# THE COST OF SECURING A MASTER'S DEGREE FROM A TEXAS STATE TEACHERS COLLEGE AND THE ECONOMIC AND PROFESSIONAL VALUE OF THE DEGREE

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# THE COST OF SECURING A MASTER'S DEGREE FROM A TEXAS STATE TEACHERS COLLEGE AND THE ECONOMIC AND PROFESSIONAL VALUE OF THE DEGREE

#### THESIS

# Presented to the Graduate Council of the North Texas State Teachers College in Partial Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

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88285

### 88283

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#### CHAPTER I

#### INTRODUCTION

#### Statement of the Problem

The problem in this study was to determine the sests to graduate students of obtaining the mesters' degrees from any one of the five Texas state teachers colleges investigated, and to determine the economic and professional values of the master's degree to the teachers who have received it. In making this study, such contributory problems as determining the costs of travel, room rent, college fees, board, books, the collecting of data, and the typing and binding of the thesis were considered.

#### Pur pose of the Study

The purpose of this investigation was to secure data which would be of value in predicting the costs of securing a master's degree, and the economic and professional values that a teacher might reasonably expect to come to him as a result of having the degree from one of the five Texas state teachers colleges. A student who holds a bachelor's degree might well ?onsider the cost of sequiring a higher degree and the benefits, if any, to be derived therefrom before he makes the necessary expenditures of time and money for earning a degree.

Since there had been no previous study conducted for the benefit of those teachers contemplating work toward a master's degree in a Texas state teachers college, insofar as the writer could determine, this thesis was thought to serve a worthwhile purpose. The only comparable study found was that conducted by Henry V. Allen in Colorado State Teachers College.

#### How Data Were Collected

In order to obtain the data necessary to determine the expenditures of the graduate students in securing the master's degree, questionnaires were sent to 509 students who had received the master's degree from five Texas state teachers colleges. The names of these students were obtained from the files of the registrar's office of each college. Only those students who had been granted a master's degree between August, 1936, and August, 1939, were included in the study.

of the 509 questionnaires mailed, 289, or 56.7 per cent, were returned. After discarding those not usable, 274, or 54.2 per cent, of the total number sent were found to be satisfactory for use in this study.

Henry V. Allen, "The Cost of the Master's Education in Colorado State Teachers College, 1930-33," (Unpublished Master of Arts thesis, Department of Education, Colorado State Teachers College, Greeley, Colorado, 1933).

<sup>2</sup> See sample of questionnaire in Appendix.

How Data Were Organized and Presented

The data of this study were organized and presented in four chapters. Chapter I contains a statement of the problem, the purpose of the study, how the data were collected, and how data were organized and presented. Chapter II deals with the cost incurred by the student in obtaining the master's degree. Chapter III is a discussion of the economic and professional value that is likely to be the result of obtaining a master's degree. Chapter IV contains a summary of the conclusions drawn from the data, and the recommendations made by the writer.

Attention is called to the variation of the frequencies in each table. Some teachers did not give complete data, thus causing the tables to have variation in the number of teachers answering different questions. It was felt that, instead of using only those cases that gave complete data, strength ould be given to the study by using all cases reporting on each individual question, as the increase in the samplings by doing this would give more reliable results.

#### CHAPTER II

## THE COST OF SECURING A MASTER'S DEGREE FROM A TEXAS STATE TEACHERS COLLEGE

This chapter presents a discussion of the cost incurred by the student in obtaining a master's degree. To facilitate the handling of the data, the items of cost are treated under two principal headings. The first part of the chapter presents the data pertaining to the general expense, which inscludes the items of travel, room, board, books, college fees, and miscellaneous expenses. The second part of the chapter presents the data relating to the expense of the research work required for the thesis, which includes the items of collecting the data, binding the report, typing the report, and miscellaneous expenses.

#### General Expense

Travel. The expense of travel is a major item in determining the cost of a master's degree. The distances traveled to and from college while working on this degree had the very wide range of sixteen thousand miles, since the students came from many different states. Another contributing factor to the difference in travel cost is that most of the students did all of the work necessary for obtaining the master's degree during the summer sessions. Since the colleges require

thirty weeks of residence work, this means that the student had to make as many as three trips to and from the college in completing the work; the variation of the range of travel costs is affected directly by the number of miles traveled. The different modes of transportation, which would make a difference in the travel costs, are not considered in this study. Table 1 shows, in condensed form, the general cost of travel to students in securing a master's degree. The cost range of \$477 for travel indicates that many teachers had a large expense for travel, while others had only a small expense. The frequency is large in the lower class intervals of the table of distribution, with sixty-two per cent of the frequencies coming in the lower three intervals. The facts that many students lived within a comparatively short radius of the colleges, that some obtained transportation from friends or others at a nominal or no cost at all to themselves, are perhaps the main causes of this wide range of travel cost. Eighteen per cent of the reporting teachers who have received the master's degree from one of the colleges under consideration lived in the city where that college was located. The frequencies are small in the upper class intervals, with 11.7 per cent of the frequencies falling in the upper ten class intervals of costs. This table presents a very accurate picture of the cost of travel involved in obtaining a master's degree. Since the median cost for travel is sixty dollars and the quartile

TABLE 1

THE DISTRIBUTION OF 180 TEACHERS ON THE BASIS OF THE COST OF TRAVEL IN OBTAINING A MASTER'S DEGREE

Cost																•	Number of Teachers
\$450-479.99			•							•		•					2
420-449.99		•					•	•		•				•			0
390-419.99	•		•		•	_	•			•	•						2
360-389.99	•	•	•			•		•	•		•			•		•	0
330-359.99	•		•	•		•	•	•			•	•	•	•	•	•	1
300-329.99	•	•	•	•	•			•	•	•			•	•		•	1 4
270-299.99	•		•		•	•	•	•	•			•	•	•	•	•	1
240-269.99		•	•	•	•		•	•	•		•	•		•	•		2
210-239.99		•	•	•	•	•	•	•	•	•	•		•	•		•	3
180-209.99		•			•		•			•	•				•	•	6
150-179.99	•	•	•	•	•	•	٠	•	•	•		•		•		•	14
120-149.99		•	•			•	•				•	•	٠	•	•	•	14
90-119,99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	17
60- 89.99		•	•	•	•	•	•	•	•	_	•	•		•	•	•	24
30- 59.99		•	•			•	•		•	•	•	•	•	•	Ĭ	•	35
0- 29.99	•	•	•	•	_	•	•	•	•	•	•	•	•		•	•	55
Total	•	•	•	•	•	•	•		•	•	•	•	•	•		•	180
10002	•	•		•	•			•	•	•	•	•	•	•	•	•	200
		.3.	_				•	_	_	_	31	128	3 . 5	57			
	7	<b>13</b> 0	lis	an	_	•	-	•	•	-	π -		0.0				
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deviation is \$52.01, it may reasonably be predicted that a student has a fifty per cent chance of securing a master's degree with a cost for travel ranging between \$8.00 and \$112.00 with a tendency for the cost to be about \$50.00. However, since the total range of this item of cost is \$477.00, it would behoove graduate students to pay particular attention to the cost of travel.

Room. -- The range of living expenses, which includes room or housing, affects the general expense. Many students

were living at home while working on the degree end paid no rent. Others worked for a part or all of their room expense. On the other hand, many married students, some with families, requiring extra housing capacity, had to pay much more than the single student. Both the length of time required to complete work for the degree and the price range of the rooms affect the general expense. Table 2 contains data on the cost of room rent.

TABLE 2

THE DISTRIBUTION OF 178 TEACHERS ON THE BASIS OF THE COST OF ROOM RENT IN OBTAINING THE MASTER'S DEGREE

Cost											Number of eachers
										Te	achers
\$400 and above	•	• •	•	•	•	•	•	•	•	•	4
300-399.99 .	•	• •	•	•	•	•	•	•	•	•	6
280-299.99 .	•	• •	•	•	•	•	•	•	•	•	1 5 4
260-279.99 .	•	• •	•	•	•	•	•	•	•	•	5
240-259.99 .	•	• •	•	•	•	•	•	•	•	•	4
220-239.99 .	•		•	•	•	•	•	•	•	•	5
200-219.99 .	•	• •	•	•	•	•	•	•	•	•	12
180-199.99 .	•		•	•	•	•	•	٠	•	•	6
160-179.99 .			•	•		•	•	•	•	•	3
140-159.99 .				•			•				13
120-139.99 .	_			•				٠		٠	24
100-119.99			•	•	_				_	_	14
80- 99.99	•		_	•			•	_	•	_	14
60- 79.99			•	•	•	•	•				35
40- 59.09	•	• •	•	•	•	•	•	•	•	•	18
20- 39.99	•	• •	•	•	•	•	•	•	•	•	9
	•	• •	•	•	•	•	•	•	•	•	5
0- 19.99 .	•	• •	•	•	•	•	•	•	•	•	-
Total .	•	• •	•	•	•	•	•	•	•	•	178
							~, <b>~</b>	-			
<u>`~3_</u>	•	•	•	•	•	•		L7(			
Mědi	lan	•	•	•	•	•		111			
√եր -	•	•	•	•	•	•			7.		
₩.	•	•	•	•	•	•		5]	4.4	13	

The median cost for room rent is \$111.43. It will be noted in Table 2 that five teachers had a cost for room rent below \$20.00, and that four reported a cost of \$400.00 or more. The original data showed a range for room rent of \$450.00. From these data it is safe to predict that the student working for a master's degree in one of the five state teachers colleges will have a room rent cost ranging from \$60.00 to \$178.00 with a tendency for the cost to be about \$110.00.

College fees. -- The item of college fees would seem to involve little variation, but there is a wide difference in the cost of these fees to different students as is shown in Table 3.

The median for this is \$94.10, and the range is \$396.

Factors accounting for this variation are time spent in securing the degree and extra fees charged by certain college departments. A factor that escapes the attention of most students is that fees are higher during the summer sessions than during the regular sessions. Since seventy-five per cent of the total number of 274 students did all of their work during summer sessions, it is reasonable to consider this item as a contributing factor in the amount spent for college fees. Paying regular fees for less than the normal load, as well as paying the regular fee for more than the normal load, tends to cause a variance in the median cost. The median of \$94.10 compares favorably

with the present regular tuition fee charged in Texas state teachers colleges. With a quartile deviation of \$17.47, it is safe to predict that the students' college fees are not likely to vary much from the median of \$94.10.

TABLE 3

THE DISTRIBUTION OF 260 TEACHERS ON THE BASIS OF THE COST OF COLLEGE FEES IN OBTAINING A MASTER'S DEGREE

Cost															Number of Teachers
\$180 and about 170-179.99 160-169.99 150-159.99 140-149.99 130-139.99 100-109.99 90-99.99 80-89.99 70-79.99 60-69.99 50-59.99 40-49.99 30-39.99 20-29.99 Below 20.00 Total	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		•••••••	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • •	4 1 1 9 5 9 18 10 5 9 30 29 27 1 6 5 3 3 26 26
	એ. એ. એ.	3d:	i ar	· ·	•	•	•	•	•	• 'त	5	9 <b>4</b> . 73 .	4( 1( 4; 4;	) 5	

Board. -- Another factor included in the general expense of obtaining a master's degree is board. Data on this item are included in Table 4.

<sup>1</sup> North Texas State Teachers College, Bulletin, (1940).

TABLE 4

THE DISTRIBUTION OF 181 TEACHERS ON THE BASIS OF THE COST OF BOARD IN OBTAINING A MASTER'S DEGREE

Cost													Number of Teachers
\$900 and above 800-849.99 750-799.99 700-749.99 650-699.99 600-649.99 550-599.99 500-549.99 400-449.99 350-399.99 350-399.99 250-299.99 200-249.99 150-199.99 100-149.99 50-99.99 Total		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	2 1 0 0 0 1 2 8 2 1 5 6 6 16 23 24 32 16 6 18 1
]	UZ Med U1 U	lia •	an	•	•	•	•	•	14	19. 13.	.22 .80 .05	) 5	

wider range than any other item considered under the heading of "General Expense." This range is \$1,000. The highest amount paid for board was \$1,000 and the lowest was \$0.00. Individual tastes, as well as large families and extra time spent in doing the graduate work, are determining factors in the cost of board. Buying "out-of-seasons" foods adds very rapidly to costs, especially for a large family. There was

no particular fluctuation in food prices during the period under consideration.<sup>2</sup> The median of \$219.80 is probably representative of the standard of living of the average American citizen. Table 4 shows the greatest frequency to fall in the interval of \$150-\$199.99. However, the frequencies in the intervals immediately below were very little less than the frequency at the mode.

with a median cost of \$219.80 and a quartile deviation of \$90.58, it would seem pertinent to call the students' attention to the importance of watching this item of cost. A range of \$1000 is rather wide, and a quartile deviation of \$90.58 indicates that the fifty per cent of students within its range will have great variations in their cost of board.

Books.--Data on the cost of books for obtaining a master's degree are contained in Table 5. This item would seem to be fairly constant, especially in Texas state teachers colleges, but there is a range of \$200 in the cost. Fifty-five cases, or 22.6 per cent of the teachers, spent above \$30 for books, indicating that about one teacher out of five had a cost for books of more than \$30. The median cost is \$18.61. The frequency is heavy at the lower end of the distribution table, indicating that the cost for books to the students of Texas state teachers colleges is a minor one. The fluctuation o

<sup>2&</sup>quot;Retail Cost of Food," The World Almanac, (1940), p. 606.

the cost of this item is not as great as the fluctuation of cost on some of the other items considered. With this median cost of \$18.61 and a quartile deviation of \$9.28, it is reasonable to predict that the student's cost for books is likely to be a minor item of the total cost.

TABLE 5

THE DISTRIBUTION OF 243 TEACHERS ON THE BASIS OF THE COST OF BOOKS IN OBTAINING A MASTER'S DEGREE

Cost													Number of Teachers
\$105 and above 100-104.99 95-99.99 90-94.99 85-89.99 80-84.99 75-79.99 70-74.99 65-69.99 60-64.99 55-59.99 50-54.99 45-49.99 45-49.99 35-39.99 30-34.99 25-29.99 20-24.99 15-19.99 10-14.99 Total			iai	• • • • • • • • • • • • • • • • • • • •									270011300209057854774411343
	્યું (સુ)	<u>.</u>	rai	.1 •	•	•	•	•	•	10	3.6 3.6 9.2	1	

Miscellaneous. -- Miscellaneous expense needs to be taken into consideration in computing the general cost of obtaining a master's degree. Data on this item are included in Table 6.

TABLE 6

THE DISTRIBUTION OF 243 TEACHERS ON THE BASIS OF GENERAL MISCELLANEOUS ITEMS OF EXPENSE INVOLVED IN OBTAINING A MASTER'S DEGREE

Cost													Number of Teachers
\$105 and above	•	•	•	•	•	•	•	•	٠	•	•		2
100-104.99	•		•	٠	•	•	•	•	•	•	•	٠	2
<b>95 99.9</b> 9	•	٠	•	•	•	•	•	•	•	•	٠	•	0
90- 94.99		٠		•		•	•	•	•	•	•	•	0
<b>85-</b> 89.99	•	•	` <b>*</b>	*	•	•			•	•	•	•	0
80- 84.99	•	•	•	· •	٠.	•	•	•	•		•	. •	0
75- 79.99	•	•					•	•	•	. •	٠.	•	0
70- 74.99	•	•		٠.	•	•	•		•		•	•	<b>9</b>
65- 69.99	•					•	. •	. •	•	. • . :		•	Þ
60- 64.99	•	•	•		٠.	٠.	. •	. •	•	. •	•	•	Ď
55- 59.99	•	•	•			•	•	•	•	•	•	•	0
50- 54.99	•					•		٠	•		•	•	0 1
45- 49.99	•	٠		٠ 🌲	•					•	•	٠	0
40- 44.99	•	•	•		٠.	. •		. •	•	•	•	•	1
35- 39.99	•	•		•	•	•			•	٠	•	•	0
30- <b>34.99</b>	•	•	•	•	•				. <b>5</b>		•	•	2
25- 29.99	•	•	•		•			•	y <b>4</b>	•	•	•	9
20- 24.99	•	•	•	• •	•	• .			•	•	٠	•	<b>9</b>
15- 19.99	•	•	•			•	•	•	•	•	•	•	9
10- 14.99	•	•	•	•	•	•	•	٠	٠	•	٠	•	56
5- 9,99	٠	•		•	•	•	•	•	•		•	٠	128
0- 4.99		•	٠	•		•	φ.	•	●.	•	•	•	26
Total	•	•	•	•	•.	•.	•	٠	•	•	•	•	243
	(	રેત્ર	•	•	. •	•	•	•	• \$	<b>\$1</b> 2	2.5	52	
	1	19	111	ań	•	•	•	•	•	8	3.1	73	
	(	રેત	•	: <b>#</b> :	•	•	•	•	•	(	3.3	36	
	(	3,4	•	•	•	•	•	•	•	-	5.(	<b>3</b> 8	

Data in Table 6 show-that the median cost of this item is\$8.73. Since the lower three class intervals contain approximately eighty-one per cent of the total cases it is evident that the general miscellaneous expense incurred while working on a master's degree is less than \$15 for four teachers out of five. The range of \$107 in this expense indicates the importance of carefully considering this item of cost. The average student is likely to find this item of expense to range from \$5.65 to \$11.81. However, with a total range of \$107 found in the study, all students would do well to guard their miscellaneous expenses.

Total general cost. -- Table 7 shows the distribution of teachers on the basis of the total general cost. This table has been presented to give the reader a clear picture of the total general cost that the student is likely to incur while working on a master's degree.

The range of \$1,610, which is shown in Table 7, seems great, but considering the items of travel, room, board, college fees, and miscellaneous costs, there is ample room for variance. The cost of board shows the greatest variance, and the discellaneous cost shows the least variance. The cases in the upper seven intervals are scattered, with only 4.9 per cent of all the cases falling above \$900. A large number of cases, or 15.1 per cent, falls between \$100 and \$199. The median of \$375.50 gives a fair estimate of the general expense the student is likely to incur while completing work necessary for a master's degree, but with a quartile deviation of \$189.20 it is safe to predict that the general cost to the student could vary greatly from the median cost of \$375.50.

TABLE 7

# THE DISTRIBUTION OF 264 TEACHERS ON THE BASIS OF THE TOTAL GENERAL COST IN OBTAINING A MASTER'S DEGREE

Cost	t												1		nb <b>er</b> sache	
\$1600-1699	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1	
1500-1599	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1	
1400-1499	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1	
1300-1399	•	•	•	•	•	٠	•	•	•	•	•	•	•	•		
1200-1299	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1	
1100-1199	•	•	•		•	•	•	•	•	•	•	•	•	•	2	
1000-1099	•	•	•	•	•	•	•	•		•	•	•	•	•	6	
900- 999	•	•	٠	•	•	•	•	•	•		•	•	•	•	10	
800- 899	•	•	•		•	•	•	•		•	•	•		•	9	
700- 799	•	•	•	•	•	•	•			•	٠	•	•		12	
600- 699			•	•	•	•				•	•		•	•	20	
500- 599	•	•	•	•	•	•	•	•	•	•				•	29	
400- 499	•	•	•			•									27	
300- 399		•	•	•	•	•	•	•	•	•	•	•	_	•	49	
200- 299	•		•	•	•	_	_	•		•	•		•	•	34	
100- 199	•	•		•		•	_	•	•			•	•	•	40	
0- 99	-	•	•	•	•	•	•	•	•	•	_	•	•	•	21	
Total	٠	•	•	•	•	_	•	•	•	-	•	•	•	•	264	
10002	•	•	•	•	•	•	•	•	•	•	•	•	•	•	201	
	(	Q3	_					•		3	593	3	10			
	1	VI BO	ì	an	•	•			•		37					
		રી			-	_	-	•	_		214					
		₹I.	_	_	_	_	_	_	_		189					
		٠.	•	•	•	-	_	•	•	•		•				

#### Research Report

The research report is a very important item, both from the standpoint of being a requirement of the Texas state teachers colleges, and from the standpoint of the expense that it involves. In completing the cost of the research report, certain items of expense must be considered. For convenience in handling the data, the research expense is divided into cost of gathering the data, binding the report, typing the report, and miscellaneous expenses not included in other costs.

Gathering the data. -- Data in Table 8 give the general cost pertaining to gathering the data for the research report.

TABLE 8

A DESTRIBUTION OF 342 TEACHERS ON THE BASIS OF THE COST OF COLLECTING THE DATA FOR THE THESIS

Cost																		Number of eachers
\$150-159.99 140-149.99 130-139.99 120-129.99 110-119.99 100-109.99 80- 89.99 70- 79.99 60- 699 50- 59.99 40- 49.99 20- 39.99 10- 19.99 Total	•	•	• • • • • • • • • • • • • • • • • • • •	•									•	18	• • • • • • • • • • • • • • • • • • • •	35	• • • • • • • • • • • • • • • • • • • •	3 0 0 1 0 9 3 1 2 9 15 9 16 42 65 242
		į Į	•	•	•	•	•	•	•	•	•	•	•		3.6 3.6			

A range of \$150.00, as shown in Table 8, indicates that the expense of gathering data for the research report can be very great. The high costs are due to two factors: namely, buying expensive tests, and traveling while gathering the data.

Many theses are written on subjects which entail practically no expense in gathering the data. On the other hand, in many theses this item costs much more than one hundred dollars. The large number of cases in the lower cost intervals indicates that the student will likely have a very

nominal expense in collecting the data for the research report. The median of \$18.35 seems to be a fair estimate of the cost of gathering the data; however, a quartile range of \$12.69 indicates that the students within its range should be prepared to meet a variation of as much as \$25.00.

Typing. -- Data in Table 9 show the distribution for the cost of typing the research report.

TABLE 9

THE DISTRIBUTION OF 240 TEACHERS ON THE BASIS OF THE COST

OF TYPING THE RESEARCH REPORT

Cost																	Number of Teachers
\$64. and a 60-63.99 56-59.99 52-55.99 48-51.99 44-47.99 40-43.99 32-35.99 28-31.99 24-27.99 20-23.99 16-19.99 4-7.99 0-3.99 Total	••••••••••••	• • • • • • • • • • • • • • • • • • • •	iaì	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •				• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		34			• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	10 4 0 1 15 3 14 7 17 26 37 30 10 32 21 9 4 240
	S S		•	•	•	•	•	•	•	•	•	15	5.2 9.6	25			

A range of eighty-two dollars, as shown in Table 9. indicates the variance of the cost of typing research reports; it varies more than any other item of the research expense. There is a very good distribution of the cases. with a few scattered in the upper intervals and a few scattered in the lower intervals. The factors contributing to this variation are probably the amount and kind of material content, the amount of typing done by the student on his own thesis, and the variation of the prices charged for typing. Many scientific and mathematical theses contain material difficult to type. Many students do not type any part of their reports, while others type all of their work except the final copy; a few do all of the typing. Prices charged by typists vary to some extent, thus causing a variation in the total cost of all typing work. These factors tend to cause a difference in the cost of typing the research report. few cases of extremely high costs are probably due to a combination of these causes. The wide range of typing cost is an indication that the cost for this item can be great or small. With a median of \$25.51 and a quartile deviation of \$9.67, the student should reasonably expect to get the thesis typed for a cost varying between fifteen and thirty-five dollars.

Binding. -- Table 10 contains data which pertain to binding the master's thesis. It also shows the number of teachers reporting each cost.

TABLE 10

THE DISTRIBUTION OF 261 TEACHERS ON THE BASIS OF THE COST OF BIRDING THE RESEARCH REPORT

Cost																		Numbe of eache	
11-11.99 10-10.99 9- 9.99 8- 8.99 7- 7.99 6- 6.99 5- 5.99 4- 4.99 3- 3.99 2- 2.99 1- 1.99	•	•		•	•		•	•	•	•	•	•	•	•		•	•	1 0 0 2 0 2 2 3 9 27 40 113 29 21 12 261	
	એ. Mi પ	ed i	i ar	· ·	•	•	•	•	•	•	•	•	•	4	5.6 1.6 1.6	30			

The range of fourteen dollars, as indicated in Table 10, shows a great variation for this item of cost. As some of the colleges fix the cost of binding and prescribe a standard type of binding for the copies to be placed in the library, the variation probably comes from the number of copies the student has bound. The scattered cases falling in the upper nine intervals indicate that about seven per cent of the students have a cost of seven dollars or more for binding the thesis. The median cost of \$4.60 seems to represent the amount the student is likely to pay for the binding of the

research report. It seems, therefore, that the binding cost will likely be a very minor item to the student in obtaining the master's degree.

Miscellaneous expense. -- Data on the miscellaneous items of research in obtaining a master's degree are contained in Table 11.

TABLE 11
THE DISTRIBUTION OF 156 TEACHERS ON THE BASIS OF THE COST OF MISCELLANEOUS ITEMS OF RESEARCH IN OBTAINING A MASTER'S DEGREE

Cost																	umb <b>er</b> of eacher	
\$44 and abo	٧e	•	•	•	•	•	•	٠	•	•		•		•	•	•	7	
42-43.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1	
40-41.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	1	
38-39.99	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	0	
36-37.99	•	•	•	•	•	•	•	•	•	٠	•	•	•	•	•	•	0	
34-35.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	٠	0	
32-33.99	•	•	•	•	•	•	•	•	•	٠	•	•	•	•	•	•	0	
30-31.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0	
28-29.99	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	•	•	0	
26-27.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0	
24-25.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	5	
22-23.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	2 <b>5</b>	
20-21.99	•	•	•	٠	•	•	•	•	•	•	•	•	•	•	•	•	5	
18-19.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1	
16-17.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1	
14-15.99	•	•	•	•	•	•	•	•	•	•	٠	•	•	•	•	•	10	
12-13.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	3	
10-11.99	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	3 <b>7</b>	
8- 9.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1	
6-7.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	10	
4-5.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	34	
2-3.99	•	•	•	•	•	•	•	•	÷	•	•	•	•	•	•	•	31	
0- 1.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	8	
Total	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	156	
	Q3						_	_				_	<b>\$</b> 1	ll.	. 84	1		
	Me		97	•	•	•	•	•	•	•	•	•	₩.		. 20			
	ચી		.aı		•	•	•	•	•	•	•	•			.06			
	ुं दरा	•	•	•	•	•	•	•	•	•	•	•			88			
	A.		•	•	•	•	•	•	•	•	•	•		U	, <b>(</b> )	•		

Data in Table 11 show that many students incurred certain expenses other than shose for typing, binding, and gathering the data. At first, the miscellaneous item of expense may seem insignificant, but a median of \$7.20 and a range of \$200, as shown in this table, indicate that the miscellaneous expense should be taken into consideration. This item was introduced for the purpose of allowing a place where such items of expense as paper, postage, printing, and the cost of other materials could be included. Since 120 cases, or seventy-seven per cent of all the reports, fall below the \$12 to \$13.99 interval, it is likely that the student will have a miscellaneous expense of less than twelve dollars in making his research report. However, a total range of \$200 is a signal warning to keep this item of cost under observation.

Total cost of research report. -- In order to get a clear picture of the cost of the research work done in fulfilling the requirement of the college, the cost of all items pertaining to research have been combined and placed in Table 12.

Data in Table 12 show a cost range of \$330. This figure seems abnormally high, considering the fact that eighty-six per cent of the cases fall in the lower ten intervals. The factors which determine the cost of research depend, to a great extent, upon the type of research done by the student. However, it may be said that in practically all types of theses

TABLE 12

THE DISTRIBUTION OF 272 TEACHERS ON THE BASIS OF THE TOTAL COST OF THE RESEARCH REPORT

Cost																Number of eachers
\$300-and above	•	•	•	•	•	•	٠	•	•	•	•	•	•	•	•	4
200-299.99	•	•	•	•	•	•	•	•	•			•	•	•	•	1
190-199.99		•	•	•	•	•	•	•	•	•	•	•	•	•		0
180-189.99	•	•	•	•	•	•	•	•	•	•	•	•		•	•	2
170-179.99	•	•	•		•	•	•	•	•	•	•	•	•	•	•	0
160-169.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	4
150-159.99	•	•	•	•	•	•	•	•	*	•	•	•	•	•	•	2
140-149.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	2
130-139.99	•	•	•	•		•	•	•	•		•	•	•	•		4
120-129.99	•	•		•	•	•	•	•	•	•	•		•	•	•	8
110-119.99	•	•	•		•	•	•	•	•	•	•	•	•	•	•	3
100-109.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	9
90- 99.99	•	•	•	•		•	•		•	•	•	•	•	•	•	14
80- 89.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	10
70- 79.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	17
60- 69.99	•	•	•	•	•		•	•	•		•	•	•	•	•	15
5 <b>0- 59</b> -9 <b>9</b>	•	•	•	•	•	•	•	•	•	•	•		•	•	•	<b>37</b>
40- 49.99	•	•	•	•	•	•	•	•		•	•	٠	•	•	•	35
30- 39.99	•	•	•	•	•	•	•	•	•	•	•	•	•	*	•	48
20- 29.99.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	20
10- 19.99	•	•	•	•	•	•	•	•	•	•	•	•	•	•		27
0- 9.99	•	•	•	•		•	•	•	•	•	•	•	•	•	•	10
Total	÷	•	•	•	•	•	•	•	•	•	•	•	•	•	•	272
	Q,	_	•	_	_		_	•	•		. 4	379	7_(	36		
	M	3 <b>d</b> :	Lai	a -	-	-	-	-	•	-	-1		3.8			
	Q.			_	-	_	_	_	•	•	-	32				
	Q	L	-	-	-	_	-	•	-	-	•		2,			
	~		_	-	_	_	-	_	_	_	-			_		

material content of the thesis, the prices charged for typing, the amount of typing the student hires done, the expense involved in gathering the data, the type of binding, and the
number of copies bound. The median cost for the research
report is \$48.86. This seems to be a fair estimate of the

cost involved in gathering the data and writing the report. However, a quartile range of \$22.38 indicates that there is a chance of this cost varying widely from the median. The total range of \$330 should be signal enough to keep all students warned as to what could happen.

#### Total Cost of a Master's Degree

Table 15 shows the range of the total cost of a master's degree as reported by 269 teachers who have received this degree from five Texas state teachers colleges.

THE DISTRIBUTION OF 269 TEACHERS ON THE BASIS OF THE TOTAL COST IN OBTAINING A MASTER'S DEGREE

TABLE 13

Cost												,	Number of Teachers
\$1600-1699.99	•	•.		•		•	•	•	•	•		•	3
1500-1599.99	•		•		•		•			•			0
1400+1499.99	~		•	_	•		: نو		_	_	•		2
1300-1599.99	_	_		•	•	_	•	_		_	_		. 1
1200-1299.99	•	-	•	-	_	•	_	•	-	_	_		2
1100-1199.99	-	•	_	•	-	-	-	•	•	_	_	-	3
1000-1099.99	_	•	•	_	_	_	-	•	_	_	_	_	9
900-999.99	•	•	•	•	-	•	•	•	•	_	•	_	10
800-899.99	•	•	•	-	•	•	•	_	•	•	-	•	14
700- 799.99		•	•	•	•	•	•	•	•	*	•	•	19
600- 699-99	•	•	•	•	•	•	•	•	•	•	•	•	21
500- 599.99	•	•	•	•	•	•	•	•	•	•	•	•	30
400- 499.99	•	•	•	•	•	•	•	•	•	*	•	•	41
	•	•	•	•	•	•	•	•	•	•	•	•	29
300- 399.99	•	•	•	•	•	•	•	#	-	•	•	•	
200- 299.99	•	•	•	•	•	•	•	•	•	•	•		<b>35</b>
100- 199.99	•	•	*	•	•	•	•	•		•	•	•	42
- 99.99	•	•	•	•	•	•	•	•	•	•	•	•	8
Total	•		•	•	•	•	٠	•	•	•		•	269
2344	•	•	•	•	•	•	•				9.		
Meg 1 er	L	•	•	•	•	•	•	•			0.		
Q <sub>1</sub>	•	•	•	•	•	•	•	•			9.3 5.3		

The range of \$1,610, as indicated in Table 13, shows a great variation of the cost of a master's degree. The items of board and travel are probably the dominating factors in this variation. Another contributing factor is the time spent in earning the degree. Twenty cases, or 7.5 per cent of the students, spent more than \$1,000 in completing the work, and a negligible number spent less than \$100; therefore the median of \$450 seems low. Allen found the median cost of obtaining a master's degree in Colorado State Teachers College to be \$658.33.

Three factors seem to have a bearing on the difference of costs in the Colorado tate Teachers College and the five Texas state teachers colleges. First, the date that the studies were made could influence the expenses. The general cost of living in the United States was higher during the 1930-1933 period than during the 1936-1939 period. Second, the accessibility of state teachers colleges to students in Texas and the surrounding states could have a tendency to lessen travel costs to the student who to k his work in a Texas institution, while the favorable summer climate in Colorado could tend to attract a student of the South and West, thus causing extra travel costs to those coming from

Henry V. Allen, "The Cost of the Master's Education in Colorado State Teachers College, 1930-1933" (Unpublished Master of Arts thesis, Department of Education, Colorado State Teachers College, Greeley, Colorado, 1933), p. 2.

<sup>4&</sup>quot;Cost of Living," The World Almanac, 1940, p. 600.

distant states. Third, the difference in the cost of a master's degree to students in Colorado and in Texas could also be caused by the difference in the living costs in the two states.

Ar analysis of the preceding data indicates that the student may expect the master's degree to cost about \$450. However, the quartile deviation of \$215.23 indicates that the variation from this figure is great. The items of cost, as shown in the previous tables, indicate that the student's costs will be greater for some items than for others. It will behoove the student to make a budget and strive to make his expenses conform to it. Failure to do this could easily cause the student financial embarrassment. This is particularly true since the quartile deviation and the total range are very great.

## The Cost of the Research Based on the Type of Research Used

For convenience in showing the cost of the thesis according to the type of research used, the major types were classified separately. The cases that used a combination of two or more types were placed under the same heading as is shown in Table 14. From data in Table 14, it is seen that the high average cost was in the group that used a combination of types in doing the research work; this average was \$70.78. The low average of \$42.80 was found to exist in the philosophical analysis type.

TABLE 14

THE DISTRIBUTION OF 259 TEACHERS ON THE BASIS OF EACH TYPE OF RESEARCH USED, THE AVERAGE COST AND THE PER CENT OF TEACHERS THAT USED EACH TYPE

Туре	A <b>v</b> erage Cost	Number of Teachers	Per Cent of ~ Teachers
Combination of Types Survey	\$70.78 67.08 57.05 56.51 55.16 42.80 \$27.98	24 107 45 44 18 21 259	9.3 41.7 17.4 17.0 6.9 7.7

Data in Table 14 also show that almost forty-two per cent of the 259 cases reporting used the survey type in gathering the material. Philosophical analysis is probably low because of the mental rather than the financial expense involved in gathering the data.

Second in expense is the survey type, with an average cost of \$67.08. Table 14 shows very conclusively which types are the major ones used by students in doing their research work. It also shows which types are the least used and which ones are the most expensive.

Cost of the Master's Degree by College Departments
Table 15 contains data which pertain to the cost of
obtaining the master's degree relative to the department

which grants the degree. The number of teachers reporting each department and each average cost is also represented in the table.

TABLE 15

THE DISTRIBUTION OF 256 TEACHERS ON THE BASIS OF THE MAJOR FOR THE MASTER'S DEGREE AND THE AVERAGE COST OF THE MASTER'S DEGREE IN EACH DEPARTMENT

Department	Average cost	Number of Teachers
conomics	\$929.87	4
overnment	648.75	2
ome Reonomies	600.83	2 3
iology	563.48	10
hemistry	537.70	13
istory	522.16	22
nglish	510.32	25
hysical Education	498.45	12
ducation	485.02	156
oreign Language	311.35	3
ommercial Education .	262.80	5
fusio	182.00	ĭ

Data in Table 15 show a range of \$747.87 in the cost of a master's degree from different departments, a range which seems exceedingly large. The lowest average of \$182.00 was found in the department of music; the highest average of \$929.87 was found in the department of economics. However, the one case in the music department does not give an adequate sampling and should not be considered a fair estimate

of the cost in this department. Out of 256 cases, 156 were in the education department. Thus the average cost of \$485.02 is likely to be a fair estimate of the cost in this department. In comparison Allen<sup>5</sup> found the average cost of obtaining a master's degree in the science department to be high, with an average cost of \$959.02, and the average cost in the home economics department to be low, with a cost of \$351.00; the range of costs was \$608.02.

From the data presented in Table 15, the student should expect the cost of obtaining the master's degree in different departments to vary to some extent.

<sup>5</sup> Henry V. Allen, op. cit., p. 31.

#### CHAPTER III

THE ECONOMIC AND PROFESSIONAL VALUE OF A MASTER'S DEGREE

In this chapter, consideration is given to the economic and professional value of the master's degree to teachers. The first part of the chapter deals with the economic value of a master's degree as to the status of the teachers, both from the standpoint of the monthly salary and the tenure in the present position. The latter part of the chapter treats the data which pertain to the professional value of a master's degree.

#### Economic Value

Salaries. -- In order to determine the true effect which the master's degree has had on salaries of teachers, it has been necessary to consider the salaries of the teachers over a period of years. These data are contained in Table 16, which shows the distribution of teachers on the basis of the monthly salary they received each year for three years before obtaining the master's degree, and the salary they received each year for three years after obtaining the master's degree. For conventence of discussion, reference will be made to the years under consideration as third year before, second year before, first year after, second year after, and third year after.

TABLE 16
THE DISTRIBUTION OF TEACHERS ON THE BASIS OF THE MONTHLY SALARY THEY RECEIVED EACH YEAR FOR THREE YEARS BEFORE THEY RECEIVED THE MASTER'S DEGREE AND EACH YEAR FOR THREE YEARS AFTER THEY RECEIVED THE MASTER'S DEGREE

		Number (	of Teacl	ners Rep	orting	
Monthly Salary		e Receiv			r Receiv	_
	3 yrs.	2 yrs.	l yr.	l yr.	2 yrs.	3 yrs.
250-259.99 240-249.99 230-239.99 230-239.99 210-219.99 200-209.99 190-199.99 180-189.99 160-169.99 150-159.99 140-149.99 120-129.99 110-119.99 100-109.99 90- 99.99 80- 89.99 80- 89.99 80- 69.99 Below 560.	2 0 2 0 0 2 2 0 0 3 1 4 6 5 1 1 0 1 5 1 2 5 2 5 1 2 5 1 2 5 1 2 5 1 2 5 1 2 5 1 5 1	4 0310060395602 16 10 2165688602	4 0 2 2 0 7 1 2 1 2 1 2 1 2 3 1 4 3 1 4 3 2 3 4 4 1 2 3 4 4 1 2 3 4 4 1 2 3 4 4 4 4 3 4 4 4 4 3 4 4 4 4 4 4 3 4 3 4 4 4 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 3 3 3 4 3	7 2 0 2 2 2 0 4 2 9 1 3 2 2 3 7 2 8 9 4 1 0 2	ô1124294480812021351002	4011216331748028710000
Total	200 \$13 <b>7.</b> 33	209 3144.75	221 \$151.50	244 \$160.00	179 168.12	99 2184.17
્યુ Median ્રી Q	115.60 99.20 19.06	\$144.75 *119.80 102.29 21.23	106.49	112.19	168.12 141.25 119.17 24.47	123.12

From data in Table 16 it will be noted that there is a variation in the number of teachers for each of the six years considered. A gradual increase exists in the number reporting up to the first year after, and a gradual decrease in the number reporting from the first through the third year after. The fact that some touchers had not entered the teaching profession and some were unemployed at one, two, and three years before, probably accounts for this variance. The largest number of reporting teachers is found in the first year after. This seems to indicate that more teachers were actually engaged in the profession during the first year after than in the previous years under discussion. The time element enters into the report for the second and third years after receiving the degree; since many, having received the mester's degree in 1937 and in 1938, could not report a salary for two and three years after. The significant year to be taken into consideration, however, is the first year after. A very interesting and significant fact shown in Table 16 is the gradual increase in the median salary. The third year before shows a median monthly salary of \$115.60, while the median monthly salary for the third year after is \$141.87. The increase seems to indicate that the teacher will likely receive a higher salary after receiving a master's degree than before receiving the degree. Table 16 shows a few scattered cases in the upper and lower salary intervals. The reason for these conditions are that some teachers probably teach as assistants and substitutes for a very nominal

wage, while some teach in rich districts and receive high salaries.

The assembled data in Table 16 present a very graphic picture of the present status of salaries of teachers who hold the master's degree from the Texas state teachers colleges, and war ant the following predictive interpretations: with the median monthly salary increasing from 115.60 three years before receiving a mester's degree to 141487 three years after receiving this degree, it is safe to predict that the teacher will receive a larger salary as a result of obtaining a master's degree. The teacher's salary is likely to range from \$115.60 to (125.18 before receiving a master's degree and from 129.73 to [141.87 after receiving the degree. With greater quartile deviations ofter the teacher has received the master's degree than before receiving it, there is a greater possibility of a teacher receiving a larger monthly increase in salary if he has obtained a master's degree than if he has not obtained the degree.

Table 17 contains data pertaining to fifty-two teachers reporting a salary for the three years before and the three years after receiving a master's degree. This, perhaps, gives a clearer estimate of the actual economic value of a master's degree than the data for all the teachers previously considered, since it seals with teachers for whom the data are complete over the entire period. The data show a gradual increase in the median monthly salary, with the greatest differences coming

TABLE 17

THE DISTRIBUTION OF FIFTY-TWO TEACHERS ON THE BASIS OF THE MONTHLY SALARY THEY RECEIVED EACH YEAR FOR THREE YEARS BEFORE RECEIVING THE MASTER'S DEGREE AND THREE YEARS AFTER THEY RECEIVED THE MASTER'S DEGREE

	N	lumber o	f Teach	ers Rep	orting			
Monthly Salary		Receiv	_ 1	After Receiving Master's Degree				
	3 yrs.	2 yrs.	l yr.	l yr.	2 yrs.	3 yrs.		
\$240 or above 230-239.99 220-229.99 210-219.99 200-209.99 190-199.99 180-189.99 170-179.99 160-169.99 150-159.99 140-149.99 130-129.99 100-109.99 90-99.99 80-89.99 70-79.99 69.99 or below Total	2 0 0 0 0 0 1 2 2 4 3 5 6 7 9 3 5 1 2 5 2 4 3 5 3 5 1 2 3 5 1 2 3 5 1 2 3 5 1 2 3 5 1 2 3 5 1 2 3 5 2 3 5 1 2 3 5 3 5 1 2 3 5 3 5 3 5 2 3 5 3 5 3 5 3 5 3 5 3 5	2 0 0 1 1 3 2 4 2 8 5 8 8 4 1 2 1 5 2 \$150.00	2 0 0 0 2 0 1 3 1 6 4 8 7 4 9 1 3 0 1 5 2	2 0 2 1 1 1 2 7 5 5 7 6 6 3 2 1 0 0	2 0 3 0 3 2 2 1 9 5 6 5 4 1 0 0 0 5 2	4 1 1 4 2 3 1 7 2 5 8 3 8 2 0 0 0 0 5 2		
Q3 Median Q1	\$143.55 118.57 102.22 20.55		131.25 142.00	142.00 121.66	152.00 12 <b>7.5</b> 0	150.00 130.00		

the first and the second years after receiving a master's degree. The distribution for three years before receiving a master's degree shows a median monthly salary of \$118.57, while the distribution for the third year after receiving a master's degree shows a median monthly salary of \$150. is a range of \$31.43. The column containing the distribution for three years before receiving a master's degree shows two teachers with a monthly salary below seventy dollars, while the column containing the distribution three years after receiving a master's degree shows no teacher with a monthly salary below one hundred dollars. As stated in the discussion of Table 16, the low monthly salaries are probably paid to teachers working as assistants in college, and the high salaries are pati to superintendents in rich districts. Data in Table 17 further substantiate the prediction made in the discussio of Table 16; the teacher who remains in the field is likely to have substantial increase in salary afte receiving a master's degree.

Table 18 contains an analysis of the data pertaining to the monthly salaries of men reporting. These data show that there is a gradual increase in the median monthly salary of men from three years before receiving a master's degree through the second year after receiving a master's degree. The greatest difference shown in the median salary is between the first year after and the second year after receiving a master's degree.

TABLE 18

# THE DISTRIBUTION OF MEN TEACHERS ON THE BASIS OF THE MONTHLY SALARY THEY RECEIVED EACH YEAR FOR THREE YEARS BEFORE RECRIVING THE MASTER'S DEGREE AND EACH YEAR FOR THREE YEARS AFTER RECRIVING THE MASTER'S DEGREE

	1	Number o	f Men i	Reportin	S		
Monthly Salary		e Re <b>c</b> civ r's Degr		After Receiving Master's Degree			
	3 yrs.	2 yrs.	1 yr.	l yr.	2 yrs.	3 yrs.	
\$240 or above 230-239.99 220-229.99 210-219.99 200-209.99 190-199.99 180-189.99 170-179.99 160-169.99 150-159.99 120-129.99 120-129.99 100-109.99 90-99.99 80-89.99 70-79.99 \$69.99 or below	52002013299783181814	4 1 0 0 4 1 0 7 3 2 1 3 1 4 1 3 1 4 1 4	5110310617104191177513	4 2 2 0 6 0 2 8 14 12 8 12 12 12 12 12 12 14 10 0 0	6 2 4 0 8 1 4 4 12 11 10 13 11 4 6 2 0 0 0	4110321173685350000	
Total · · · · · · · · · · · · · · · · · · ·	112 \$143.33 120.00 101.66 20.83	125.00	128.94 108.53		98 \$181.25 152.73 131.15 25.05	129.00	

Data in Table 18 further show that the range in the median monthly salary is \$32.73. This represents an increase in the median monthly salary over a five year period. It will be noted that sixteen men reported a monthly salary under \$100.00 for the year before receiving a master's degree, while five reported a monthly salary under this amount for the first year after receiving the degree, and no man received a monthly salary of less than \$100.00 three years after receiving the master's degree.

when the median salary is considered, it seems that a man is likely to receive a salary of \$152.73 the second year after receiving the degree. Based on this figure, his monthly salary would be \$32.73 greater the second year after receiving the master's degree than he had received three years before receiving the degree.

Table 19 contains the same type of data for women's salaries that Table 18 contains for men's salaries. It is found in Table 19 that practically the same significant facts appear for women as appear for men only and teachers as a whole. The median monthly salary increases consistently with the six years under consideration, the low median salary of \$110 being in the third year before, and the high median salary of \$133.75 being in the third year after receiving a master's degree. Comparing this table with Table 18, it will be noted that the medians are generally lower for women than for men. However, considering the fact that more men than women have been reported to be employed in administrative

TABLE 19

THE DISTRIBUTION OF WOMEN ON THE BASIS OF THE MONTHLY SALARY RECEIVED EACH YEAR FOR THREE YEARS BEFORE RECEIVING THE MASTER'S DEGREE AND FOR EACH YEAR FOR THREE YEARS AFTER RECEIVING THE MASTER'S DEGREE

		Number	of Wom	en Repor	ting	
Monthly Salary		ore decei		Receiving r's Degree		
	3 yrs.	2 yrs.	l yr.	l yr.	2 yrs.	3 yrs.
240 or above	1	2	1	2	2	1
230-239.99	0	0	ī	1	1	ō
220-229.99	0	0	1	0		1
210-219.99	0	0	0	2	1 2 2	1 1 3 1 2
200-209.99	1 1 3 3	2	4	4		3
190-199.99	1	1 1	0	4	4	1
180-189.99	3	3	2	0	0	2
170-179.99	3	· 3	4	1	3	0
160-169.99	3	2	3	3	6	2
150-159.99	3	4	8	12	6	2 2 4 6 5
140-149.99	1	5 8	4	4	4	2
130-139.99	8		9	4	5	4
120-129.99	9	12	77	13	9	6
110-119.99	13	11	15	T8	12	
100-109.99	13	15	26	21	14	4
90- 99.99	11	16	7	5	3	1
80-89.99	11	6	4	3	1	0
70- 79.99	4	4	1	21 5 3 1	0	0
69.99 or below	7	5	7	1	1	0
Total	. 92	99	104	103	7 მ	35
• •	\$121 OF	176 56	145 00	191 KK 91	5 <b>1 &amp;</b> 72 72 72 72	J181.28
Median	.\$131.25 . 110.00			121.15		
_ · · · ·	90.90			107.50		
$\hat{z}_1 \cdots$	20.17	1			26.66	31.9
* • • • •	•   ~ ~ ~ ~ ~ /	~0.~	~		20.00	<b>01.</b> 0

positions in school systems, it is reasonable to expect this difference in salary to exist. The woman teacher will likely receive about \$10.00 more per month the first year after receiving a master's degree. This represents a very substantial increase in the monthly salary and would mean that the woman teacher would likely receive an annual increase in salary of about \$100.00.

The data presented in Table 20 pertain to 143 teachers who reported an annual increase in salary as a direct result of obtaining a master's degree. This number is only fiftytwo per cent of the 274 teachers who returned the questionnaire. The fifty-two per cent of teachers reporting an annual increase in salary seems low in view of the fact that the state makes a provision in its salary schedule for an increase in salary of \$2.50 per month, or \$22.50 per year. Since thirty cases, or approximately twenty-one per cent. fall between twenty and thirty dollars, it is apparent that the increase is in keeping with the amount of increase set by the State. The large increase in salary usually comes from a change in positions. The large median increase of \$66.89 in salary is probably due to this reason. However, the quartile deviation of \$85.33 indicates that there might be a great variance from this figure.

From the data presented in Table 20, it would seem safe to conclude that the teacher could reasonably expect to receive

TABLE 20
TON OF 143 THACHING REPORTING AL

THE DISTRIBUTION OF 143 TEACHERS REPORTING AN ANNUAL INCREASE IN SALARY AS A DIRECT RESULT OF A MASTER'S DEGREE

Annual Salary Increase											Number of Teachers
\$210 and above	•			_	_	_	•				33
\$200-209.99		•	•	•	•	•	_	•	•	•	5
190-199.99	•	•	•	•	•	•	•		•	•	Ö
180-189.99	•		•	•	٠	•	•	•		•	4
170-179.99	•	•	•	•	•	•	•	•		•	ō
160-169.99	•		•	•			•	•	•	•	ì
150-159.99		•				•		•			$\overline{\mathbf{z}}$
140-149.99	•		•	•	•		•	•	•		ì
130-139.99	•	•		•	•	•	•	•	•	•	3
120-129.99	•	•	•	•	•	•	•	•	•	•	2
110-119.99			•	•	•	•	•		•	•	ì
100-109.99	•				•	•	•		•	•	12
90- 99.99				•	•	•		•		•	3
80- 89.99	•		•	•	•	•	•			•	2
70- 79.99		•	•	•	•						Ö
60- 69.99	•	•					•	•		•	8
50- 59.99			•	•		•	•				8
40- 49.99	•	•		•	•	•	•			•	13
30- 39.99	•	•	•	•		•	•	•		•	15
20- 29.99	•	•			•	•	•			•	30
Total		•		•	•	•		•	•		143
	-	-	-	-	-	-	-	-	-	-	
Ų	3 •	•	•	•		•	952	204	1.	ō0	
M	ed:	lai	1.	•	•	•	•		3.8		
G.	7 •	•	•	•	•	•			3.8		
นั	_	•	•	•	•	•			5.3		
•											

an increase in salary as a result of obtaining a master's degree; but with a median increase of \$66.99 and a quartile deviation of \$85.33, the amount of increase is difficult to predict. There is even some chance that the salary will be smaller after receiving the degree than before. On the other hand, there is a possibility of the increase being very substantial.

Tenure. Tenure should certainly be taken into consideration in determining the economic value of a master's degree.

The meaning of the word "tenure" is somewhat indefinite, but in this study it will mean the years of service which teachers have had in their present positions. Table 21 contains data on the distribution of all teachers of men teachers, and of women teachers on the basis of service in their present position.

Data in Table 21 show the percentage distribution for all teachers, and for men and for women teachers separate. The median tenure of the women is 4.54 years, and the median tenure of the men is 3.33 years. There were three women who had a tenure of more than twenty years, while no men had a tenure of more than eighteen years. The distribution was heavy at the lower end of the years of tenure. There is about a 36.3 per cent difference between the tenure of men and women with the women having the advantage. The median for all teachers is 3.75 years. In a study similar to the present investigation,

Foote found the median tenure for men teachers in Louisiana to be 2.68, and the tenure for women to be 2.69. Sharp found the median per cent of teaching service in present

<sup>1</sup> Irving P. Foote, Tenure of High School Teachers in Louisiana, p. 17.

<sup>&</sup>lt;sup>2</sup>L. A. Sharp, The Present Status of Rural Teachers in the South, p. 26.

TABLE 21

THE DISTRIBUTION OF ALL TEACHERS, OF MEN TEACHERS, AND OF WOMEN TEACHERS ON THE BASIS OF SERVICE IN PRESENT POSITION, EXPRESED IN PERCENTAGE

	All	Teachers		ien	Women		
Years	Kumber	Fer cent	Number	Per cent	Number	For cent	
bove 20	5	1.22	0		3	2.83	
0	ŏ	0.00	Õ		0	0.00	
9	ŏ	0.00			5	0.00	
	4	1.62	0 1 1	.71	3	2.63	
7	lī	0.40	ī	v.71	o	0.00	
	2 1	0.81	ī	0.71	1	0.94	
5	l ī	0.40	1	0.71	ō	0.00	
4	4	1.62	ī	0.71	3	2.63	
3	5	2.0ಪ	ĩ	0.71	4	3.77	
2	7	2.85	4	2.86	3	2.83	
	9	3.66	4	2.86	5	4.72	
	7	2.85		2.14	4	3.77	
	4	1.62	<b>3</b> 2	1.43	2	1.89	
3	9	3.66	4	2.86	5	4.72	
	9	3.66	3	2.14	6	5.66	
	6	2.44	3	2.14	3	2.83	
	16	6.50	10	7.14	6	5.66	
	23	10.60	15	10.71	11	10.38	
	40	16.28	24	17.14	16	15.10	
	37	15.04	26	20.00	9	8.49	
	46	18.69	25	17.86	21	19.81	
us <b>ti</b> len L	10	4.07	S	6.43	1	.94	
Total	246	100.00	140	100.00	106	100.00	
Q3	7.39		5.40		9.75		
Median			3.33		4.54	l	
41 · ·	2.15		2.04		2.50	1	
	2.62		1.68		3.67		
	1		İ		İ	l	

positions of 24,766 teachers in five Southern States to be as follows: first year in position, 63 per cent; second year 20.7 per cent; third year, 7 per cent; fourth year, 3.2 per cent; and fifth year or above, 2.4 per cent.

Opinions of teachers. -- Table 22 varies somewhat from the preceding tables and gives the distribution of all teachers answering the questions pertaining to the economic value of a master's degree. Answers other than "yes" and "no" were given no consideration in this table, since they were extremely varied:

Data in Table 22 show that 130 teachers, or 47.4 per cent of the 274 reporting were of the opinion that the master's degree had been directly responsible for an increase in their salaries, while 117 or 42.7 per cent stated that the master's degree had not been instrumental in increasing their salaries. Texas makes provision in its salary schedule for an increase in salary for a teacher with a master's degree, but since the granting of this increase is at the discretion of the local school board, it is not certain that the teacher will receive the increase in salary. Righty-one, or 29.5 per cent of the 274 teachers reporting, stated that the master's degree had been directly responsible for their receiving a better teaching position, while sixty-one per cent stated that the master's degree had not been responsible for their receiving a better teaching position. It appears that most teachers receive financial remuneration for taking this degree, since 157, or 57.5 per cent of the 274 reporting on the question answered it in the affirmative.

There is one especially significant fact shown in Table 22: out of a total number of 274 teachers reporting, 185 or

TABLE 22

THE DISTRIBUTION OF TEACHERS ON THE BASIS OF ANSWERS GIVEN TO QUESTIONS PERTAINING TO THE ECONOMIC VALUE OF A MASTER'S DEGREE

ţ

	Answers										
Question	Ye	S	N	lo	No An	ewer					
	Num- ber	Per	Num- ber	Per	Num- ber	Per					
l. Has the master's degree been di- rectly responsible for an increase in your salary?	130	47.4	117	42.7	27	9.9					
2. Has the master's degree been di- rectly responsible for your receiv- ing a better teaching posivition?	81	29.5	167	61.0	26	9.5					
5. Has the master's legree been of any linencial value to you?	157	57.3	103	37.6	14	5.1					
4. Do you feel more secure in your position since receiving a master's degree? .	185	66.8	64	23.3	27	9.9					

66 per cent of them, felt more secure in their teaching positions after receiving a master's degree than they felt before receiving the degree. It will be noted that a large majority of teachers gave either a "yes" or "no" answer on these questions, while a very negligible number failed to answer. Therefore data in Table 22 presents an insight into the opinions of teachers regarding the economic value of a master's degree and indicate definitely that teachers in general have received some economic value as a result of their having a master's degree.

### Professional Value

The professional value of a thing is not easily determined or measured, but several factors should be taken into consideration in determining this value to a person in the teaching field. In order that the master's degree may be of professional value to a teacher, that teacher should have acquired certain qualities of scholarship as a result of the added academic training necessary for obtaining a master's degree. Some of the qualities of professionalism in the teaching field are a knowledge of research techniques, a practical philosophy of education, a broad vision of educational objectives, an ability to contribute to school publications, a higher standard of academic training, professional leadership, a wider technical vocabulary, self-confidence, and an interest in current; educational literature.

An attempt was made in this study to determine to what extent, if any, the master's degree has been of professional value to teachers. This effort was made by asking three representative questions.

Table 25 contains the opinions of the teachers who reported the professional value they have gained as a result of a master's

TABLE 23

THE DISTRIBUTION OF TEACHERS ON THE BASIS OF ANSWERS CIVEN TO QUESTIONS PERTAINING TO THE PROFESSIONAL VALUE OF A MASTER'S DEGREE

			Ans	wors		
Questions	Ye	8	K	0	No Abswer	
	Num- ber	cent	Num- ber	Per cent	Num- ber	Fer cent
. Has the master's de- ree sided you profes- lonally?	194	70.8	45	16.4	35	12.8
. Has the master's de- ree given you more pro- essional spirit?	206	75.1	45	16.4	23	8.6
Do you feel more ob- igated to keep abreast f current educational iterature since re- eiving a master's de- ree?	198	72.3	55	20.	21	7 <b>. 7</b>

degree in so far as their replies to the three questions, reflect their opinions. From these data it will be noted that 194, or 74.8 per cent of the 274 teachers replying to the questionnaire, think that they have been aided professionally by receiving a master's degree, while 45, or 16.4 per cent, think they have received no professional benefit from this degree. The 205 bechers that replied to the questions, or 75.1 per cent, think they have more professional spirit since receiving the degree, while 45, or 16.4 per cent, think the degree has not caused them to have more professional spirit. The per cent of affirmative answers to the first two questions indicate that teachers

will usually be aided professionally by obtaining a master's degree.

### Summary

The data pertaining to the economic benefit of a master's degree tend to show that teachers' salaries are higher after obtaining a master's degree than before receiving the degree. This was shown in Tables 16 to 19 inclusive. Table 16 showed a median increase of \$4.55 between the first year before and the first year after receiving the master's degree. Table 17 showed an increase of \$10.75 between the first year before and the first year after. Table 18 showed an increase of \$6.85. and Table 19 showed an increase of \$6.48. The tenure for men was 3.33, and the tenure for women was 4.54. The tenure for all teachers reporting was 3.75. This tenure seems to be adequate for enabling the teacher to establish himself well in his position, thus making his economic security more definite. A little less than one half of the teachers thought the master's degree had been directly responsible for an increase in salary, and consequently had been of financial value to them.

About three-fourths of all teachers reporting were of the opinion that the master's degree had been of professional benefit to them. Seventy and eight-tenths per cent felt that the degree had aided them professionally. The degree was reported to have given more professional spirit to 75.1 per cent of the teachers, and 72.3 per cent kept abreast of current educational literature more efficiently since receiving the degree.

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### CHAPTER IV

# SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

### Summary

To summarize this study in terms of medians, a master's degree will involve costs to the student or teacher as follows: travel \$60; room rent \$111.43, board \$219.80, college fees \$94.10, books \$18.61, collecting data \$18.35, typing thesis \$25.51, binding thesis \$4.60, and miscellaneous expenses \$15.93.

To further summarize the study in terms of the economic and professional value of a master's degree to a teacher, it would be a degree which would bring to the teacher an increase in monthly salary, a better teaching position, opportunities for securing still better positions, more security in his position, and a breader professional out-look.

### Conclusions

The findings in this study seem to justify the following conclusions:

- 1. The student may expect his master's degree to cost between \$400.00 and \$500.00 if he carefully guards his expenses.
- 2. The research cost should be between \$40.00 and \$60.00.
  - 3. The student can control his expenditures to a

very marked degree by carefully watching such costs as board, books, and the many miscellaneous items. Being too conservative, however, such as in the purchase of books, might tend to decrease the professional value to be derived from the degree.

- 4. There is a wide variation of cost dependent upon the type of research conducted.
  - 5. The master's degree has a definite economic value.
- 6. The teacher with a master's degree can, by salary increases, remunerate himself for the cost of obtaining the degree within an average period of six years.
- 7. The master's degree has some marked professional values.

### Recommendations

In view of the findings in this study, it is recommended that those who expect to work for a master's degree make a financial budget and strive to keep within the budget. It is particularly urged that they watch such items of cost as travel, room rent, board, college fees, and miscellaneous expenses.

Students who plan to secure a master's degree are advised to examine the teaching field and try to determine where positions are likely to be available. In view of the varying costs to majors in different fields, it will behave a student or teacher to select a field in which he can reasonably expect to secure a position

and at the same time a field in which the cost of receiving a master's degree will not be prohibitive.

It is further recommended that additional studies be made on the economic and professional value of the master's degree. These studies should cover a wider range of colleges, a wider range of territory, and a wider range of values that may come as a direct result of holding a master's degree.

### APPENDIX A

The following letter form was sent to 509 persons as a means of securing data for the study:

Dear Fellow Teacher.

I am making a study to determine the cost and the economic and professional value of a master's degree to those persons who have received this degree from the Texas state teachers colleges.

As I am dependent upon your aid for the completion of this work, will you kindly fill in the enclosed question-naire and return it to me as soon as possible?

The enclosed business reply envelope is for your convenience.

Feel no hesitancy in filling in the following blanks, as no names will be used in the study, and all information obtained will be kept strictly confidential.

Thanking you in advance for your prompt response, I am

Very truly yours.

# Questionnaires Sent to Teachers

## Questionnaire

All of the following questions apply only to graduate work on the master's degree.

- I. Transportation to and from College:
  - 1. What was the total mileage traveled to and from college while you were morking on your master's degree?
  - 2. What was the total cost of this travel?

# II. General Expense:

- 1. What was the total cost of room or house rent while you were working on the master's degree?
- 2. What was the cost of board or living expenses while you were working on the master's degree?
- 3. What was the cost of books while working on the master's degree?
- 4. What was the cost of college tuition and other fees while working on the master's degree?
- 5. What Was the cost of gown, diploma, and other expenses not included in the above questions?

# III. Research Expense:

- 1. What was the total cost of gathering the data?
- 2. What was the cost of typing or printing the report?
- 3. What was the cost of binding the report?
- 4. Miscellaneous expenses not included above?
- IV. Types of Research Used: (underscore one)
  - 1. Historical (2) Survey (3) Experimental

	01	Prognostic (5) Philosophical Analysis (6) If not no of these, please write the type in the following pace.
٧.		s the master's degree been of financial value you?
	1.	How much per teaching year?
	2.	How much per teaching month?
vI.	Fi	nancial Status:
	1.	What salary did you receive per month the year before receiving the master's degree?
	2.	What salary did you receive per month two years before receiving the master's degree?
	3.	What salary did you receive per month three years before receiving a master's degree?
	4.	What salary did you receive per month the first year after receiving the master's degree?
	5.	What salary did you receive per month the second year after receiving the master's degree?
		What salary did you receive per month the third year after receiving the master's degree?
VII.	. Pi	rofessional Status:
	1.	Has the master's degree aided you pro- fessionally?
	2.	Has the master's degree been directly responsible for your receiving a better teaching position?
	3.	Has the master's degree been directly responsible for an increase in salary?

**	a master's degree?
5.	What positions have you held since re- ceiving a master's degree?
	Has the master's degree given you more professional spirit?
7.	Do you feel more secure in your position since receiving a master's degree?
	Do you feel more obligated to keep abreast of current educational literature since receiving a master's degree?
	State other ways the master's degree has helped you professionally?
	How long have you been in your present position?
11.	Please make any additional statement that you care to make in regard to the financial and professional values you have received due to your master's degree.
	ease write your name and address if you wish a of the findings of this study.
	Name
	Address

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