, Alexis M. "Scholastic Achievement of Extension and Regular College Student," Journal of Applied Psychology, 38: No. 3 (June, 1954), pp. 171-173.
- Bittner, W. S. "The University Extension Movement," Bureau of Education Bulletin, No. 84 (1920, pp. 124.
- Cantril, Hadley, and Sherif, Muzafer. "The Psychology of Attitudes," Psychological Review, Part I, 52: 195-232 (November, 1945).

- Carmichael, O. C. "Some Basic Problems of Graduate Education," Liberal Education, 49: 81-5 (March, 1963).
- Carter, Gerald C., et al. "Characteristics of Extra Mural Students," Adult Education, Vol. 12, No. 4 (Summer, 1962), pp. 223-230.
- Chiappetta, Michael. "Higher Education, Graduate or Undergraduate," School and Society, 77: 308-310 (May 16, 1953).
- Cochran, W. G. "Some Methods for Strengthening the Common X Tests," Biometrics, 10: 417-451 (December), 1941.
- Dent, Charles H. "If Colleges Asked the Teachers," Education Leadership, 9: 22-26 (October, 1951).
- Edited. "Comparative Ability of Extension and Resident Students," Adult Education, 12: No. 2, 98-105 (Winter, 1962).
- Farnum, Hollis B. "Comparison of Aptitude of Extension and Campus Students," Journal of Applied Psychology, 41: 63-65 (February, 1957).
- Gallup, Gladys, and Wilson, C. C. "Extension Teaching Methods," United States Department of Agriculture Extension Circular, No. 495 (1957).
- Grinnell, John E. "The Problem of the Mediocre Graduate Student," Peabody Journal of Education, 35: 131-142 (November, 1957).
- Halfter, Irma T. "The Comparative Academic Achievement of Women," Adult Education, Vol. 12, No. 2 (Winter, 1961), p. 106.
- Jackson, Robert, and Rothney J. W. M. "A Comparative Study of the Mailed Questionnaire and the Interview in Follow-up Studies," Personnel and Guidance Journal, 39: 569-571 (March, 1961).
- Love, Robert. "The Use of Motivation Research to Determine Interest in Adult College Level Training," Educational Record, 34: 210-218 (July, 1953).
- McGrath, Earl J. and Froman, Lewis A. "College Aptitude of Adult Students," School and Society, 45: 102-104 (January, 1937).

- McCormick, F. C. "Comparative Study of Engineering Extension and Resident Programs," Adult Education, 11: No. 2, 106-109 (Winter, 1961).
- McCulloch, Robert W. "The Role of Graduate Schools in Teacher Education: A Study of Ten Graduate Programs," North Central Association Quarterly, 30: 211-212 (October, 1955).
- McNemar, Quinn. "Opinion-Attitude Methodology," Psychological Bulletin, XLIII: No. 4, 289-374 (July, 1946).
- Michael, William B. "Selected Contributions to Parametric and Non-Parametric Statistics," Review of Educational Research, 33: 474-489 (December, 1963).
- Michigan High School Athletic Association Bulletin. Vol. 34, No. 6. Lansing: Department of Public Instruction (February 1960), p. 28.
- Nicholson, D. "Why Adults Attend School--An Analysis of Motivating Factors," University of Missouri Bulletin, 56: No. 30 (1954).
- Norman, Ralph D. "A Review of Some Problems Related to the Mail Questionnaire," Educational and Psychological Measurement, 8: 234-245 (Summer, 1948).
- Rapp, Albert. "The Experimental Background of the Problem of Learning," The Classical Journal, 40: No. 8, 467-480 (May, 1945).
- Romie, Stephen. "Criteria for a Better Questionnaire," Journal of Educational Research, XLII: No. 1, 69-71 (September, 1948).
- Reber, L. E. "University Extension in the United States," United States Bulletin of Education, Bulletin 19, 1914, p. 63.
- Rothney, John W. M. and Mooren, Robert L. "Sampling Problems in Follow-up Research," Occupations, 30: 573-578 (Fall, 1952).
- Stephen, A. Stephen. "University Extension in America," Harvard Educational Review, 18: 99-108 (Spring, 1948).
- Stillwell, Hamilton. "Detroit's Merger in Adult Education," Adult Leadership, 9: No. 2 (June, 1959), pp. 34-36.

- Underwood, B. J. "Interference and Forgetting,"  
Psychological Review, 64: 49-60 (January, 1957).
- Underwood, J. J. "Studies of Distributed Practice,"  
Journal of Experimental Psychology, 45: 253-259  
(April, 1953).
- Weaver, J. C. "Facts and Philosophy of Graduate Extension  
Education," Educational Record, 40: 242-248 (July,  
1959).
- Winters, Clifford L. "Off Campus Graduate Centers: A  
Problem of University Adult Education," Adult  
Education, 10: No. 2 (Winter, 1960), pp. 94-100.
- Zahn, Jane. "Comparative Ability of Extension and Resident  
Students," Adult Education, 12: No. 2 (Winter, 1962),  
pp. 98-105.

#### Unpublished Materials

- Hagelberg, Milton J. "A Study of the Goals and Character-  
istics of Extension Credit Students in Northwestern  
Michigan," Unpublished Ed. D. thesis, Michigan State  
University, 1960, 106 pp.
- Marcus, J. D. "A Study of Opinions Toward Off Campus  
College Credit Courses," Unpublished Ed. D.  
Dissertation, Michigan State College, 1953, 163 pp.
- Saupe, Joe and Taylor, Clair. "A Survey of Evening  
College Students," Office of Institutional Research,  
Michigan State University, 1962.

#### Newspapers

- Michigan State News, October 14, 1959.

## APPENDICES

APPENDIX A

PILOT QUESTIONNAIRE

## PILOT STUDY

## GRADUATE STUDY QUESTIONNAIRE

The purpose of this questionnaire is to furnish data for a study which would attempt to determine what, if any, differences exist among Full time, Part time and Extension students at the Graduate level. It is hoped that an understanding and analysis of these differences could be instrumental in better fitting the program in Administration to the individual.

Most of the questions will require only a check mark (✓). However, there are some questions that require more than one check or a short written answer. These questions will be so indicated. Please indicate the answer that best fits your situation or thinking. The questionnaire is divided into areas covering different aspects of background and training.

## ACADEMIC BACKGROUND

1. What type of institution granted your Bachelor's degree?  
☐ Teacher's College                      ☐ Technical School  
☐ University                              ☐ Bible College  
☐ Liberal Arts College
2. What was your undergraduate (Bachelor's degree) grade average for all work that applied to the degree? Indicate in which category your average would fall.  
☐ A    ☐ between B and C.  
☐ between A and B                      ☐ C  
☐ B    ☐ less than C
3. Where did you rank, scholastically, in your high school graduating class?  
☐ upper 1/4                                      ☐ third 1/4  
☐ second 1/4                                      ☐ lowest 1/4
4. What was the major field of emphasis in your undergraduate work? List second in importance if Education was the major field.  
 (Please specify) \_\_\_\_\_
5. What was the major reason you decided to seek a Master's degree?  
☐ increased salary                      ☐ desire to increase  
☐ improve position through              ☐ knowledge of education  
   advancement in present              ☐ improve position through  
   system                                      ☐ being qualified to seek  
☐ felt it was required by              ☐ employment in another  
   supervisors, administrators        ☐ system  
   and/or board of education        ☐ other (please specify) \_\_\_\_\_

6. What was your major reason for choosing Michigan State University for your Master's program?
- |  |   |
|--|---|
| <input type="checkbox"/> received AB there         | <input type="checkbox"/> close to my place of         |
| <input type="checkbox"/> advice of friends         | <input type="checkbox"/> employment                   |
| <input type="checkbox"/> extension courses were    | <input type="checkbox"/> had course(s) I wanted       |
| <input type="checkbox"/> conveniently located      | <input type="checkbox"/> other (please specify) _____ |
| <input type="checkbox"/> to my place of employment |   |
7. What was your major reason for choosing School Administration as your graduate field of emphasis?
- |   |   |
|---|---|
| <input type="checkbox"/> financial returns        | <input type="checkbox"/> it would be a good field     |
| <input type="checkbox"/> advice of friends        | <input type="checkbox"/> to have if an adminis-       |
| <input type="checkbox"/> wanted to become an      | <input type="checkbox"/> trative or department        |
| <input type="checkbox"/> administrator            | <input type="checkbox"/> head position became         |
| <input type="checkbox"/> suggested by a           | <input type="checkbox"/> available                    |
| <input type="checkbox"/> practicing administrator | <input type="checkbox"/> other (please specify) _____ |
8. How many term hours of your Master's degree credit did you earn in each of the following ways? (List number of term hours; approximate if you are not sure.)
- |  |
|--|
| <input type="checkbox"/> as a full time on campus student                  |
| <input type="checkbox"/> as a part time on campus student (evening school) |
| <input type="checkbox"/> in extension courses off campus                   |
| <input type="checkbox"/> in summer session                                 |
9. Were you a member of any student activity group during your graduate study?
- |                              |                             |
|------------------------------|-----------------------------|
| <input type="checkbox"/> yes | <input type="checkbox"/> no |
|------------------------------|-----------------------------|
- If yes, please specify. \_\_\_\_\_
10. Which of the following activities (offered at MSU) did you take advantage of or engage in during your graduate study? (more than one may be indicated.)
- |  |  |
|--|--|
| <input type="checkbox"/> athletic contests | <input type="checkbox"/> forums on education     |
| <input type="checkbox"/> lectures          | <input type="checkbox"/> conferences at Kellogg  |
| <input type="checkbox"/> travel series     | <input type="checkbox"/> Center                  |
| <input type="checkbox"/> concerts          | <input type="checkbox"/> speakers on Educational |
|  | <input type="checkbox"/> subjects                |
11. How many books have you read on Educational subjects (professional books) during the last year? (Exclude books read to meet course requirements.)
- |                                 |                                    |
|---------------------------------|------------------------------------|
| <input type="checkbox"/> none   | <input type="checkbox"/> 3 to 5    |
| <input type="checkbox"/> 1 or 2 | <input type="checkbox"/> 6 or more |
12. How many Educational periodicals do you read (at least partially)
- |                                 |                                    |
|---------------------------------|------------------------------------|
| <input type="checkbox"/> none   | <input type="checkbox"/> 3 to 5    |
| <input type="checkbox"/> 1 or 2 | <input type="checkbox"/> 6 or more |



13. How badly would your Master's degree education have been affected if there had not been MSU Library facilities but only assigned reading rooms?
- much affected    little affected  
   somewhat affected
14. To what extent did you make use of Library facilities other than MSU Library during your Master's degree work?
- none    extensive use  
   occasionally

## OCCUPATIONAL INFORMATION

15. How are you engaged during the summer?  
 \_\_\_ summer school  
 \_\_\_ employed in  
 \_\_\_ Educational work  
 \_\_\_ contract includes summer employment  
 \_\_\_ employment other than Educational  
 \_\_\_ other (please specify) \_\_\_
16. Had you had Military service? (as of the beginning of the Master's program)  
 \_\_\_ yes  
 \_\_\_ no  
 If yes, the number of years of service was:  
 \_\_\_ less than one year  
 \_\_\_ 1 to 2 years  
 \_\_\_ over 2 but less than 4 years  
 \_\_\_ 4 years or over
17. How many years of non-teaching or non-educational work did you have between graduation from high school and the beginning of your Master's degree program? (exclude summer work experiences and Military service)  
 \_\_\_ none  
 \_\_\_ less than one year  
 \_\_\_ 1 but less than 2 years  
 \_\_\_ 2 but less than 3 years  
 \_\_\_ 3 but less than 5 years  
 \_\_\_ 5 years or over
18. What was the time interval between the receiving of your Bachelor's degree and the beginning of your Master's degree?  
 \_\_\_ none  
 \_\_\_ less than one year  
 \_\_\_ 1 to 2 years  
 \_\_\_ 2 to 5 years  
 \_\_\_ over 5 years
19. What objectives do your future plans include? (more than one may be checked)  
 \_\_\_ classroom teacher  
 \_\_\_ counselor  
 \_\_\_ principal  
 \_\_\_ position outside of education  
 \_\_\_ supervisor or director  
 \_\_\_ superintendent  
 \_\_\_ position in a college level institution  
 \_\_\_ other (please specify)

20. Please list in chronological order, the teaching and/or administrative positions you have since receiving your Master's degree.

Under years - indicate the school years the position was held

Under position - indicate the type of work you were doing

Under name of school system - if the system was in Michigan give the name of the system, if the system was outside of Michigan, name and give the approximate enrollment of the total school system. (this is for identifying size of school system)

Under yearly salary - indicate salary to the nearest \$100.00

	Years	Position	Name of school system	Yearly salary
Example	1958-59	Elementary Principal	Glendale	\$6,000

21. Do you plan to take University or College courses beyond the Master's level?

☐ yes

☐ no

If yes, what type?

☐ degree basis (Doctoral level)

☐ non-degree basis

☐ would like a "sixth year" degree program

22. At the beginning of your Master's degree program, how many years of teaching experience had you had?

☐ none

☐ less than one year

☐ 1 but less than 2 years

☐ 2 but less than 3 years

☐ 3 but less than 5 years

☐ 5 years or over

23. Free of restrictions what would you want to be doing 15 years from now? (please specify fully)

OPINIONAIRE

In this area your opinion will be asked on various subjects. Please check the response (s) that best fits your thinking or explain your answer fully.

24. Should one get some practical teaching experience before beginning a Master's degree? (other than student teaching)
- ☐yes                                  ☐makes little difference
- ☐no
- If yes, how many years?
- ☐one                                      ☐three
- ☐two                                        ☐more than 3
25. Do you feel that sufficient time was spent setting up your course program for the Master's degree?
- ☐yes                                        ☐no
26. Were the Master's degree program course requirements sufficiently flexible to meet your individual needs?
- ☐yes                                        ☐no
27. If you were enrolled both as a part time and a full time student (other than summer school) would you evaluate and compare the two types of classes.

## PERSONAL AND FAMILY BACKGROUND

28. Your Name \_\_\_\_\_  
(All questionnaires will be kept in strict confidence  
and information will only appear in compiled form with  
data from others)
29. Your sex  
\_\_\_\_male  
\_\_\_\_female
30. Your age at the beginning of your Master's degree pro-  
gram?  
\_\_\_\_20 through 25  
\_\_\_\_26 through 30  
\_\_\_\_31 through 35  
\_\_\_\_36 through 40  
\_\_\_\_41 through 45  
\_\_\_\_46 through 50  
\_\_\_\_over 50

31. Your marital status at the beginning of your Master's degree program?  
☐ single ☐ other (divorced, widowed etc.)  
☐ married
32. Number of children you had at the beginning of your Master's degree program?  
☐ none ☐ three  
☐ one ☐ four or more  
☐ two
33. In how many educational professional organizations do you hold membership?  
☐ none ☐ 3 or 4  
☐ 1 or 2 ☐ four or more
34. What financial resource did you use to finance your Master's program? (more than one may be checked.)  
☐ own current earnings ☐ borrowing  
☐ savings ☐ scholarship  
☐ parents ☐ Government subsidy
35. Indicate your father's occupational category.  
☐ professional, technical or kindred worker  
☐ farmer or farm manager  
☐ manager, official, or proprietor, except farm  
☐ clerical or kindred worker  
☐ sales worker  
☐ craftsman, foreman or kindred worker  
☐ operative or kindred worker  
☐ private household worker  
☐ service worker except private household  
☐ farm laborer or foreman  
☐ laborer, except farm and mine  
☐ other (please specify) \_\_\_\_\_
36. Indicate your father's educational level.  
☐ 8th grade or less ☐ some college  
☐ some high school ☐ college graduate  
☐ high school graduate
37. Indicate your mother's educational level.  
☐ 8th grade or less ☐ some college  
☐ some high school ☐ college graduate  
☐ high school graduate

38. Indicate the type of community where your youth was spent.

☐ rural farm

☐ rural non-farm

☐ village (up to 2500 population)

☐ city (2500 to 50,000 population)

☐ metropolitan (over 50,000 population)

For pilot study only.

How long did it take you to complete this questionnaire?

Any general comments you would like to make?

## APPENDIX A

### QUESTIONNAIRE USED IN MAIN STUDY



## GRADUATE STUDY QUESTIONNAIRE

The purpose of this questionnaire is to furnish data for a study which would attempt to determine what, if any, differences exist among Full time, Part time and Extension students at the Graduate level. It is hoped that an understanding and analysis of these differences could be instrumental in better fitting the program in Administration to the individual.

Most of the questions will require only a check mark (✓). However, there are some questions that require more than one check or a short written answer. These questions will be so indicated. Please indicate the answer that best fits your situation or thinking. The questionnaire is divided into areas covering different aspects of background and training.

### ACADEMIC BACKGROUND

1. What type of institution granted your Bachelor's degree?  
☐ Teacher's College                      ☐ Technical School  
☐ University                                ☐ Bible College  
☐ Liberal Arts College
2. What was your undergraduate (Bachelor's degree) grade average for all work that applied to the degree? Indicate in which category your average would fall.  
☐ A    ☐ between B and C  
☐ between A and B                                ☐ C  
☐ B    ☐ less than C
3. Where did you rank, scholastically, in your high school graduating class?  
☐ upper  $\frac{1}{4}$     ☐ third  $\frac{1}{4}$   
☐ second  $\frac{1}{4}$     ☐ lowest  $\frac{1}{4}$
4. What was the major field of emphasis in your undergraduate work? List second in importance if Education was the major field.  
(Please specify) \_\_\_\_\_
5. What was the major reason you decided to seek a Master's degree? List in order of importance 1st, 2nd, 3rd.  
☐ increased salary                                ☐ desire to increase knowledge of education  
☐ improve position through advance-        ☐ improve position through being qualified  
ment in present system                                to seek employment in another system  
☐ felt it was required by                                ☐ other (please specify) \_\_\_\_\_  
supervisors, administrators and/  
or board of education  
☐ already had the 10 required hrs and decided to continue
6. What was your major reason for choosing Michigan State University for your Master's program? List in order of importance 1st, 2nd, 3rd.  
☐ received AB there                                ☐ close to my place of employment  
☐ advice of friends                                ☐ had course(s) I wanted  
☐ extension courses were                                ☐ other (please specify) \_\_\_\_\_  
conveniently located to my  
place of employment
7. What was your major reason for choosing School Administration as your graduate field of emphasis? List in order of importance 1st, 2nd, 3rd.  
☐ financial returns                                ☐ it would be a good field to have if an  
☐ advice of friends                                administrative or department head position  
☐ wanted to become an administrator                                became available  
☐ suggested by a practicing                                ☐ other (please specify) \_\_\_\_\_  
administrator
8. How many term hours of your Master's degree credit did you earn in each of the following ways? (list number of term hours; approximate if you are not sure.)  
☐ as a full time on campus student  
☐ as a part time on campus student (evening school) or Saturday a.m.  
☐ in extension courses off campus  
☐ in summer sessions
9. Were you a member of any student activity group during your graduate study?  
☐ yes    ☐ no  
If yes, please specify. \_\_\_\_\_



10. Which of the following activities (offered at MSU) did you take advantage of or engage in during your graduate study? (more than one may be indicated.)
- |  |   |
|--|---|
| <input type="checkbox"/> athletic contests | <input type="checkbox"/> forums on education              |
| <input type="checkbox"/> lectures          | <input type="checkbox"/> conferences at Kellogg Center    |
| <input type="checkbox"/> travel series     | <input type="checkbox"/> speakers on Educational subjects |
| <input type="checkbox"/> concerts          | <input type="checkbox"/> none                             |
11. How many books have you read on Educational subjects (professional books) during the last year? (Exclude books read to meet course requirements.)
- |                                 |                                    |
|---------------------------------|------------------------------------|
| <input type="checkbox"/> none   | <input type="checkbox"/> 3 to 5    |
| <input type="checkbox"/> 1 or 2 | <input type="checkbox"/> 6 or more |
12. How many Educational periodicals do you read (at least partially) each month?
- |                                 |                                    |
|---------------------------------|------------------------------------|
| <input type="checkbox"/> none   | <input type="checkbox"/> 3 to 5    |
| <input type="checkbox"/> 1 or 2 | <input type="checkbox"/> 6 or more |
13. How badly would your Master's degree education have been affected if there had not been MSU Library facilities but only assigned reading rooms?
- |  |  |
|--|--|
| <input type="checkbox"/> much affected     | <input type="checkbox"/> little affected |
| <input type="checkbox"/> somewhat affected |  |
14. To what extent did you make use of Library facilities other than MSU Library during your Master's degree work?
- |                                       |  |
|---------------------------------------|--|
| <input type="checkbox"/> none         | <input type="checkbox"/> extensive use |
| <input type="checkbox"/> occasionally |  |
- Which Library? \_\_\_\_\_

#### OCCUPATIONAL INFORMATION

15. How were you engaged during the past summer?
- |   |  |
|---|--|
| <input type="checkbox"/> summer school                | <input type="checkbox"/> contract includes summer employment |
| <input type="checkbox"/> employed in Educational work | <input type="checkbox"/> employment other than Educational   |
| <input type="checkbox"/> summer recreation work       | <input type="checkbox"/> other (please specify) _____        |
16. Had you had Military service? (as of the beginning of the Master's program)
- |                              |                             |
|------------------------------|-----------------------------|
| <input type="checkbox"/> yes | <input type="checkbox"/> no |
|------------------------------|-----------------------------|
- If yes, the number of years of service was:
- |   |   |
|---|---|
| <input type="checkbox"/> less than one year | <input type="checkbox"/> over 2 but less than 4 years |
| <input type="checkbox"/> 1 to 2 years       | <input type="checkbox"/> 4 years or over              |
17. How many years of non-teaching or non-educational work did you have between graduation from high school and the beginning of your Master's degree program? (exclude summer work experiences and Military service also exclude student status periods)
- |   |  |
|---|--|
| <input type="checkbox"/> none                     | <input type="checkbox"/> 2 but less than 3 years       |
| <input type="checkbox"/> less than one year       | <input type="checkbox"/> 3 but less than 5 years       |
| <input type="checkbox"/> 1 but less than 2 years  | <input type="checkbox"/> 5 years but less than 8 years |
| <input type="checkbox"/> 8 but less than 12 years | <input type="checkbox"/> 12 years or over              |
18. What was the time interval between the receiving of your Bachelor's degree and the beginning of your Master's degree?
- |   |                                       |
|---|---------------------------------------|
| <input type="checkbox"/> none               | <input type="checkbox"/> 2 to 5 years |
| <input type="checkbox"/> less than one year | <input type="checkbox"/> over 5 years |
| <input type="checkbox"/> 1 to 2 years       |                                       |
19. What objectives do your future plans include? (more than one may be checked)
- |  |  |
|--|--|
| <input type="checkbox"/> classroom teacher             | <input type="checkbox"/> supervisor or director                  |
| <input type="checkbox"/> counselor                     | <input type="checkbox"/> superintendent                          |
| <input type="checkbox"/> principal                     | <input type="checkbox"/> position in a college level institution |
| <input type="checkbox"/> position outside of education | <input type="checkbox"/> other (please specify) _____            |
20. Please list in chronological order, the teaching and/or administrative positions you have held since receiving your Master's degree. If you are not engaged in teaching would you please give a work resume in the block below.
- Under years - indicate the school years the position was held
- Under position - indicate the type of work you were doing
- Under name of school system - if the system was in Michigan give the name of the system, if the system was outside of Michigan, name and give the approximate

enrollment of the total school system. (this is for identifying size of school system)  
Under yearly salary - indicate salary to the nearest \$100.00

	Years	Position	Name of school system	Yearly salary
Example	1958-1959	Elementary Principal	Glendale	\$6,000

21. Do you plan to take University or College courses beyond the Master's level?  
 \_\_\_yes \_\_\_no  
 If yes, what type? \_\_\_degree basis (Doctoral Level)  
 \_\_\_non-degree basis \_\_\_would like a "sixth year" degree program
22. At the beginning of your Master's degree program, how many years of teaching experience had you had?  
 \_\_\_none \_\_\_2 but less than 3 years  
 \_\_\_less than one year \_\_\_3 but less than 5 years  
 \_\_\_1 but less than 2 years \_\_\_5 years or over
23. Free of restrictions what would you want to be doing 15 years from now? (please specify fully) \_\_\_\_\_

#### OPINIONAIRE

In this area your opinion will be asked on various subjects. Please check the reponse(s) that best fits your thinking or explain your answer fully.

24. Should one get some practical teaching experience before beginning a Master's degree? (other than student teaching)  
 \_\_\_yes \_\_\_makes little difference  
 \_\_\_no  
 If yes, how many years?  
 \_\_\_one \_\_\_three  
 \_\_\_two \_\_\_more than 3
25. Do you feel that sufficient time was spent setting up your course program for the Master's degree?  
 \_\_\_yes \_\_\_no
26. Were the Master's degree program course requirements sufficiently flexible to meet your individual needs?  
 \_\_\_yes \_\_\_no
27. If you were enrolled both as a part time and a full time student (other than summer school) would you evaluate and compare the two types of classes.

#### PERSONAL AND FAMILY BACKGROUND

28. Your Name \_\_\_\_\_ (All questionnaires will be kept in strict confidence and information will only appear in compiled form with data from others)
29. Your sex  
 \_\_\_male  
 \_\_\_female
30. Your age at the beginning of your Master's degree program?  
 \_\_\_20 through 25 \_\_\_41 through 45  
 \_\_\_26 through 30 \_\_\_46 through 50  
 \_\_\_31 through 35 \_\_\_over  
 \_\_\_36 through 40
31. Your marital status at the beginning of your Master's degree program?  
 \_\_\_single \_\_\_other (divorced, widowed etc.)  
 \_\_\_married
32. Number of children you had at the beginning of your Master's degree program?  
 \_\_\_none \_\_\_three  
 \_\_\_one \_\_\_four or more  
 \_\_\_two

33. In how many educational professional organizations do you hold membership?  
☐ none ☐ 3 or 4  
☐ 1 or 2 ☐ four or five  
☐ six or more
34. What financial resource did you use to finance your Master's program (more than one may be checked.)  
☐ own current earnings ☐ borrowing  
☐ savings ☐ scholarship  
☐ parents ☐ Government subsidy  
☐ spouse working
35. Indicate your father's occupational category.  
☐ professional, technical or kindred worker  
☐ farmer or farm manager  
☐ manager, official, or proprietor, except farm  
☐ clerical or kindred worker  
☐ sales worker  
☐ craftsman, foreman or kindred worker  
☐ operative or kindred worker  
☐ private household worker  
☐ service worker except private household  
☐ farm laborer or foreman  
☐ laborer, except farm and mine  
☐ other (please specify) \_\_\_\_\_
36. Indicate your father's educational level.  
☐ 8th grade or less ☐ some college  
☐ some high school ☐ college graduate  
☐ high school graduate
37. Indicate your mother's educational level.  
☐ 8th grade or less ☐ some college  
☐ some high school ☐ college graduate  
☐ high school graduate
38. Indicate the type of community where your youth was spent.  
☐ rural farm  
☐ rural non-farm  
☐ village (up to 2500 population)  
☐ city (2500 to 50,000 population)  
☐ metropolitan (over 50,000 population)

I would like a copy of the results of this study.

## APPENDIX B



TABLE 1

ATTENDANCE AT MICHIGAN STATE UNIVERSITY  
ATHLETIC CONTESTS

Participation	Type of Student			
	Full Time	Part Time	Extension	Total
Attended Athletic Contests	(13.1)* 25	(25.5) 18	(9.4)	48
Did not Attend Athletic Contest	(29.9) 18	(58.5) 66	(21.6) 26	110
Total	43	84	31	158

\*Numbers in ( ) indicate the expected frequency for the cell.

TABLE 2

## BREAKDOWN OF POPULATION SAMPLE

Graduates	Not Usable for Study Purposes	Population Totals
Total Educational Administration Graduates at Michigan State University 1954-1958		296
Graduates living outside Michigan	51	
Summer school graduates	43	
Graduates for whom classi- fication was impossible (due to nearly equal credit hour combinations)	29	
Graduates to whom question- naires were sent		173
Deceased graduates	2	
Graduates who had recently left Michigan	3	
Questionnaires returned with no record of addressee and for whom no further address could be obtained	2	
Graduates not wishing to reply or from whom no reply could be obtained	7	
Questionnaires received after tabulation was completed and not in- cluded in the study	1	
Total usable questionnaires		158
Per cent of questionnaires returned		95%

TABLE 3

BREAKDOWN OF SAMPLE BY TYPE  
OF STUDENT DURING MASTER'S  
DEGREE PROGRAM

---

Type of Student	Number
Full Time Student	43
Part Time Student	84
Extension Student	31
Total Students in Sample	158

---



TABLE 4

TYPE OF INSTITUTION GRANTING  
THE BACHELOR'S DEGREE

Type of Institution	Type of Student			Total
	Full Time	Part Time	Extension	
Technical and Teacher Colleges	8	19	15	42
University	26	44	9	79
Liberal Arts College	9	21	7	37
Total	43	84	31	158

$\chi^2 = 11.13$   
Significant

df = 4      p = > .05

TABLE 5

UNDERGRADUATE ACADEMIC GRADE AVERAGE

Grade Average	Type of Student			Total
	Full Time	Part Time	Extension	
Above B	6	16	6	28
B	12	19	10	41
Below B	25	48	15	88
Total	43	83	31	157

$\chi^2 = 1.79$   
Not significant

df - 4

p = > .80



TABLE 6

SCHOLASTIC RANK IN HIGH SCHOOL  
GRADUATING CLASS

Scholastic Rank	Type of Student			
	Full Time	Part Time	Extension	Total
Upper One-fourth	23	40	22	85
Second One-fourth	14	25	4	43
Lower One-half	5	14	4	23
Total	42	79	30	151

$\chi^2 = 4.76$   
Not significant

df = 4

p = > .50

TABLE 7

MAJOR FIELD OF EMPHASIS IN  
UNDERGRADUATE WORK

Field of Emphasis	Type of Student			
	Full Time	Part Time	Extension	Total
Science and Mathematics	11	22	5	38
Social Science	9	20	8	37
English and Arts	8	14	9	31
Business and Vocational	6	15	7	28
Physical Education	8	10	2	20
Total	42	81	31	154

$\chi^2 = 4.89$   
Not significant

df = 8

p = > .80

TABLE 8

MAJOR REASON FOR SEEKING A  
MASTER'S DEGREE

Reason for Master's Degree	Type of Student			
	Full Time	Part Time	Extension	Total
Salary	8	17	2	27
Advancement in present system	6	25	7	38
Felt it was re- quired by superiors	5	8	5	18
Desire for knowledge of education	13	14	7	34
To better qualify for employment in another system	10	19	10	39
Total	42	83	31	156
<hr/>				
$\chi^2 = 9.74$ Not significant	$df = 8$		$p = > .30$	

TABLE 9  
MAJOR REASON FOR CHOOSING MICHIGAN STATE  
UNIVERSITY FOR THE MASTER'S PROGRAM

Reason for Choosing Michigan State University	Type of Student			
	Full Time	Part Time	Extension	Total
Received AB at MSU	18	10	3	31
Advice of friends	8	2	5	15
Extension courses con- veniently located	5	4	22	31
MSU close to my place of employment	2	63	0	65
Offered courses I wanted	10	5	1	16
Total	43	84	31	158
$\chi^2 = 127.39$ Significant	df - 8		p = > .001	

TABLE 10  
REASON FOR CHOOSING SCHOOL ADMINISTRATION  
AS THE GRADUATE FIELD OF EMPHASIS

Reason for Choosing School Administration	Type of Student			
	Full Time	Part Time	Extension	Total
Wanted to be an ad- ministrator or al- ready was an admin- istrator	28	48	15	91
A good field to have if an opening became available	11	23	9	43
Other reasons	4	13	7	24
Total	43	84	31	158
$\chi^2 = 3.02$ Not significant	df - 4		p = > .70	

TABLE 11

MEMBERSHIP IN STUDENT ACTIVITY GROUPS  
DURING GRADUATE ENROLLMENT

Student Activities	Type of Student			
	Full Time	Part Time	Extension	Total
Yes	2	3	1	6
No	41	81	30	152
Total	43	84	31	158

$\chi^2 = *$

\*Because of the small number of persons reporting membership in student activities it was not possible to calculate  $\chi^2$  for this table with meaningful results.

TABLE 12

ACTIVITIES ATTENDED OR ENGAGED IN AT  
MICHIGAN STATE UNIVERSITY

Number of Activities	Type of Student			
	Full Time	Part Time	Extension	Total
One or less	2	23	9	34
Two	10	18	9	37
Three	10	18	4	32
Four	8	9	5	22
Five or more	13	16	4	33
Total	43	84	31	158

$\chi^2 = 13.21$   
Not significant

df = 8

p = > .20

TABLE 13

ATTENDANCE AT MICHIGAN STATE UNIVERSITY  
ATHLETIC CONTESTS

Attendance at Athletic Contests	Type of Student			
	Full Time	Part Time	Extension	Total
Attended athletic contests	25	18	5	48
Did not attend athletic contests	18	66	26	110
Total	43	84	31	158
<hr/>				
$\chi^2 = 22.98$ Significant	df = 2		p = > .001	

TABLE 14

ATTENDANCE AT MICHIGAN STATE UNIVERSITY  
LECTURE SERIES

Attendance at Lecture Series	Type of Student			
	Full Time	Part Time	Extension	Total
Attended Lectures	25	28	12	65
Did not attend Lectures	18	56	19	93
Total	43	84	31	158
<hr/>				
$\chi^2 = 7.31$ Significant	df = 2		p = > .05	

TABLE 15

ATTENDANCE AT MICHIGAN STATE UNIVERSITY  
TRAVEL SERIES

Attendance at Travel Series	Type of Student			Total
	Full Time	Part Time	Extension	
Attended series	17	21	5	43
Did not attend series	26	63	26	115
Total	43	84	31	158
$\chi^2 = 5.43$ Not significant				
		df = 2		p = > .10

TABLE 16

ATTENDANCE AT MICHIGAN STATE UNIVERSITY  
CONCERT SERIES

Attendance at Concert Series	Type of Student			Total
	Full Time	Part Time	Extension	
Attended concerts	17	19	7	43
Did not attend concerts	26	65	24	115
Total	43	84	31	158
$\chi^2 = 4.54$ Not significant				
		df = 2		p = > .20



TABLE 17

## ATTENDANCE AT FORUMS ON EDUCATIONAL TOPICS

Attendance at Forums	Type of Student			
	Full Time	Part Time	Extension	Total
Attended forums	16	37	10	63
Did not attend forums	27	47	21	95
Total	43	84	31	158
<hr/>				
$\chi^2 = 1.47$ Not significant	df = 2		p = > .50	

TABLE 18

## ATTENDANCE AT EDUCATIONAL CONFERENCES

Attendance at Conferences	Type of Student			
	Full Time	Part Time	Extension	Total
Attended conferences	22	44	17	83
Did not attend conferences	21	40	14	75
Total	43	84	31	158
<hr/>				
$\chi^2 = .10$ Not significant	df = 2		p = > .99	



TABLE 19

ATTENDANCE AT MEETINGS WITH SPECIAL SPEAKERS  
ON EDUCATIONAL TOPICS

Attendance at Meetings with Special Speakers	Type of Student			
	Full Time	Part Time	Extension	Total
Attended meetings	33	56	18	107
Did not attend meetings	10	28	13	51
Total	43	84	31	158
$\chi^2 = 2.17$ $df = 2$ $p = > .90$ Not significant				

TABLE 20

PARTICIPATION IN MICHIGAN STATE UNIVERSITY  
ACTIVITIES

Participation In Activities	Type of Student			
	Full Time	Part Time	Extension	Total
Participated	42	68	26	136
Did not participate	1	16	5	22
Total	43	84	31	158
$\chi^2 = 6.82$ $df = 2$ $p = > .05$ Significant				

TABLE 21

NUMBER OF EDUCATIONAL BOOKS READ DURING THE  
LAST YEAR

Number of Books Read	Type of Student			
	Full Time	Part Time	Extension	Total
None	6	16	5	27
One or two	15	30	15	60
Three to five	17	22	10	49
Six or more	5	16	1	22
Total	43	84	31	158
<hr/>				
$\chi^2 = 7.48$ Not significant	df = 6		p = > .30	

TABLE 22

NUMBER OF PERIODICALS READ DURING THE  
LAST YEAR

Number of Periodicals	Type of Student			
	Full Time	Part Time	Extension	Total
Two or less	14	39	16	69
Three or more	29	45	15	89
Total	43	84	31	158
<hr/>				
$\chi^2 = 3.24$ Not significant	df = 2		p = > .20	

TABLE 23

THE AFFECT LACK OF MICHIGAN STATE UNIVERSITY  
LIBRARY FACILITIES WOULD HAVE HAD ON THE  
STUDENT'S GRADUATE PROGRAM

Affect of Lack of Library Facilities	Type of Student			
	Full Time	Part Time	Extension	Total
Much affected	21	33	12	66
Somewhat affected	17	32	11	60
Little affected	5	19	8	32
Total	43	84	31	158
<hr/>				
$\chi^2 = 3.04$ Not significant	df = 4		p = > .70	

TABLE 24

USE MADE OF OTHER THAN MICHIGAN STATE UNIVERSITY  
LIBRARY FACILITIES

Use Made of Other Libraries	Type of Student			
	Full Time	Part Time	Extension	Total
None	12	13	5	31
Occassionally	27	49	22	98
Extensive	4	21	4	29
Total	43	84	31	158
<hr/>				
$\chi^2 = 7.18$ Not significant	df = 4		p = > .20	

TABLE 25

USE MADE OF LIBRARIES OTHER THAN MICHIGAN STATE  
UNIVERSITY LIBRARY FOR GRADUATE WORK

Type of Library	Type of Student			Total
	Full Time	Part Time	Extension	
State Library	11	38	4	53
City or County Library	11	17	9	37
College or School Library	4	5	7	16
Total	26	60	20	106

$\chi^2 = 14.91^*$   
Significant

df = 4

p = > .01

\*This table does not meet the requirement of fewer than 20 per cent of the cells having expected frequencies of less than 5. Actually 22 per cent of the cells have expected frequencies of less than 5. Therefore, the results of this  $\chi^2$  should be interpreted accordingly.

TABLE 26

EMPLOYMENT OR ACTIVITIES OF GRADUATES  
DURING THE SUMMER

Summer Activities	Type of Student			Total
	Full Time	Part Time	Extension	
Summer school, study or travel	12	5	5	22
Educational or recreational employment	13	22	5	40
Under contract for educational work	6	17	10	23
Non-educational employment	12	38	11	61
Total	43	82	31	156

$\chi^2 = 16.51$   
Significant

df = 6

p = > .02

TABLE 27

MILITARY SERVICE AT THE BEGINNING  
OF THE MASTER'S DEGREE PROGRAM

Military Service	Type of Student			
	Full Time	Part Time	Extension	Total
Yes	30	56	15	101
No	13	28	16	57
Total	43	84	31	158
<hr/>				
$\chi^2 = 4.12$ Not significant	df = 2		p = > .20	

TABLE 28

YEARS OF MILITARY SERVICE COMPLETED AT THE  
BEGINNING OF THE MASTER'S DEGREE PROGRAM

Years of Military Service	Type of Student			
	Full Time	Part Time	Extension	Total
Less than two years	12	20	11	43
Two but less than four	10	27	4	41
Over four years	8	9	0	17
Total	30	56	15	101
<hr/>				
$\chi^2 = 10.24$ Significant	df = 4		p = > .05	

TABLE 29

YEARS OF NON-EDUCATIONAL WORK BETWEEN HIGH  
SCHOOL GRADUATION AND THE BEGINNING OF THE  
MASTER'S DEGREE PROGRAM

Years of Non- educational Work	Type of Student			
	Full Time	Part Time	Extension	Total
None	15	22	10	47
Less than two	11	22	6	39
Two to five	8	19	7	34
Over five	9	21	8	38
Total	43	84	31	158

$\chi^2 = 1.74$   
Not significant

df = 6

p = > .95

TABLE 30

THE TIME INTERVAL BETWEEN RECEIPT OF THE  
BACHELOR'S DEGREE AND THE BEGINNING OF  
THE MASTER'S DEGREE PROGRAM

Time Between Degrees	Type of Student			
	Full Time	Part Time	Extension	Total
None	9	9	1	19
Less than two years	12	33	15	60
Two to five years	16	21	9	46
Over five years	6	21	6	33
Total	43	84	31	158

$\chi^2 = 10.17$   
Not significant

df = 6

p = > .20



TABLE 31

## CLASSROOM TEACHING AS A PART OF FUTURE PLANS

Future Plans Include	Type of Student			
	Full Time	Part Time	Extension	Total
Classroom teaching	10	18	2	30
No classroom teaching	33	66	29	128
Total	43	84	31	158
<hr/>				
$\chi^2 = 4.02$ Not significant	df = 2		p = > .20	

TABLE 32

## PRINCIPALSHIP AS A PART OF FUTURE PLANS

Future Plans Include	Type of Student			
	Full Time	Part Time	Extension	Total
Principalship	24	35	13	72
No principalship	19	49	18	86
Total	43	84	31	158
<hr/>				
$\chi^2 = 2.47$ Not significant	df = 2		p = > .30	

TABLE 33

POSITION OF SUPERVISION OR DIRECTOR AS PART  
OF FUTURE PLANS

Future Plans Include	Type of Student			
	Full Time	Part Time	Extension	Total
Supervisory position	14	16	3	33
No Supervisory position	29	68	28	125
Total	43	84	31	158
<hr/>				
$\chi^2 = 6.08$ Significant	df = 2		p = > .05	

TABLE 34

SUPERINTENDENCY AS A PART OF FUTURE PLANS

Future Plans Include	Type of Student			
	Full Time	Part Time	Extension	Total
Superintendency	12	29	15	56
No Superintendency	31	55	16	102
Total	43	84	31	158
<hr/>				
$\chi^2 = 3.34$ Not significant	df = 2		p = > .20	

TABLE 35

## A COLLEGE POSITION AS A PART OF FUTURE PLANS

Future Plans Include	Type of Student			
	Full Time	Part Time	Extension	Total
College position	13	24	11	48
No college position	30	60	20	110
Total	43	84	31	158
$\chi^2 = .52$ Not significant				
	df = 2		p = > .98	

TABLE 36

A POSITION OUTSIDE OF EDUCATION AS A PART OF  
FUTURE PLANS

Future Plans Include	Type of Student			
	Full Time	Part Time	Extension	Total
Position outside education	7	13	3	23
No position out- side education	36	71	28	135
Total	43	84	31	158
$\chi^2 = .62$ Not significant				
	df = 2		p = > .98	

TABLE 37

TYPE OF POSITION HELD BY GRADUATES DURING  
SCHOOL YEAR 1959-1960

Position Held	Type of Student			
	Full Time	Part Time	Extension	Total
Teacher	17	32	10	59
Principal	13	24	14	41
Superintendent, Supervisor, Director	9	17	5	31
University or Outside education	4	9	4	17
Total	43	82	31	156
$\chi^2 = 5.45.$ Not significant				
df = 6				
p = > .50				

TABLE 38

SIZE OF SCHOOL SYSTEM WHERE GRADUATE WAS  
EMPLOYED DURING SCHOOL YEAR 1959-1960\*

Size of School System	Type of Student			
	Full Time	Part Time	Extension	Total
A	18	27	6	51
B	7	23	5	35
C	4	13	7	24
D	4	8	8	20
Total	33	71	26	130
$\chi^2 = 12.81$ Significant				
df = 6				
p = > .05				

\*Only those employed in K--12 school systems were included in this table.

TABLE 39

SALARY REPORTED BY GRADUATES FOR THE SCHOOL YEAR  
1959-1960

Salary Reported	Type of Student			
	Full Time	Part Time	Extension	Total
Under \$5,500	10	11	6	27
\$5,500 - \$5,999	7	18	8	33
\$6,000 - \$6,499	9	12	4	25
\$6,500 - \$6,999	6	11	3	20
Over \$7,000	8	26	8	42
Total	40	78	29	147

$\chi^2 = 5.54$   
Not significant

df = 8

p = > .80

TABLE 40

GRADUATE'S PLANS FOR TAKING COURSES BEYOND  
THE MASTER'S DEGREE

Plan to Take Courses	Type of Student			
	Full Time	Part Time	Extension	Total
Yes	41	73	25	139
No	2	11	6	19
Total	43	84	31	158

$\chi^2 = 3.95$   
Not significant

df = 2

p = > .20



TABLE 41

TYPE OF COURSE PROGRAM GRADUATES PLAN TO  
TAKE BEYOND THE MASTER'S DEGREE

Type of Course Program	Type of Student			
	Full Time	Part Time	Extension	Total
Degree	18	26	15	59
Non-degree	12	25	6	43
Total	30	51	21	102
<hr/>				
$\chi^2 = 2.63$ Not significant	df = 2		p = > .30	

TABLE 42

NUMBER OF YEARS OF TEACHING EXPERIENCE AT THE  
BEGINNING OF THE MASTER'S PROGRAM

Years of Teaching Experience	Type of Student			
	Full Time	Part Time	Extension	Total
None	19	8	1	28
Less than two years	10	24	13	47
Two to three years	2	16	0	18
Three to five years	5	18	8	31
Over five years	7	18	9	34
Total	43	84	31	158
<hr/>				
$\chi^2 = 39.16$ Significant	df = 8		p = > .001	





TABLE 43

OCCUPATIONAL PLANS OF THE INDIVIDUAL  
FIFTEEN YEARS HENCE

Future Plans	Type of Student			
	Full Time	Part Time	Extension	Total
Principal or Supervisor	13	12	5	30
Superintendent	9	16	12	31
College position or Consultant	6	18	7	31
Position outside education	5	9	3	17
Retired and others	10	29	4	43
Total	43	84	31	158
$\chi^2 = 13.24$ $df = 8$ $p = > .20$ Not significant				

TABLE 44

OPINION ON THE VALUE OF TEACHING EXPERIENCE AS  
A PREREQUISITE FOR MASTER'S DEGREE WORK

Should Get Experience	Type of Student			
	Full Time	Part Time	Extension	Total
Yes	30	72	26	128
No or makes little difference	13	12	5	30
Total	43	84	31	158
$\chi^2 = 5.13$ $df = 2$ $p = > .10$ Not significant				

TABLE 45

YEARS OF TEACHING EXPERIENCE DESIRABLE BEFORE  
BEGINNING THE MASTER'S DEGREE PROGRAM

Desirable Years of Experience	Type of Student			
	Full Time	Part Time	Extension	Total
One	6	13	6	25
Two	15	35	7	57
Three	7	8	7	32
More than three	2	4	4	10
Total	30	70	24	124

$\chi^2 = 5.21$   
Not significant

df = 6

p = > .70

TABLE 46

OPINION ON TIME SPENT SETTING UP THE  
MASTER'S DEGREE PROGRAM

Sufficient Time Spent Setting Up Program	Type of Student			
	Full Time	Part Time	Extension	Total
Yes	30	58	21	109
No	13	26	10	49
Total	43	84	31	158

$\chi^2 = .05$   
Not significant

df = 2

p = > .99

TABLE 47

OPINION ON THE FLEXIBILITY OF MASTER'S DEGREE  
COURSE REQUIREMENTS

Requirements Were Sufficiently Flexible	Type of Student			
	Full Time	Part Time	Extension	Total
Yes	35	68	24	127
No	7	15	6	28
Total	42	83	30	155
$\chi^2 = .14$ Not significant				
		df = 2		p = > .99

TABLE 48

SEX OF GRADUATES

Sex of Student	Type of Student			
	Full Time	Part Time	Extension	Total
Male	39	78	28	145
Female	4	6	3	13
Total	43	84	31	158
$\chi^2 = .29^*$ Not significant				
		df = 2		p = > .90

\*This table fails to meet the requirement of twenty per cent of the cells with an expected frequency of five or more.

TABLE 49

AGE OF STUDENT AT THE BEGINNING OF THE  
MASTER'S PROGRAM

Age	Type of Student			
	Full Time	Part Time	Extension	Total
Twenty to twenty-five	18	22	9	49
Twenty-six to thirty	15	34	15	64
Thirty-one to thirty-five	5	12	2	19
Over thirty-six	5	16	5	26
Total	43	84	31	26
$\chi^2 = 5.25$ Not significant				
df = 6			p = > .70	

TABLE 50

MARITAL STATUS OF STUDENT AT THE BEGINNING OF  
THE MASTER'S PROGRAM

Marital Status	Type of Student			
	Full Time	Part Time	Extension	Total
Single	15	7	5	27
Married	28	77	26	131
Total	43	84	31	158
$\chi^2 = 14.25$ Significant				
df = 2			p = > .001	

TABLE 51

NUMBER OF CHILDREN STUDENT HAD AT THE  
BEGINNING OF THE MASTER'S PROGRAM

Number of Children	Type of Student			
	Full Time	Part Time	Extension	Total
None	26	19	10	55
One	10	28	10	48
Two	5	26	11	42
Three or more	2	11	0	13
Total	43	84	31	158
<hr/>				
$\chi^2 = 23.61$ Significant	df = 6		p = > .001	

TABLE 52

NUMBER OF PROFESSIONAL ORGANIZATIONS IN WHICH  
GRADUATE HOLDS MEMBERSHIP

Number of Organizations	Type of Student			
	Full Time	Part Time	Extension	Total
Two or less	8	28	12	52
Three or four	20	24	12	56
Four or five	10	20	7	37
Six or more	1	12	0	13
Total	43	84	31	158
<hr/>				
$\chi^2 = 11.60$	df = 6		p = > .10	
Not significant				

TABLE 53

CURRENT EARNINGS AS A SOURCE OF FUNDS FOR  
MASTER'S DEGREE PROGRAM EXPENSES

Source of Funds	Type of Student			
	Full Time	Part Time	Extension	Total
Current earnings	24	77	31	132
No current earnings	19	7	0	26
Total	43	84	31	158
$\chi^2 = 34.00$	df = 2		p = > .001	
Significant				

TABLE 54

SAVINGS AS A SOURCE OF FUNDS FOR MASTER'S  
DEGREE PROGRAM EXPENSES

Source of Funds	Type of Student			
	Full Time	Part Time	Extension	Total
Savings	24	13	4	41
No Savings	19	71	27	117
Total	43	84	31	158
<hr/>				
$\chi^2 = 28.29$ Significant	df = 2		p = > .001	

TABLE 55

SPOUSE WORKING AS A SOURCE OF FUNDS FOR  
MASTER'S DEGREE PROGRAM EXPENSES

Source of Funds	Type of Student			
	Full Time	Part Time	Extension	Total
Spouse working	11	7	3	21
No spouse working	32	77	28	137
Total	43	84	31	158
<hr/>				
$\chi^2 = 7.84$ Significant	df = 2		p = > .02	

TABLE 56

GOVERNMENT SUBSIDY AS A SOURCE OF FUNDS FOR  
MASTER'S DEGREE PROGRAM EXPENSES

Source of Funds	Type of Student			
	Full Time	Part Time	Extension	Total
Government subsidy	24	13	4	41
No Government subsidy	19	71	27	117
Total	43	84	31	158
<hr/>				
$\chi^2 = 28.89$ Significant	df = 2		p = > .001	

TABLE 57

FATHER'S OCCUPATION

Father's Occupation	Type of Student			
	Full Time	Part Time	Extension	Total
Professional	11	16	5	32
Farmer	6	15	7	28
Craftsman	11	13	4	28
Manager	10	12	4	26
Laborer	2	12	4	18
Others	3	16	7	26
Total	43	84	31	158
<hr/>				
$\chi^2 = 11.33$ Not significant	df = 10		p = > .50	



TABLE 58

COMPARISON OF FATHER'S OCCUPATION BY TYPE OF  
STUDENT WITH MALE OCCUPATIONAL DATA FOR THE  
STATE OF MICHIGAN (1960)

Expressed in per cents\*

Occupation	Michigan 1960 Census Data	Type of Student		
		Full Time	Part Time	Extension
Professional, technical or kindred worker	10.6	25.7	19.1	16.1
Farmer or farm manager	3.0	13.9	17.9	22.6
Manager, official, or proprietor, except farm	9.2	23.2	14.3	12.9
Clerical or kindred worker	6.6	21.3	1.2	0.0
Sales worker	6.7	0.0	5.9	3.2
Craftsman, foreman or kindred worker	21.6	25.6	15.5	12.9
Operative or kindred worker	26.1	4.7	10.6	12.9
Private household worker	0.1	0.0	0.0	0.0
Service worker except private household	5.6	0.0	2.4	6.5
Farm laborer or foreman	1.1	0.0	1.2	0.0
Laborer, except farm and mine	5.5	2.3	8.3	9.7
Others	4.0	2.3	3.6	3.2
Total	100.0 per cent	100.0	100.0	100.0

\*Because converting to per cents results in inflated Ns, no  $\chi^2$  was computed for this table.

TABLE 59

## EDUCATION COMPLETED BY FATHER OF THE GRADUATE

Father's Educational Level	Type of Student			
	Full Time	Part Time	Extension	Total
Eighth grade or less	17	40	15	72
Some high school	13	16	5	34
High school graduate	0	14	2	16
Attended college	13	14	9	36
Total	43	84	31	158
$\chi^2 = 15.85$ Significant				
$df = 6$				
$p = > .02$				

TABLE 60

## EDUCATION COMPLETED BY MOTHER OF THE GRADUATE

Mother's Educational Level	Type of Student			
	Full Time	Part Time	Extension	Total
Eighth grade or less	9	32	12	53
Some high school	11	26	3	40
High school graduate	12	17	9	38
Attended college	11	9	7	27
Total	43	84	31	158
$\chi^2 = 12.38$ Not significant				
$df = 6$				
$p = > .10$				

TABLE 61

## TYPE OF COMMUNITY WHERE GRADUATE SPENT HIS YOUTH

Youth Environment	Type of Student			
	Full Time	Part Time	Extension	Total
Rural	12	23	8	43
Village	8	14	5	27
City	11	28	11	50
Metropolitan	12	19	7	38
Total	43	84	31	158
$\chi^2 = .95$ Not significant				
df = 6				
p = > .99				

TABLE 62

COMMENTS OF STUDENTS COMPARING FULL TIME STUDY  
WITH PART TIME AND EXTENSION STUDY

Opinion as to the Value of Types of Study	Type of Student			
	Full Time	Part Time	Extension	Total
Full time study definitely superior	6	4	2	12
Little or no difference in type of study	5	4	2	11
Part time and/or extension study definitely superior	1	2	2	5
Total students commenting on value of type of study	12	10	6	28