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AUTHOR Oaklander, Harold
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ABSTRACT

This study is an analysis of the educational attainment of teachers, based on the hypothesis that educational preparation beyond the necessary level is beneficial to the teacher, the school student, and the educational administration alike. The questions considered are 1) What changes in teacher aspirations and values are brought about by advanced education? and 2) To what extent does advanced education facilitate the achievement of socially and professionally rewarding objectives? Chapter 2 sets out the methods used in the study, and Chapter 3 introduces the data on which it is based. Chapters 4 - 8 explore data collected by the Institute of Administrative Research, Teachers College, Columbia University. Chapter 9 deals with the 1962 postcensal survey of professional and technical manpower, to amplify the findings of the present study, and Chapter 10 summarizes the findings from both sets of data. Chapter 11 reviews the implications of the study and provides two broad conclusions: 1) Graduate educational requirements may work in some ways to reduce the effectiveness of the teaching force; and 2) More education does not automatically "lock in" a teacher either to a school system or to the teaching profession. The results cannot be interpreted as proving either that career change is detrimental or that increased career change is caused by additional education. (MBN)

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SOME UNANTICIPATED EFFECTS OF
ADVANCED EDUCATION ON A CRITICAL
PROFESSIONAL MANPOWER RESOURCE,
THE INSERVICE TEACHER

BY HAROLD OAKLANDER

1969

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Chapter I

THE TEACHER AND "MORE" EDUCATION -- FOR WHAT?

This study is an analysis of the educational attainment of teachers. It introduces the factor of teacher mobility into its analytical framework. The introduction of the teacher-mobility factor serves to raise seldom examined questions concerning the value of educational attainment.

Various ramifications of the educational preparation of teachers are discussed; and a broad generalization emerges: At all levels of educational administration considerable importance is attached to the educational preparation of teachers and more education for teachers has become synonymous with better teachers.¹ This commonly

¹New England School Development Council, Teacher Competence And Its Relation To Salary, (Cambridge, NESDEC, 1956), p. 13.

held assumption is fitted into the design of this study simply by translating the assumption into a hypothesis: that educational preparation beyond that necessary, i.e. a bachelor's degree, for teachers to gain entrance into the profession of teaching is beneficial to all parties concerned with education--to the teacher, the school student, and the educational administration alike.

A number of studies have included educational attainment as a variable; but where teachers' attitudes and job performance were under examination the influence of education has not been made clear.² One implication suggested by such research is that educational attainment is not particularly relevant. Some researchers suggest, however, that education does intervene with other factors to influence job attitudes.³ Only in relatively simple studies will education be found as a principal factor. Typical of such studies are those concerned with entrance into certain occupations or work classifications.⁴ It would appear reasonable, as well as timely, to raise the

²F. Herzberg et al, Job Attitudes: Review Of Research And Opinion (Pittsburgh: Psychological Service, 1957).

³J. G. March And H. A. Simons, Organizations (New York: Wiley, 1958) p. 96.

⁴M. A. Schwartz, The U. S. College Educated Population: 1960, National Opinion Research Center, Report #102 Chicago: University of Chicago, 1965.

question: Why is it--at a time when educational attainment is accorded so much value and so many people see nothing but good arising from it--that important social phenomena, such as labor mobility, are not being examined in respect to the influence of educational attainment?

Several lines of inquiry are suggested by the relative absence of educational attainment as an independent factor in manpower-research studies. Why is education directly and unquestionably related to only what is good, beneficial, or rewarding? Is it possible that teachers with increased educational attainment become vulnerable to less favorable consequences than those they are striving for? Might, for example, the more educated of the professionals tend to change jobs and occupations more frequently, with little or no gain, than their lesser educated associates?

Another reasonable line of inquiry centering on education pertains to the need for increased educational attainment. Might methods be employed, other than the obtaining of formal educational credentials, that could accomplish those ends which are exclusively credited to educational preparation? In the case of teachers the primary desired ends are: admittance into the profession, attainment of full professional recognition, qualification for a higher-level job, and winning salary increases. Merit

rating is one possible alternative means for achieving several of these ends. However, merit rating is a highly controversial procedure which has found little acceptance in large school systems.⁵

Conflicting Views of the Significance of Labor Mobility:

Different analysts tend to place different values on turnover or labor mobility. In one group are those who view a high or rising degree of mobility as potentially harmful. This group includes those educational officials alarmed over teacher turnover because it seems to them to be a factor working against keeping the nation's classrooms staffed by fully certified teachers.⁶ Also in this group are local school principals and superintendents (many of whom write doctoral dissertations about teacher turnover in their particular schools or systems) who see turnover as a symptom of inadequate salary plans, unsatisfactory working conditions, or unfair administrative policies.⁷

⁵F. R. Brighton, Merit Pay Programs For Teachers, (Washington, N. Ed. Assoc., 1962), p. VII.

⁶W. W. Charters, Jr., "Survival In The Profession: A Criterion For Selecting Teacher Trainees," Journal Of Teacher Education (September, 1956), p. 253.

⁷E. H. Crane And J. R. D. Erviti, Reasons Why Some Teachers Leave Public School Teaching, Report By Division Of Research, The N. Y. State Education Department, (Albany: University Of State Of N. Y., 1955).

Also, many business and industry analysts view employee turnover as a barometer of job dissatisfaction,⁸ and see a multitude of causes for this dissatisfaction. In some of these studies, the leadership pattern of the supervisor is singled out. In others, the rigidity of the general environment is seen as having a stultifying effect on mature adults striving to attain social and ego needs.⁹ In still other studies, wage and salary differentials are seen as having the effect of attracting workers out of certain lines of work and into more rewarding activities.¹⁰

A second general group of observers tends to view turnover or labor mobility as playing an essentially positive, constructive and healthy role.¹¹ Unlike the observers discussed above, they see labor mobility as useful and even necessary. When labor is scarce in cer-

⁸E. A. Fleishman And E. F. Harris, "Patterns Of Leadership Behavior Related To Employee Grievances And Turnover", Personnel Psychology Vol. 15, No. 1 (Spring, 1962).

⁹Chris Argyris, Understanding Organizational Behavior, (Homewood, Dorsey Press, 1960).

¹⁰New England School Development Council, Teacher Competence And Its Relation To Salary, (Cambridge, NESDEC, 1956).

¹¹E. Wight Bakke, A Positive Labor Market Policy, (Columbus, Merrile, 1963), p. 4.

tain sectors of the nation's complex economy, there are other sectors where labor is more plentiful or less productive, or less rewarded. The imbalance serves to stimulate the flow of workers, teachers or other professionals from the latter area to the former. Moreover, a few behavioral scientists conceive of the freedom to move from one job to another as providing the opportunity for healthy workers to seek out more psychologically rewarding job situations.¹² One might even speculate that certain persons need a variety of work experiences that cannot be provided by any one enterprise and such people must regularly move from one type of job to another until their particular needs are to some degree satiated.

Thus, simply stated, some analysts consider turnover as detrimental and others see it as beneficial. To a large degree one's perspective is influenced by his discipline and by his unique area of responsibility in the institutional or economic structure. One might reasonably assume, for example, that some school superintendents see high teacher turnover as one avenue for relief from severe budget restrictions. When an experienced teacher resigns and is replaced by a novice, a financial saving is realized.

¹²F. Herzberg et al The Motivation To Work (New York: Wiley, 1959).

On the other hand, if job mobility were to be reduced, the deficient teacher would tend to remain in his position longer. Whether one sees job mobility as a positive or negative factor depends not only upon his training, job, and value system but also upon the nature of the problems thrust upon him. The inescapable conclusion is that one just can't say, in general, how much job mobility is good or bad.

The author of this study makes no judgment as to the goodness or badness of teacher turnover. I do, however, feel that teacher turnover, since it is of concern to many people in the educational establishment for a variety of reasons, has not received adequate analysis. Whether one's motive is to increase the mobility of teachers (judging from its present high rates, teacher turnover needs no more encouragement), or to decrease the mobility of teachers (a much more frequently asserted objective), knowledge of the factors relating to the desire of teachers to leave their jobs appears necessary. I feel it is more useful in this study to adopt the widely held position that a high rate of teacher turnover is detrimental. It should be emphasized, however, that none of the data presented in this study as presently constituted can either support or disprove this assumption.

Should Past Assumptions On Teacher Education and Mobility
Continue As Guides To Future Decisions?

School boards may be right in assuming that increased educational preparation for their teachers is wholly beneficial. However, the vast expenditure of time, money and effort being devoted to the quest for graduate-level education invite questions as to whether educational officials can afford to remain uncritical of the consequences of advanced education. An appraisal of the yet unproven benefits of advanced education is long overdue. The author realizes, however, that preliminary studies--such as this one--of possible negative consequences of advanced education can only make first, tentative steps toward a complete analysis.

School boards may also be right in assuming that teacher job mobility is beneficial to a dynamic labor supply. However, their alarming inability to maintain adequately staffed teacher rosters may be one suggestion that the guiding assumption is obsolete.

A less tangible, but more alarming, hint as to the validity of the "mobility is beneficial" assumption lies in the fact that there is no evidence that high rates of teacher attrition do not have an adverse effect on the quality of teaching. If indeed the quality of educa-

tion is one of the major concerns of our times, no expense should be spared to investigate all possible factors which might adversely effect the classroom environment.

Other Factors Intervening Between The Educational Attainment And The Mobility Characteristics Of Teachers

Previous discussion supports the utilization of educational attainment as a major factor in studies of the career patterns of teachers whereas in the past it has been delegated to minor consideration. However, in the present study, an equally serious omission would occur if factors other than education and career aspirations or job change were neglected.

Therefore, such factors as sex, marital status, teaching assignment, age, level of teaching and social background will be taken into consideration. However, such factors will be used as a refinement or control of the primary factors under consideration rather than as possible alternatives to them.

Summary And Brief Outline Of The Report

These, then, are the central questions asked by

the author: What might advanced education do to the values, aspirations and goals of the teacher that make him so prone to changing his job or even his career? To what extent does advanced education speed the attainment of goals that the teacher regards as socially and professionally rewarding? It is with these -- admittedly broad and difficult -- questions that this study is concerned.

The author will devote the second chapter to his methods and goals, in the hope that the reader will recognize the purposes and limitations of the present study. This is an exploratory study: It does not solve; it merely hints at solutions. It does not set matters to rest; it provokes.

Chapter 3 introduces the data on which the study is based. Chapters 4 through 8 deal with a body of data collected by the Institute of Administrative Research, Teachers College, Columbia University. These chapters, forming the heart of the study, explore the data using a considerable variety of extracted sub-samples and variables -- focusing, adjusting, and refocusing in order to fully utilize this significant body of data.

Chapter 9 deals, but not so intensively, with yet another body of data, the 1962 Postcensal survey of Professional and Technical Manpower. This data is used pri-

marily to elaborate and amplify the findings made with the Institute data. Chapter 10 summarizes the findings from both sets of data. In the final chapter (Chapter 11) the author sets down some of his views regarding the implications of the study.

Through his intensive analysis of the data employed in this study, the author has come to two broad conclusions. Each has many ramifications, but may be tentatively stated as follows:

(1) Rather than exclusively improving the general effectiveness of the teaching force, the graduate educational requirements imposed by the education hierarchy ("the establishment") may work in some ways to reduce the teaching force's effectiveness. In many situations, the educational requirements seem to further complicate, rather than simplify, already complex manpower-utilization problems.

(2) More education, once attained by a teacher, does not automatically "lock-in" that individual either to a school system or to the teaching profession.

If these two conclusions are valid -- and the author believes that they are -- then a broad reexamination of the current efforts to extend educational requirements, and to deal with teacher turnover and the teacher shortage, is required. In the author's view, his study will have succeeded if it helps to provoke such a reexamination.

Chapter II

AN EXPLORATORY STUDY -- NATURE AND DESIGN

The primary focus of this study--educational preparation of teachers and its possible detrimental effects--has been briefly discussed. The primary and secondary factors influencing the current investigation must now be explored. How will this be achieved? In other words, what is the investigator's strategy, what kind of data will be utilized, how is the present study designed?

The study will be exploratory, its purpose being to explore some unanticipated consequences of advanced education upon practicing public school teachers. The results of studies of this type offer knowledge of value for policy change. Such information may serve a diagnostic function as well.¹

¹H. Hyman, Survey Design and Analysis, (Glencoe: Free Press, 1955), p. 66.

An early decision was made to use data from studies made previously for other purposes. The decision was based in part upon the dollars-and-cents cost of obtaining primary, fully controlled data. The author felt that secondary analysis would allow workable data to be obtained for minimum cost and would also reduce considerably the time needed to obtain information. He believes that little, if anything, in this study has been lost by the use of secondary analysis.

The framework for analysis of the empirical data can now be outlined. This framework can be described first by indicating the extent of the causal chain of variables.

The Causal Chain

The elements of the causal chain in the analyses to follow will include several independent variables, several dependent variables, and several explanatory variables intended to inject the social factors which are not ordinarily associated with studies centering around job satisfactions. No intervening variables -- such as the commonly utilized profiles or summaries of satisfaction, dissatisfaction or morale -- will be part of the analytical structure.

Educational attainment will be considered the primary

independent variable because of its central role in teacher-certification requirements; in teacher salary practices; and in professional growth; and most importantly, because it has been heretofore unexplored as an influence on job-related behavior. The organizational setting -- or teaching assignment -- will be represented as a secondary independent variable. Classroom teachers are differentiated from other types of professionals working in the school. Elementary, junior high, and senior high classroom teachers are set apart. Personal characteristics -- most importantly the sex of the teacher -- constitute the third type of independent variable. Other personal factors will be considered, e.g. age and marital status.*

* Throughout the study the various cross-tabulations will be divided into four sex-marital groups. In this sense there will be a rigid division of labor according to sex. This was not done because of traditional distinctions between males and females in studies of job satisfactions and career patterns (which sometimes implied that males were strongly committed to their careers but women were only secondarily committed).

There are several reasons why the author has chosen to use the sex-marital division. First, sex-marital distinctions were made because significant proportions of each of the four categories are represented among the ranks of public school teachers. Women in engineering or law, or men in nursing, are considered as unusual, since these professions are still considered the exclusive province of men and women respectively. Yet both men and women, single and married, are found in large proportions in public education with women in the majority in primary education.

Secondly, there are significant differences in the needs and job aspirations of each of the four groups and it can be reasonably assumed that these differences result in different job behavior and career-mobility patterns.

The dependent variables, as will be recalled from previous discussion, are indicators of job mobility. They are commonly treated as "effects" of job dissatisfactions. Particular significance is attached in this study to those effects because it is believed that they are costly to teachers, to school systems, and to the educational process. The first dependent variable to be analyzed will be a relatively simple attitudinal effect -- whether the inservice teacher desires to stay as a classroom teacher or desires to leave the teaching occupation. A second more specific dependent variable utilizes career intentions -- whether the inservice teacher desires to stay as a classroom teacher, desires to change to a nonteaching job within the educational establishment, or desires to leave the public school entirely. Both dependent variables will be examined in respect to the same independent variables.

Actual intra-occupational job mobility is also considered as a dependent variable. Here the effect is behavioral rather than attitudinal for, as will be seen, many

If teacher mobility is to be in any way influenced by public policy, these distinctions must be recognized and taken into consideration. For example, providing opportunities for young unmarried female teachers to meet young men may be one way to retain this group a few years longer in a particular school system. However, income supplementation would be of greater importance to married male teachers.

The third reason for a rigid sex-marital distinction is because of changes in the social fabric. For example, more older women than ever before are leaving the home to start or resume careers.

teachers in the samples have switched from one teaching job to another. The question here is: Do the more educated teachers change jobs more frequently than the less educated ones, and why?

Once the factors described above have been analyzed, the explanatory variables--social factors--will be introduced to help establish the absence or presence of the hypothesized relationship between educational attainment and career change. The father's level of education will be utilized as a separate factor to ascertain whether the more educated teachers with more highly educated fathers react differently to their job situations than do the more educated teachers with less educated fathers. The same analysis will be set up with the mother's education as a separate factor. According to the literature of reference groups either the father or the mother may be used as a standard for the teacher to equal or exceed.²

Outside groups of teachers will also be analyzed for possible influence as reference objects. The more educated teachers who hold offices in educational associations will be compared with the more educated teachers who are not active in professional voluntary associations. This will give an indication as to whether this particular reference

²T. M. Newcomb et al, Social Psychology, (New York: Holt Rinehart, Winston, 1965), p. 145.

group has an influence on career decisions.

Data from Teachers College, Columbia University ("The Institute Sample") provided the necessary independent variables with considerable latitude for elaboration; however, the dependent variables are somewhat lacking. Data from a Postcensal study of college-educated workers by the National Opinion Research Center ("The Postcensal Sample") contained a wider array of factors reflecting the career-changing behavior of teachers but suffered somewhat because educational attainment could not be fully controlled as could be done with the Institute Sample. In this study two dimensions, degree held and years of graduate education, were combined where possible to obtain an operational as well as sensitive indicator of educational attainment.

The personal factors--age, sex, marital status and number of children--are all straightforward (although some researchers might debate the concreteness of age when reported by large numbers of female teachers). The explanatory variables, on the other hand, will be found to be relatively abstract. Historically, a father's social status set the status of his sons. Today the relative status of father and son is less direct, with formal education and other reference objects intervening to make objective status relatively unimportant and subjective and imputed status increasingly important.

The use of secondary data called for some special considerations in abstracting the factors from the raw data. In the case of one dependent variable, number of positions held in education, information had to be assembled from several different sections of the Postcensal questionnaire. In addition, teachers from church-sponsored elementary schools had to be screened out to obtain the sample of public school teachers desired for this investigation. Obviously, there are drawbacks as well as benefits in using secondary data.

The Design Of The Study

The overall assumption on which the design of this study is based is that increasing levels of education result in unanticipated negative consequences in respect to the career patterns of public school teachers. This deduction is analogous to the "sluiceway" function described by Davis, i.e. the supply of new teachers entering the nation's schools is restricted with each increase in the educational requirement for entrance into the profession.³ In this report inservice teachers, not prospective teachers, are the primary interest. Therefore, the complexity of teacher career problems and the numerous dimensions of the teacher corps must be taken into account. It

³J. A. Davis, The Role Of Higher Education In Career Allocation, National Opinion Research Center, University of Chicago (Chicago, By The Author, 1962), p. 14.

will be necessary to exercise considerable control over all the variables. With these realities in mind, this study was set up as exploratory. While hypotheses are not customarily deduced in studies devoted to hypothesis-testing, they can be deduced and refined in exploratory studies. One of the outputs of this study will be a more sharply defined working hypothesis than was originally formulated. A consequence of hypothesis-development is that intensive hypothesis-testing may be put off to future studies. It is hoped that this work will stimulate further investigation into the unanticipated consequences of advanced education.

Each of the various foundations upon which this study is based has been discussed. It would be well, at this point, to summarize and place each element into the overall design before introducing the data.

Chapter 1 suggested the existence in the educational establishment of an informal hypothesis -- advanced education for teachers is directly related to improvements, benefits and rewards to all those concerned.

Until very recently, there has been relatively little investigation of any significant cost which might be associated with the graduate education of classroom teachers. It is this lack of negative perspective about education which has prompted the primary assumption of

this study: that the graduate education of teachers incurs significant, unanticipated costs to the educational system. This assumption will serve as a working hypothesis challenging the infallibility of the generally accepted assumption that advanced education for teachers has only positive consequences.

A second, more elementary, assumption is necessary however. This assumption is that teacher job and career-mobility are detrimental to the educational system. Thus, if the results obtained from analyzing the data indicate that the more educated teachers, rather than the less educated teachers, are more inclined to mobility, then the working hypothesis is to some degree supported and the "educational-payoff" hypothesis is to some degree weakened.

In the following chapters, educational attainment is represented by degrees actually attained and/or years of graduate work achieved. The mobility factor is represented by several different indicators of mobility; some factors indicate tendencies toward job change; others indicate actual job changes, while still other statistics indicate the direction of the change. In each of the several different analyses, an indicator of educational attainment is cross-tabulated against some indicator of job or career mobility. The result in each

case reflects the nature of the relationship between educational attainment and job or career mobility, whether direct, inverse or unrelated. The repetition of cross-tabulations serves the purposes of validation of the results through replication, and also serves to build a pattern of results rather than merely an isolated result of some kind. Results obtained from cross-tabulating one factor against another can be significant if the analysis is strong enough to be statistically significant. Analyses of this type can also be judged as meaningful if the results obtained are consistent over a number of trials. The latter technique will be used in this study. Multiple analyses become possible when two different samples, or sets of data, are utilized. Multiple analyses have the virtue of making possible a variety of dependent variables.

In the chapter that follows, both the Institute Sample and the Postcensal Sample will be introduced and described in detail.

Chapter III

INTRODUCTION TO THE DATA

The empirical data that forms the core of the secondary analysis comes from two sources. As indicated in the previous chapter, the first source is "The Institute Sample," which includes data from an investigation made in 1962 of the staff characteristics of a large group of public schools initiated by the Institute of Administrative Research, Teachers College, Columbia University. The second source, "The Postcensal Sample," was utilized for a survey of professional and technical manpower. It was conducted in 1962 by the National Opinion Research Center.

The Institute Sample

The Institute study covered 420 school systems with data on the characteristics of professional staff.¹

Three suburban school systems were selected from among the 420 urban, rural and suburban systems covered by the Institute study. These three were the only systems for which complete data on educational attainment, including years of education and highest degree attained, as well as data on career changes were coded. This information was requested on the questionnaire for all school systems. The fact that it was coded and processed for only three systems raises the question of how much importance the school administrators supporting the Institute study attached to teachers' career patterns and the characteristics of educational attainment. However, the three-system sample of suburban schools had considerable potential for research. The author selected 12 factors for cross-tabulation, each of which was suited to the purposes of this study. This information is not readily available elsewhere.

The three suburban school systems adjoin New York City and Philadelphia. They incorporate some 532 males

¹P. A. Wood, A Measurement Of Staff Characteristics In Selected Public Schools, Unpublished Doctoral Dissertation, Teachers College, Columbia University (New York, By Self, 1963), p. 25.

and 862 female classroom teachers. All teachers had maximum opportunity, if they were personally motivated, to increase the level of their graduate education and to find jobs in neighboring school systems or in other occupations because of their proximity to large urban centers. This sample, while not a completely representative sample, is adequate in size and scope for this study. It is useful to the extent that urban and suburban areas are increasing in size relative to rural areas. Also urban and suburban teachers are more educated than rural teachers.

The Institute Data:

Thirteen factors were extracted from this data because of their relevance to this study. The majority of these factors, e.g. age, sex, and type of teacher, will be used in the analysis in a form fairly similar to their raw form. The frequency distributions of the 13 factors are indicated in Table 3.1 for each of the three suburban schools.

Table 3.1

PERCENTAGE DISTRIBUTIONS OF RELEVANT TEACHER
CHARACTERISTICS IN THREE SCHOOL SYSTEMS

Teacher Characteristic		School Systems			
		A	B	C	All
Sex:	Male	38	38	39	38
	Female	62	62	61	62
	total % n	100 645	100 455	100 289	100 1389
Age:	24 & less	11	17	19	14
	25 - 29	20	16	15	18
	30 - 34	21	13	13	17
	35 - 44	25	25	24	25
	45 & more	24	29	30	27
	total % n	100 649	100 456	100 293	100 1398
Marital Status:	Single	33	39	38	36
	Married	67	61	62	64
	total % n	100 645	100 455	100 289	100 1389
Teaching Level:	Elementary	50	43	47	47
	Junior High	13	28	45	20
	Senior High	27	24	21	25
	Others	10	5	7	8
	total % n	100 651	100 458	100 293	100 1402
Years Of College Education:	4½ & less	28	36	27	30
	5	36	29	32	33
	6	25	21	25	24
	7 & more	12	14	17	13
	total % n	100 641	100 456	100 289	100 1386
Assignment:	Class R'm T.	71	82	71	74
	Special T'ier	14	3	17	11
	Supervisor	3	2	1	2
	Administ'ion	5	4	4	4
	Other	9	9	7	8
	total % n	100 650	100 457	100 293	100 1400
Educational Attainment:	No Bachelors	5	4	9	6
	Bachelors	41	43	34	40
	Masters	53	52	56	54
	Doctorate	1	1	1	1
	total % n	100 412	100 460	100 295	100 1408

Table 3.1 (continued)

Teacher Characteristic		School Systems			
		A	B	C	All
Is Career Change Desired?	Yes	27	29	25	27
	No	73	71	75	73
	total % n	100 637	100 447	100 286	100 1370
Type of Career Change Desired:	Guidance	15	9	20	14
	Supervision	15	17	23	18
	Administrat'n	30	29	11	26
	College Teach	22	22	21	22
	Out of educ.	17	24	25	21
total % n	100 149	100 118	100 71	100 338	
Father's Education:	Elementary	18	15	14	16
	Junior High	25	23	22	24
	Senior High	37	35	40	37
	College, Grad	20	28	25	24
	total % n	100 629	100 454	100 285	100 1368
Mother's Education:	Elementary	18	11	13	14
	Junior High	26	23	23	24
	Senior High	45	48	45	46
	College, Grad	12	18	20	16
	total % n	100 626	100 452	100 285	100 1363
Is Either Parent a Teacher?	Yes	12	18	19	16
	No	88	83	81	84
	total % n	100 613	100 439	100 279	100 1331
Number of Offices in Educational Associations:	None	64	71	75	69
	1	15	17	10	14
	2 or more	21	12	15	17
	total % n	100 653	100 460	100 295	100 1368

Note: It will be noticed that slight differences occur in the total n's when various charts are compared. This results from computer processing and does not significantly alter the percentages.

The Chi-Square statistic was used to test for significant differences between school systems for each factor.*

*It is a common statistical practice when hypotheses are under examination or when several factors are inter-related to test the results for significance. In this manner investigators hope to ward off speculation as to whether the relationships obtained were a result of some chance association or whether some relationship is indeed established between the two or more factors under examination. Tests for significance, of which Chi-Square is most relevant here, are not generally utilized in this study (but see Chapter 8) for several reasons. For one, Chi-Square has limitations. If the 'n' is very large, that is, more than 100, the results often tend to be significant regardless of how small the degree of relationship. Such would tend to be the case in the Institute Sample with all married male, single female, and married female teachers. Conversely, if the sub-sample is too small, that is, less than 20, it becomes difficult to argue a significant relationship. Many such cases are found in charts where the principal factors are cross-tabulated and then controlled two or three ways, which is typical of this study. Also, linearity is not implied by significance. In this study considerable value is placed upon the consistency of the results across a number of sub-tables, rather than on the significance of any one table. For example, where an array of sub-tables yields consistently direct or inverse relationships between education and job change. Reliance upon Chi-Square tests in an exploratory study of this type may tend to oversimplify the analysis of the results. For these reasons, the use of Chi-Square is confined to those tables where its disadvantages are minimized.

No factor was found to differ so much as to preclude the feasibility of combining the data from the three systems. Most of the factors were then ready for cross-tabulation. Several, however, had to be assembled into a more meaningful final form. Such was the case for highest degree attained, years of college education, and desired career change.

Two educational indexes are available, highest degree obtained and years of college. Each factor has been widely used to indicate the educational accomplishments of individuals although highest degree is more common and more definitive.

Several characteristics of urban school systems suggest that highest degree obtained would not alone realistically portray the educational attainment of teachers. Salary plans, such as the one for Los Angeles teachers, recognize either additional blocks of graduate credits or advanced degrees for salary differentials.² The group of teachers included in the Institute data demonstrates wide variation in length of college training both for those with bachelor's degrees and for those with master's degrees.

²Los Angeles School System, Personnel Data 1966-1967, Personnel Division Publication No. Z-17 (6), (Los Angeles: Research Section, 1967), p. 12.

Table 3.2

YEARS OF COLLEGE ACCORDING TO
HIGHEST DEGREE OBTAINED
(IN PERCENT)

Years of College	Highest Degree Obtained				
	No Degree	Bachelor	Masters	Doctorate	All
2 to 3½	39	2	1	0	4
4	21	39	1	0	17
4½	4	23	0	0	10
5	18	19	19	0	19
5½	4	6	21	0	14
6	5	5	24	8	15
6½	4	2	13	8	8
7 or more	6	4	20	85	13
Totals %	100	100	100	100	100
n	78	550	745	13	1386

Table 3.2 indicates that 36% of the bachelor's degree holders have as many years of graduate education as most of the master's degree holders. Among the master's degree holders, more than half possess two or more years of graduate education. Twenty percent of the master's degree holders possess as many years of graduate education as do 85% of the holders of doctoral degrees. Neither index alone gives as meaningful a description of educational attainment as both together.

The distinction between years of college and degree attained has qualitative as well as quantitative impli-

cations. One of the criticisms of graduate teacher education is that many teachers take duplicate and unrelated courses in order to accumulate graduate credits.³ Programs leading to graduate degrees, in contrast, are typically composed of courses relevant to the purposes of the program. Courses are logically related to each other. One implication is that teachers who complete graduate programs demonstrate a higher order of scholarship and a deeper commitment to their professional development than do teachers who merely accumulate graduate credits.⁴

It would appear desirable from several points of view to incorporate both indices of graduate education in the measure of educational attainment, especially if they are assembled in such a way as to permit comparisons of the effect of each index on the dependent variable under examination.

For the purposes of this study, both years of college education and highest degree obtained will be integrated into one index: educational attainment. A four-increment scale will be set up for the Institute data:

³K. W. Meyer, "Still Another Look At Teacher Education", The North Central Association Quarterly Vol. XXXIV, #1 (July, 1959) p. 167.

⁴K. J. McLeod, A Follow-Up Study Of Graduates Of The Fifth-Year Program Of Teacher Education (New York: N. Y. University Press, 1954), p. 3.

Bachelor's - will include only those with the degree, with not more than $4\frac{1}{2}$ years of college.

Bachelor's Plus - will include only those with the degree and 5 or more years of college.

Master's - will include only those with the degree, with not more than $5\frac{1}{2}$ years of college.

Master's Plus - will include only those with the degree and 6 or more years of college.

Teachers with no degree or with doctoral degrees will be examined less exhaustively. Constituting, respectively, some 6% and 1% of the sample, these two groups are too small to subject to the fragmentation of cross-tabulation. Table 3.3 indicates the frequency distribution of the newly constructed variable -- educational attainment.

One indicator of the dependent variable obtained from the Institute sample is -- whether or not the teacher desires to change his job. This desire is generally considered an effect of job dissatisfaction. It is an attitudinal type of effect rather than a behavioral effect such as absenteeism or resignation. While more tangible than desires, neither of these behavioral effects indicate the extent of dissatisfaction arising from one's teaching situation. Many factors may lead to the teacher's dissatisfaction with his job. For example, he may desire to leave his job but be unable to do so for some reason or another.

Certain behavioral scientists feel that it is the

"healthy" workers who leave dissatisfying job situations and the "unhealthy" ones who remain.⁵ If this is so, then a factor such as desire to leave, although it is rather general, does give some feeling of the possible outer limits of the extent of such internal disquiet. Internal disquiet -- as well as an inadequate supply of teachers -- are both major factors that can disrupt the effectiveness of educational systems.

If the factor "desire to change jobs" could be made more descriptive, its value would be increased. This was accomplished by combining some of the categories of responses obtained when the teachers who indicated a desire to leave their jobs were also asked to indicate the field into which they would like to change. This information was introduced in Table 3.1. Those responses indicating a desire for guidance work, for supervisory and administrative positions were combined into a category labeled "Up." This indicates a group of teachers who, while unsatisfied by their present job situations, see one road to future satisfaction in education, in higher-level jobs. Those responses indicating a desire to leave public school education to seek work outside the profession or to enter college teaching were grouped

⁵Chris Argyris, Personality And Organization (New York, Harper & Bros., 1957).

together and labeled "Out."* Using these designations, it is possible to amplify more meaningfully upon the theoretical implications of the basic dependent variable. It also permits the data on field of change to be utilized, whereas previously the number of responses in any particular field were too small to be given serious consideration.

The frequency distribution of the second newly constructed factor, type of career change desired, is also described in Table 3.3. Those with the highest intensity of commitment to teaching desire to "remain." Less commitment is suggested by the desire to move within education. The least commitment is expressed by those wanting other occupations.

Several more of the factors described in Table 3.1, although not so important as those discussed above, may need additional introduction here. "Type of teacher" and "assignment" describe important teacher characteristics that previous discussions indicate must be held in control. However, there is some overlap and ambiguity associated with these two characteristics. It was found

*It might be more realistic to label college teaching as "Up" rather than "Out". "Out" is used simply because there is no evidence of an established career ladder to both upgrade public school teachers and to replace them. Perhaps there should be such a promotional scheme to motivate lower level teachers and to control their rate of advancement.

that when the two factors were combined a cleaner division of the type of teacher was possible. A new factor, "Assignment level," was constructed.

Table 3.3

PERCENTAGE DISTRIBUTIONS OF SELECTED
COMPOSITE FACTORS ACCORDING TO SEX

Composite Factor		Sex		
		Male	Female	Both
<u>Educational Attainment:</u>	Bachelor	11	37	27
	Bachelor+	13	17	15
	Master	24	25	25
	Master +	50	21	32
	total %	100	100	100
	n	516	804	1320
<u>Type Of Career Change Desired</u>	Remain	54	82	71
	Promotion	26	7	14
	Leave Ed.	20	11	14
	total %	100	100	100
	n	520	841	1361
<u>Assignment Level</u>	Elem. CRT	13	53	38
	Jr. H. CRT	21	12	16
	Sr. H. CRT	32	12	19
	Other	34	24	28
	total %	100	100	100
	n	531	861	1392

The frequency distribution of the new factor, as described in Table 3.3 has three classes of classroom teachers (CRT) and a fourth category of professional educators all of whom possess higher status in the educational hierarchy than the ordinary classroom teacher. The various factors derived from the Institute data will be related to one another in the analytical chapters to follow.

The Postcensal Sample

The second source of empirical information was the 1962 Postcensal Survey of Professional and Technical Manpower conducted by the National Opinion Research Center for the National Science Foundation.⁶ This study describes, among other things, the mobility patterns, fields of specialization, and background characteristics, including education, of elementary and secondary school teachers as well as of 38 other occupational groups, all with four or more years of college education at the time of the 1960 census. A questionnaire elicited information on their 1960 and 1962 career and educational status. Bi-annual statistics on the mobility patterns of certain classes of teachers can be set up which can then be related to the teachers' educational attainment. Information of this type is unobtainable in traditional studies of teacher turnover.

Each of the various occupations making up the Postcensal study was sampled in sufficient number to ensure at least 1,000 respondents for each occupation.⁷ The overall rate of return was 72%. Samples of 1,966 elementary teachers and 1,913 secondary teachers were obtained.

⁶S. Warkov and J. Marsh, The Education And Training of America's Scientists And Engineers Report No. 104 (Chicago: National Opinion Research Center, 1965).

⁷M. A. Schwartz, The U.S. College Educated Population 1960, N.O.R.C., Report #102 (Chicago: Univ. Of Chicago, 1965,) p. 68.

While 3,879 teachers represent a small proportion of the almost two million who staff the nation's schools, these samples do provide an opportunity to obtain information about elementary and secondary teachers not otherwise available. The samples are considered representative of the nationwide population of teachers.

The Postcensal Data: The Postcensal data contain a variety of factors related to educational background as well as to the career patterns of college-educated public school teachers. The selection of pertinent factors was, of course, governed by the purposes of the study, but it was also influenced by the type of factors previously used in this report. Ideally, to contribute to an exploratory study, a second body of data could both replicate important previous analyses as well as contribute new insights. Frequency distributions of the pertinent factors are given in Table 9.1, and the Postcensal data are analyzed in Chapter 9.

The Analytical Procedure

Before commencing the analysis of the data, it may be useful to discuss briefly the sequence that will be followed, tell what factors will be related to each other, and explain what purpose each phase of the analysis is intended to serve.

The Institute set of data will be utilized first, starting with Chapters 4. It more fully describes the independent variable -- educational attainment -- and offers more control factors and more explanatory variables on which to build discussion than does the Post-censal data.

1. Educational attainment will be cross-tabulated against the broadest available indicator of the career plans of inservice teachers, that is, whether or not they desire to leave the teaching position for which they were trained. Table 3.4 gives a general indication of the results of this relationship.

Table 3.4

EDUCATIONAL ATTAINMENT VERSUS DECISION
TO REMAIN IN OR CHANGE CAREERS

Level Of Educational Attainment	Career Decision					
	Male Teachers			Female Teachers		
	Remain in Teaching	Leave Teaching	Both	Remain in Teaching	Leave Teaching	Both
Bachelors	39	62	100	80	20	100
Bachelors +	53	47	100	87	13	100
Masters	62	38	100	83	17	100
Masters +	57	43	100	79	21	100
All	56	44	100	79	21	100

Almost as many male teachers would like to leave teaching (44%) as remain in teaching (56%). A smaller percentage of the total female teachers (21%) desire to leave teaching. Educational attainment appears inversely related to the proportion of male teachers desiring to change careers, comparing those with bachelor's degrees with those possessing a bare master's degree. This finding will be reexamined, controlling for age, to ascertain if the masters are a self-screened in-group. A curvilinear relationship typified female teachers. Theoretical considerations suggest the necessity to explore the relation between educational attainment and career intentions, exercising control over more factors than just sex alone.

In the next chapter, therefore, the age of the teacher will be taken into account, recognizing that many younger teachers desire to leave teaching for reasons other than those that might be influenced by graduate education. The marital status of the teacher will also be a consideration, since single people may make career decisions according to somewhat different value systems than married people. A third type of distinction separates elementary teachers from junior high and senior high classroom teachers. In addition, all classroom teachers

will be distinguished from special teachers and school supervision. The purpose served by these controls is to ascertain the relationship between educational attainment and career intentions in a variety of commonplace contexts, and to determine whether one particular factor or another serves to accentuate the causal relationship. Different groupings of age and other classes of factors will be constructed to ascertain whether the way that the information is assembled influences the results. Groups will be retained for analysis only where results suggested before the grouping were not changed. It will be interesting to compare the relationship between educational attainment and career intention in the case of classroom teachers and in the case of non-classroom educators. Supposedly the latter, higher-status group has been more rewarded for professional investments such as graduate education and would therefore be less inclined to change jobs.

2. Educational attainment will be cross-tabulated against a second dependent variable in the fifth chapter. In this analysis the dependent variable is more specific in regard to the career intentions of the respondents. Certain classroom teachers indicated a desire to seek higher level positions within the schools, other teachers indicated a desire to leave public school teaching all together. The influence of level of educational attainment will be ascertained for each expressed direction of

change, for each intention has different organizational as well as career implications.

The system of controls outlined for Chapter 4 will not be repeated in this second phase of the analysis of the Institute Data. Instead the simplified groups suggested by the results obtained in Chapter 4 will be utilized. Where certain controls did not produce discriminating results they will not be repeated.

3. A different type of dependent variable is analyzed in Chapter 6. Here the extent of the teacher's actual job-jumping history is related to his level of educational attainment. Previous chapters, in contrast, were concerned with career switching intentions. The results from Chapter 6 may serve to validate to some degree the results obtained from the more subjective indicators of job mobility of the previous chapters.

4. In Chapter 7 the primary factor, educational attainment, is elaborated upon. Three different social background factors were cross-tabulated against educational attainment in order to ascertain if teachers of certain types of backgrounds were more inclined to attain higher levels of education than teachers with different background characteristics. The purpose of this series of cross-tabulations is to examine the possibility that "education" masks other characteristics and that it is therefore spuriously correlated with the dependent variables.

5. The fifth of the analytical chapters involving the Institute data (Chapter 8) will be devoted to seeking explanations for the results reported in Chapter 4. Social background factors, including those used in Chapter 7, will be used to specify results in tabulations of the primary factors. The purpose is to ascertain the influence, if any, of social class experiences upon career decisions. The influence of present day reference groups will be appraised, for example, by utilizing a factor such as the intensity of relationships with teacher associations.

6. The Postoensal data will be utilized in the sixth and last of the analytical chapters (Chapter 9). Here the dependent variable will take the form of actual career changes in contrast to the attitudinal effects of dissatisfaction with the teaching job discussed in earlier chapters. The first sections of this chapter will aim towards exploring the function of education in respect to changes in the employment status of teachers over the two-year period. Movement out of the labor market is especially identified with young female teachers. The influence of advanced education upon women abandoning professional careers for domestic careers will be considered in this phase of the analysis.

7. The last section of the Postoensal chapter will consider teacher job change over the long-run, namely

the professional life of the teacher. The immediate purpose here is to ascertain to what degree level of advanced education is associated with actual job mobility. The Postcensal data contains an added feature ("no degree") in respect to educational attainment. Teachers from the Institute sample data possessed at least bachelor's degrees. Many of the teachers from the Postcensal set of data lacked the bachelor's degree.

8. The tenth chapter summarizes the findings obtained from the data. Conclusions are drawn from this information.

9. Policy implications will be cautiously raised in the final chapter, which draws in part from the conclusions of the analytical material. Here the research results will be viewed in respect to existing educational policies to train, recruit and retain a stable and effective teaching force in the public schools of the country.

Chapter IV

TEACHERS WHO WANT "OUT" FROM TEACHING: THE ROLE OF EDUCATIONAL ATTAINMENT AND OTHER FACTORS

Many aspiring teachers, while still in college, change their minds about embarking upon a teaching career. Also, many students who had not considered teaching upon entering college have come to anticipate a teaching career. Because considerable data is available on the effect of undergraduate education upon career aspirations, it is surprising to find so little available information on how the work situation and part-time graduate education influence decisions to change careers. Undergraduate career decisions have considerable significance to the undergraduate but little immediate effect on the public school system. No doubt, empirical data of this type contributes to knowledge of educational psychology.

Yet with the inservice teacher decisions to make career changes also have considerable effect on the individual, perhaps an even greater effect from a "personal finance" point of view. Such decisions may also affect the quality of the educational process. Thus the need for empirical data is, at least, just as great for teachers as for student teachers. Such data not only contribute to occupational psychology but also influence public policy concerning the administration of the teaching force in such areas as selection, assignment and professional development of teachers.

These are the reasons why the author has placed emphasis on the empirical data presented in this and succeeding chapters. In discussions of results, information obtained from the data will be related to previous discussions. The results of other studies will also be interjected at the appropriate points.

Two previously discussed characteristics of this study dictate the structure of the analysis. It was decided that a number of control and explanatory variables should be introduced to avoid over-simplification. Six different factors will be related in this chapter alone. The exploratory nature of the study necessitates numerous divisions of each of the factors so that different groupings and combinations

may be tested. Age, for example, is initially grouped into six sections but is eventually reduced to two.

More than 1,000 computer output tables were condensed into 60 working tables each with 12 variations. This does not include the simple frequency distributions used in introductory discussions. From these 60 working tables, the data presented in this and succeeding chapters were extracted.

The Primary Questions

In this first of five empirical chapters, concerned with the career dynamics of inservice teachers, the primary question to be explored is whether or not data will support the assumption of a relationship between teachers' level of education preparation and their intent to leave classroom teaching.

The second question attempts to discriminate among the different avenues of change. Not all change can be evaluated as contributing to organizational instability. Promotion is one type of career change made necessary by turnover among the ranks of administration as well as by the growth needs of school systems. One would feel fairly comfortable in predicting that where a direct relationship

is discovered between educational attainment and desire to leave teaching, the new career goal would be a higher status position within the educational establishment, rather than a position outside of public education. This possibility will be explored.

The Sequence of Examination of The Data

1. The discussion of the data will start with a description of the form and results of measurement of each of the six factors utilized in the analysis. Also included in this section of the chapter will be discussion of the rationale used to condense the data. It is hoped that the reader will find this elementary discussion helpful in viewing the more complex data that follow.

2. Age is an especially important factor because, more so than any of the other independent variables, it inter-relates with other variables. Data on levels of education, for example, are particularly influenced by age. Age is also a factor in clarifying the meaning of the proportion of teachers, both male and female, who are married rather than single. This is why the first analyses will concern the relationship of age to each of the other five factors under consideration. This introductory form of analysis will be

found useful in the discussions of the more complex forms of analysis.

3. Data will then be presented on the first of the primary purposes of the study: the relationship of level of educational attainment to the desire to turn away from the practice of teaching.

4. The second primary purpose, a differential analysis of the intended direction of change in respect to educational attainment, will be undertaken at this stage of the overall discussion.

5. A summary of the results will highlight the important findings. The relationship of the findings of this study to findings of other relevant studies will also be interjected in this phase of the discussion.

6. The chapter will conclude with a review of questions raised by the data which will either be clarified in future chapters or which will be left for future investigators.

The Various Factors

Sex and Marital Status: Table 4.1 serves the dual function of providing not only information about the sex and marital status composition of the Teacher's College (Institute) sample of teachers, but also about frequency distributions for each of the other factors to be discussed.

Table 4.1

PERCENTAGE DISTRIBUTIONS OF RELEVANT TEACHER
CHARACTERISTICS BY SEX, AND BY SEX-MARITAL STATUS

Teacher Characteristic	Male	Female	Male		Female	
			Single	Married	Single	Married
Assignment:						
Element. CRT	13	53	22	11	46	60
Junior H. CRT	21	12	22	21	12	13
Senior H. CRT	32	12	41	31	16	8
Non-Cl. Rm. T'r	34	24	14	37	26	19
totals %	100	100	100	100	100	100
n	531	881	40	392	379	404
Age:						
24 and less	5	20	22	2	29	14
25 to 29	17	17	27	16	21	17
30 to 34	25	12	25	24	16	10
35 to 44	33	20	25	35	12	27
45 to 54	15	22	1	17	15	25
55 and more	5	9	0	5	8	7
totals %	100	100	100	100	100	100
n	530	860	88	99	378	405
Educational Attainment:						
Bachelors	11	37	20	8	38	37
Bachelors +	13	17	21	10	13	21
Masters	25	25	18	27	25	25
Masters +	51	21	41	53	25	17
totals %	100	100	100	100	100	100
n	504	803	90	409	392	410
Career Intentions:						
Remain in job	56	83	53	56	76	87
Change Job	44	17	47	44	24	13
totals %	100	100	100	100	100	100
n	515	842	90	394	380	404
Type Of Career Change Desired:						
Remain in job	54	82	52	54	76	86
Promotion	26	7	19	28	9	5
Leave Educat.	20	11	29	18	16	8
totals %	100	100	100	100	100	100
n	520	841	89	398	378	406

Many studies of career change control for sex. However, relatively few consider the (statistical) effects of marital status on these changes. There is much to suggest that the latter distinction is almost as important as the former, at least in the case of the classroom teacher. Looking first at educational attainment, it is seen that little variation is apparent in the proportion of males and females with master's degrees. When marital status is differentiated, however, a significant degree of variation is indicated, which is not explainable by age. Even where control for sex alone does produce a variance, as in the case of bachelor's plus, it is found that control for both sex and marital status produces an even great range of variation in the percentages.

The usefulness of incorporating both sex and marital status is also demonstrated by the variations of the percentages in other factors. The distribution of the ages of single males does not follow the normal curve pattern indicated for all males. There are also differences in the pattern of the frequency distributions for age in respect to the female teachers. The importance of the sex-marital control is also supported by the assignment and career factors. All further analyses based on the Institute sample will reflect control for sex-marital status rather than sex alone. We may call this an

"accommodation index."

The sex-marital control also has its disadvantages, the most obvious of which is the small size of the single-male grouping. However, it is felt that this weakness stems from the inadequate size of the whole sample. Future studies of this type might also find sex-marital control useful and be better able to establish a sample size to accommodate the procedure.

Assignment: Four classes of assignment are indicated, three of which are the classroom teachers with whom this study is primarily concerned. The fourth class, including special teachers, supervisors, principals and guidance counselors, will be excluded from further consideration in this chapter. Unfortunately, this means that the size of the sample will be reduced by about 28%. However, this will not substantially subvert the intention in undertaking the study. All four sex-marital groups are reduced but the reductions are not crippling. A gain is realized in that the various groups contain only classroom teachers with whom the study is primarily concerned. The reason why this (non-classroom) group was included at all in a study concerned with classroom teachers is that it will contribute to a fuller understanding of the questions under investigation in the next chapter.

The traditional dominance of the elementary class-

room by females and of the high school classroom by males is evident. However, there is a sizable proportion of single men in elementary classrooms and of single women in high school classrooms. This prompts the question of whether this invasion of offices traditionally held by the opposite sex, with the difference in educational attainment so implied, might influence the desire for career change.

Age: The characteristics of the various distributions of age were discussed in connection with the sex-marital status factor: thus, the decisions made in the process of condensing age factors can now be explained. Each table is made up of only four cells, because both the age factor and the educational attainment factor are dichotomized. In the working tables, however, age was divided six ways and education was divided four ways, resulting in rather cumbersome tables of 16 cells. More significantly, many of the cells of even some of the largest groups of teachers were deficient in numbers. More than half of the cells of the work table on single female elementary teachers, for example, contained zero percentages.

For these reasons 11 additional work tables were constructed for each of the different types of teachers in order to arrive at a simplified table without sacrificing the informational aspects of the original chart. Addressing

the age factor alone, a four-way breakdown was first tried and then two different two-way breakdowns. It was found that the four-way division was still too diffuse. A comparison of the two-way age breakdowns, to 34 - 35 and more and to 29 - 30 and more, indicated that the latter method for presenting the age of the teachers gave both a more reasonable division of the numbers of teachers falling into each cell and also represented a natural break in respect to the pattern of the information yielded by the various cells.

Educational Attainment: It would be desirable to retain this factor, the primary independent variable of the study, with all the four classifications initially established. However, the paucity of certain cell populations, as discussed above in respect to age, also suggests that educational attainment be condensed. For this reason three different dichotomies were tested: bachelor's - all others: all bachelor's - all master's: and degree holders - degree holders with one or more additional years. The conventional breakdown, all bachelor's - all master's, emerged as the preferred method for measuring educational attainment with minimum distortion.

Career Intentions: An examination of the data in Table 4.1 serves to provide several clues as to what relationships may be important in the cross tabulations to follow. Single males desire to leave teaching more so than teachers

from any other of the four sex-marital groupings. Married males come a close second. It will be interesting to see to what extent educational attainment relates to this apparent show of dissatisfaction with teaching. It will also be interesting to see if married males who want change are interested in leaving teaching or obtaining better jobs in education, in contrast to single males. It would not be illogical to predict that married males with greater financial requirement want "out" while the single males want "up."

As for the females who want to change their careers, it is not surprising to find this desire strongest among the single women. In contrast to the males, one would assume that for this group change means "out." While more than twice the proportion of males want to leave teaching than females, the importance of the desire for change among the females should not be underestimated. For one, there are more women in teaching than men. Secondly, the numbers of teachers in the public schools are so large that a change of 2 to 3% in the proportion of those who leave teaching has considerable effect on the problem of keeping the nation's classrooms staffed.

Direction of Intended Change: The data for male teachers is more revealing with this second dependent variable than was the case for desire to change jobs. Qualitatively,

the desire to leave the profession appears to show greater dissatisfaction than the desire for job change within the profession. Also, as will be discussed later, the implications of wanting "out" are considerably different than wanting "up." The data themselves are also revealing when sex-marital status is compared. Higher proportions of single males wish to leave public education than aspire for promotion. The opposite is true for married males. Single females, too, tend to prefer exiting from teaching rather than aspiring for advancement. One might suspect that those with higher levels of educational attainment primarily aspire for promotions and that those teachers who want to turn their backs on the profession for which they were educated will be primarily those with lower levels of educational attainment.

The Significance of Age As A Control Factor

The influence of age upon educational attainment and the career factors is indicated in Table 4.2.

Attention is directed first to the variation in patterns of age according to sex-marital status. A comparison of male and female single teachers in the sample indicates that the males maintain fairly uniform proportions in each age group below 45, after which they practically disappear. The number of single female teachers decreases almost by half up to the age of 34, beyond which the proportions in the various age

Table 4.2

AGE DISTRIBUTION ACCORDING TO SEX-MARITAL STATUS, BY
EDUCATIONAL ATTAINMENT, AND BY CAREER CHANGE DESIRED
(IN PERCENT)

Age Distribution		Educational Attainment				Career Change Desired		
Age Group	Percent	B	B+	M	M+	"Up" in Educa'n	"Out" of Educa'n	"Up" & "Out"
Single-Male:								
24 and less	21	67	5	31	3	(43) 26	(43) 35	(19) 63
25 to 29	27	28	48	25	17			(24) 58
30 to 34	25	5	32	25	31	(42) 14	(42) 26	(22) 32
35 to 44	25	0	16	13	47			(22) 41
45 to 54	2	0	0	6	9			(2) 0
55 and more	0	0	0	0	0			0
total %	100	100	100	100	100	20	30	47
n	89	18	19	16	36	85	85	89
Married-Male:								
24 and less	2	12	6	1	0	(75) 39	(75) 24	(8) 50
25 to 29	16	53	22	17	8			(64) 64
30 to 34	25	30	26	35	20	(309) 26	(309) 17	(95) 52
35 to 44	35	3	24	31	45			(135) 50
45 to 54	17	0	20	13	22			(68) 9
55 and more	5	3	2	3	7			(19) 10
total %	100	100	100	100	100	28	18	44
n	405	34	46	109	216	384	384	389
Single-Female								
24 and less	29	64	18	7	2	(194) 6	(194) 15	(108) 25
25 to 29	20	18	34	31	7			(79) 22
30 to 34	15	6	18	20	23	(196) 9	(196) 16	(59) 44
35 to 44	17	2	6	18	26			(46) 35
45 to 54	14	6	12	13	30			(55) 7
55 and more	9	4	12	10	11			(31) 0
total %	100	100	100	100	100	8	15	24
n	390	146	49	99	96	390	390	378
Married-Female								
24 and less	14	31	4	5	1	(122) 7	(122) 11	(57) 21
25 to 29	17	23	12	17	7			(68) 18
30 to 34	10	8	9	13	10	(274) 5	(274) 6	(40) 38
35 to 44	28	20	30	32	36			(111) 13
45 to 54	25	15	37	25	32			(102) 7
55 and more	7	2	8	8	13			(27) 4
total %	100	100	100	100	100	6	8	15
n	411	154	86	102	69	396	396	405

categories are fairly uniform.

The age pattern for the married teachers differs from that of their single counterparts. Married males entered the three school systems included in the Institute sample in increasingly larger proportions up to the 25% included in the 30-to-34 age category. The proportions of married males decreases sharply in the higher age groupings, recognizing that the groupings are larger at this end of the scale. The heavy influx of married males up to age 34 is not explained by decreases in the single males since such decreases are not indicated. Perhaps many married males, like married females, enter or reenter teaching at middle age. The age distribution of married females, below age 35, is more regular than that of the other teachers except for single males. They reach a low of 10% by the 30-to-34 age category, after which their proportions build up slightly in contrast to the single female teachers.

One would expect to find that the higher the age the higher the level of education of the teacher, except for the fact that today younger people are better educated than yester-years young people. The overall pattern indicated is one of more education with age for male teachers both single and married. Married males, however, tend to possess a generally higher level of education than single males, indicated by the fact that in the sample 53% of the married

males had gone at least one year beyond their master's degree. Only 41% of the single males had attained the same level of education. The opposite relationship holds for the female teachers; 25% of the single females reached the master's plus level while only 17% of the married females obtained the same amount of education.

Age is directly related to educational attainment for the female teachers, as with males. However, the young single females in the sample have less graduate education than the young single males. As might be suspected many married female teachers reach the higher levels of educational attainment after the age of 35 in contrast to single females, many of whom received graduate degrees earlier in life.

Age has been used above to discern patterns of educational attainment in the sample according to age grouping. The same type of analysis can be made in respect to the dependent variable, career change. Table 4.2 indicates the proportion of the various groups of teachers desiring to climb up the career ladder in education as well as those wanting to leave the field entirely. The third column under "Career Change Desired" includes both groups, those wanting "up" as well as those wanting "out." Both groups share the distinction of wanting to leave the classroom.

teaching, a profession in itself.

The indicator of career change that will be utilized in this chapter is the last one discussed, the proportion of class room teachers who want to leave teaching. The more specific version of career change will be used in the chapters that follow. Most of the single males who want change occur in the youngest age bracket. The next older age bracket contains the highest proportion of married males in the first four age brackets who also want change. The largest proportions of females wanting change occur in the 30-to-34 age bracket for both married and single teachers.

The figures regarding the single teachers are interesting since they imply that significant proportions of older single teachers are interested in leaving their jobs. Teacher turnover studies emphasize the high rate of turnover of young single teachers in their first three years of service,¹ the implication being that single female teachers are inclined toward job stability after their probationary period. The data from this sample suggests a much longer period of potential job instability, not only for this type of teacher but for the others as well.

Age is also important in respect to the direction ("up" or "out") of desired change. One would anticipate that teachers with little experience wanting career change

¹W.W.Charters, Jr., "Survival In The Profession, A Criterion For Selecting Teacher Trainees", Journal Of Teacher Education, (September, 1956), p. 253.

had discovered that they were miscast and would be interested in leaving the profession altogether. In contrast, once a teacher had accumulated considerable service, one might suspect that the motivation for wanting to exit from teaching would be to climb the promotional ladder into specialist or administrative type jobs.

The proportions of teachers indicating a preferred direction of career change are somewhat in conflict with these commonly held assumptions, according to the figures in Table 4.2. The majority of the younger single male teachers, some 35%, do want "out" rather than "up." But, this is also true for the older single males.

The direction of desired career change is different for most of the married males wanting change compared to single males. The married teachers, regardless of age category are more inclined for promotion "up" than for termination. Like the single males, the younger, as well as the older, teachers uniformly express a particular preference.

Female teachers have the same pattern of preference for career change as the single males, "out." However, it must be pointed out that, in general, relatively small proportions of females want career change of any direction, whether they are young or middle-aged, single or married. It is interesting that among the married females there is more similarity to men in the proportions wanting "up" and

"out" than is the case for the single female teachers, taking age into consideration.

The proportion of teachers at various levels of educational attainment and the proportion of teachers wanting to leave teaching, the two primary factors of this study, have been subject to a first cursory examination.

In looking at variations in educational attainment while holding age, sex, and marital status constant, and disregarding career intentions, we can conclude that patterned differences do exist in respect to age and sex-marital status. In respect to age, larger proportions of graduate degree holders exist in the age brackets 30-to-44 years than in the lower age brackets. With sex-marital status, single male and single female teachers tend to contain larger proportions of more educated teachers in the lower age brackets than is the case for the married teachers. There is much to suggest that in the more thorough analyses to follow, age, sex, and marital status should be taken into consideration.

The same type of conclusions can be drawn from examination of the variations in career change while holding age, sex and marital status constant, disregarding educational attainment. Patterned differences are evident in Table 4.2 with respect to age and sex-marital status. Considering age first, the highest proportions of teachers wanting to

leave teaching occurs in the 30 to 34 age bracket among the female teachers and among the lower age brackets of the male teachers.

A More Thorough Look At Educational Attainment and Desired Career Change

An overview of the proportions of classroom teachers desiring career change according to their highest level of formal education is given in Table 4.3. This will be the starting point from which the effects of education on career change will be examined in more detail, in the context of results from other studies.

Table 4.3

PROPORTIONS OF MALE CLASSROOM TEACHERS DESIRING TO CHANGE THEIR CAREERS ACCORDING TO THEIR LEVEL OF EDUCATIONAL ATTAINMENT, BY SEX-MARITAL STATUS AND BY AGE (INCLUDES ALL TEACHING LEVELS)

Level Of Ed. Attainment	Single - Male		Married - Male	
	To 29	30 & Up	To 29	30 & Up
Bachelors	(17) 71	1) 0	(17) 65	(8) 50
Bachelors +	(9) 67	6) 50	(10) 60	(21) 48
Masters	(5) 70	6) 33	(15) 53	(51) 35
Masters +	(6) 33	24) 33	(11) 91	(12) 52
All Levels	(39) 64	37) 35	(53) 66	(92) 47

Looking at the percentages of single male teachers wanting career change, one observes a decrease in the proportions desiring change as level of education increases, especially when bachelor's holders are compared with all those teachers with more education, a common comparison. But the numbers of single male teachers in each cell are perhaps too small to yield conclusive information. For this reason, the other three sex-marital groupings will be given major attention. Both an indirect and a direct relation between education and desire for career change are indicated for married male teachers regardless of age group. The lower three levels of educational attainment, bachelor's, bachelor's plus, and master's, with decreasing percentages of teachers desiring change, suggest a holding influence which may predispose the more educated teacher in these categories to stay in teaching. The greatly increased proportions desiring change at the master's plus level, however, implies the existence of motivating factors which increasingly alienate the teacher from his job. Since the largest numbers of married male teachers possess at least a master's degree and since the degree of change in the percentages is greatest with master's degree holders, these results are given particular emphasis.

Table 4.4

PROPORTIONS OF FEMALE CLASSROOM TEACHERS
DESIRING TO CHANGE THEIR CAREERS ACCORDING
TO THEIR LEVEL OF EDUCATIONAL ATTAINMENT BY
SEX-MARITAL STATUS AND BY AGE (INCLUDES ALL
TEACHING LEVELS)

Level Of Ed. Attainment	Single-Female		Married-Female	
	To 29	30 &Up	To 29	30 & Up
Bachelors	(101)28	(21) 19	(75) 17	(60) 7
Bachelors +	(23) 17	(18) 0	(12) 8	(51)16
Masters	(32) 9	(41) 24	(21) 24	(62)13
Masters +	(5) 20	(40) 30	(5) 20	(41)14
All Levels	(161)22	(120)22	(113)19	(214)12

The proportions of single female teachers wanting career change vary considerably depending upon age group. The younger teachers appear to be less interested in career change the higher their level of education, with the exception of the master's plus group which comprised only 3% of the 161 teachers involved. Table 4.4 indicates the reverse relationship with the older group of single female teachers. Among the top three levels of education, the higher the level, the greater the proportion of teachers wanting career change. The percentage changes, from 0 for bachelor's plus to 30 for master's plus, appear particularly noteworthy in respect to the relation between

education and career change since they include 83% of the teachers involved.

The relationship between educational attainment and desire for career change is rather more difficult to discern for the married female teachers than for the single females. The pattern for the younger group is one of decreasing interest in career change with increased education when only the two bachelor's categories are compared: 17% for bachelor's and 8% for bachelor's plus. The same tendency appears when the two higher educational levels are compared: 24% for master's and 20% for master's plus. On the other hand a cursory comparison of both bachelor's with both master's categories does suggest a direct relation between the two variables. In the more detailed analyses to follow statistics on the educational factor will be dichotomized into "all bachelor's" and "all master's" categories.

With the older married female teachers, a direct relation is discerned between educational attainment and desire for career change when those teachers with bachelor's degrees are compared with those possessing one additional year of graduate credits. Seven percent of the bachelor's and more than twice as many of the bachelor's plus category, 16%, desire change. These two levels of education involve 52% of the married female teachers.

From the foregoing preliminary discussion, it would appear that a pattern is discernible suggesting a relationship between the educational attainment of teachers and their desire for career change. This finding is not a remote phenomenon but involves the bulk of the teachers in the sample. In the section which follows all factors so far introduced will be brought into the cross-tabulations and the results will be discussed in respect to the findings of other studies.

How Important A Factor Is Educational Attainment Among Teachers Desiring Career Change?

A number of studies have been designed to identify factors which significantly influence the tendency of public school teachers to be dissatisfied with or leave their jobs. It is not surprising to find that several of these studies did consider teacher education as a possible influence. They did not, however, conclude that the teacher's educational preparation was important. One study of the "future teaching plans of teachers", a dependent variable quite similar to that used in this chapter, did factor in the number of graduate credits earned. No significant relationship was found between the teacher's educational attainment and his plans to continue his career, however some trends were suggested.²

²W.S. Mason, The Beginning Teacher (Wash., D.C.: U.S. Government Printing Office, 1961), p. 80.

Another study of the effect of school principals upon the morale of teachers took the educational preparation of the teachers into account.³ This study is of relevance here because of its finding that one reason why teachers leave their jobs is dissatisfaction with their principal. Yet no connection was uncovered between level of education of the teacher and job dissatisfaction of this type. This is typical of the few studies factoring educational attainment; practically all find education of no influence on morale, job satisfactions, career plans or outright job change.

The one exception is a government study focusing upon the career orientations of regular beginning school teachers.⁴ The expectation was that the "best" prepared teachers are also the most committed. Considerable importance was attached to this expectation. "If a relationship is not found here, there would be an indication of a gross malfunctioning of the societal process of allocation to occupations."⁵ The results indicated in Table 4.5 tend to

³M. J. Silverman, "Principals - What Are You Doing To Teacher Morale?" Educational Administration And Supervision 43 (April 1957)

⁴W. S. Mason, Op. cit.

⁵W. S. Mason, Op. cit.

substantiate the Government researcher's expectations.

Table 4.5

PERCENTAGE OF BEGINNING TEACHERS INTENDING
TO LEAVE TEACHING WITHIN 5 YEARS ACCORDING
TO EDUCATIONAL ATTAINMENT⁶

Highest Education Completed	Sex	
	Male	Female
No Bachelors	(231) 25	(865) 62
Bachelors	(1295) 28	(2856) 70
Bachelors +	(861) 24	(706) 54
Masters	(211) 16	(116) 58

While the anticipated effects were found when degree holders alone were compared (except in the category of females with the master's degrees), such was not the case when non-degree holders were compared to those holding bachelor's degrees. In this nationwide sample of teachers, 16% lacked the bachelor's degree. This non-degree group was described as, "being somewhat more positively oriented teaching than one would expect."⁷

The results obtained in the detailed analyses that follow may suggest that where sex alone is used in analyses of educational attainment relative to career change that patterns of behavior contrary to the researcher's expectations may be obscured.

⁶W. S. Mason, Op. Cit., p. 110.

⁷W. S. Mason, Op. Cit., p. 116.

The Career Intentions of Single Male Teachers. Although the numbers of single male teachers in the sample are too small to enable the drawing of solid conclusions from the data, it is worthwhile to peruse the percentages of those groups of teachers who want career change. (See Summary Table, Appendix A) Even small bits of information may be valuable when they concern a group of teachers whose personnel characteristics differ considerably from the other groups. Junior high school teachers (Table 4.6) are singled out first because of the uniformity of results across the two age groupings; and because junior high school teachers have an ambiguous status, falling between the elementary school teachers whose ranks are dominated by women (and whose emphasis is upon child development) and high school teachers who are traditionally interested in subject matter. Interestingly enough, junior high teachers are not commonly identified as such in studies of career patterns. They are usually merged with the high school teachers if, indeed, any distinction is made regarding assignment level.

The younger elementary teachers and the older high school teachers of the sample seem more inclined to change careers if they possess master's degrees than if they have lesser levels of educational attainment. However, the numbers involved do not lend significance to the results.

Table 4.6

PERCENTAGE OF SINGLE MALE TEACHERS DESIRING
CAREER CHANGE ACCORDING TO EDUCATIONAL
ATTAINMENT, BY TEACHING ASSIGNMENT

Assignment Level	Educational Attainment	Age Group		
		To 29	30 & Up	All
Elementary Class R'm Tr.	Bachelors	(7) 71	(2) 100	(9) 78
	Masters	(3) 100	(8) 63	(11) 73
Junior High Class R'm Tr.	Bachelors	(13) 62	(2) 50	(15) 60
	Masters	(2) 100	(3) 67	(5) 80
Senior High Class R'm Tr.	Bachelors	(6) 83	(3) 0	(9) 55
	Masters	(8) 24	(19) 16	(27) 19

With the junior high teachers, even with low numbers, the consistency across age groups attaches some credibility to the results suggesting, at least, that these results might be kept in mind while discussing the other category of male teachers.

The Career Intentions of Married Male Teachers: Married male teachers have been cited as being particularly prone to abandon their teaching careers because of their difficulty in supporting a family on a teacher's salary. This situation is becoming less important, as a factor explaining career change, in this period of upward salary adjustments for teachers, especially for unionized urban teachers. The sample

of 245 married male classroom teachers (Table 4.7) in this study is numerically large enough to permit reasonable conclusions to be drawn.

Table 4.7

PERCENTAGE OF MARRIED MALE TEACHERS DESIRING
CAREER CHANGE ACCORDING TO EDUCATIONAL
ATTAINMENT, BY TEACHING ASSIGNMENT

Assignment Level	Educational Attainment	Age Group		
		To 29	30 & Up	All
Elementary Class R'm Tr	Bachelors	(7) 71	(10) 60	(17) 65
	Masters	(5) 100	(21) 86	(26) 88
Junior High Class R'm Tr	Bachelors	(12) 66	(8) 25	(20) 50
	Masters	(10) 70	(52) 54	(62) 56
Senior High Class R'm Tr	Bachelors	(8) 50	(11) 54	(19) 53
	Masters	(11) 55	(90) 33	(101) 35

The fewest married male teachers are found in the elementary school classroom. This finding may be relevant to the extremely high proportions of these teachers who want to change their careers regardless of their age or level of educational attainment. This desire is strongest among the master's degree holders, 88% of whom want career change compared to 65% for the less educated elementary, married male teachers.

While the junior high teachers are not so strongly inclined toward career change as the elementary teachers, they too follow the pattern of increased interest in career

change among the more educated teachers, regardless of age.

Several consistencies are evident among male junior teachers regardless of marital status (Tables 4.6 and 4.7). The most significant consistency is, of course, that higher levels of education are identified with increased desire for career change. In addition, change is desired by larger proportions of the younger teachers than older teachers regardless of their education.

Education appears to be much less of a negative factor in respect to senior high school teachers than among teachers at other assignment-levels. Indeed, the opposite relationship prevails among the 101 older senior high teachers in Table 4.7. The fact that 54% of those who hold bachelor's degrees -- but only 33% of the holders of master's degrees -- desire career change suggests (at least within the Teachers College sample) that only among high school teachers over 30 years of age may advanced education function as commonly assumed: that is, as a "holding" factor influencing career stability.

Career Intentions of Single Female Teachers: Single females are generally considered to have more career mobility than any other group. Matrimony and motherhood play such prominent roles in studies of teacher turnover that a suspicious investigator cannot help but wonder if these factors have not sidetracked consideration of other factors which can be influences, such as educational attainment.

Another question arises in respect to the tendency of researchers to not distinguish between the career intentions of single versus married women. Might the career intentions of the married woman, numerically the more important group in the long run, be covered up by the responses of their single associates?

Table 4.8 supports the commonly held assumption about the volatile careers of young single female teachers.

Table 4.8

PERCENTAGE OF SINGLE FEMALE TEACHERS DESIRING
CAREER CHANGE ACCORDING TO EDUCATIONAL
ATTAINMENT, BY TEACHING ASSIGNMENT

Assignment Level	Educational Attainment	Age Group		
		To 29	30 & Up	All
Elementary Class R'm Tr	Bachelors	(84) 26	(23) 13	(107) 23
	Masters	(29) 14	(36) 25	(65) 30
Junior High Class R'm Tr	Bachelors	(29) 24	(5) 0	(34) 21
	Masters	(7) 43	(7) 15	(14) 29
Senior High Class R'm Tr	Bachelors	(15) 20	(7) 14	(22) 18
	Masters	(5) 0	(34) 26	(39) 23

The largest subgroup of single female teachers is found to be the elementary teachers under 30 years of age. It is evident that with this group graduate education has career holding power. Only 14% of the master's degree holders want to change their careers while 26% of the bachelor's degree holders are so inclined. It would be useful to take a closer look at the statistics concerning the under-30, single female

group, since so much career literature is concentrating upon it.

Two changes in perspective are incorporated in Table 4.8a. First, the age category that (in Table 4.8) included teachers up to 29 years is divided into two age categories: up through 24 years of age, and over 25. This is done in order to obtain a younger group of teachers which closely matches the age classification of "beginning teachers" discussed in the Department of Education Study of career intentions.⁸ The second change is in respect to educational attainment. The distinction in the supplementary table is between teachers with only the bachelor's degrees and teachers with at least one additional year of graduate education, including those with master's degrees.

Table 4.8a

PERCENTAGE OF YOUNG SINGLE FEMALE ELEMENTARY TEACHERS
DESIRING CAREER CHANGE ACCORDING TO EDUCATIONAL
ATTAINMENT, BY TEACHER ASSIGNMENT-LEVEL

Educational Attainment	Age Group			
	24 & Less	25 to 29	All	
Bachelor's	(54) 30	(15) 20	(69)	28
More Than A Bachelor's	(12) 8	(32) 19	(44)	16
All	(66) 26	(47) 19	(113)	23

⁸W. S. Mason, Op. Cit.

Of the "beginning" elementary teachers in the sample (those 24 and under), only a very small proportion of those with advanced education are interested in career change. This supports the results of the government study cited above. However, two characteristics of Table 4.8a suggest a less simplistic picture of the career aspirations of under-30 single female elementary school teachers.

There is evidence, as previous studies indicate, of a decreased desire for career change as the teacher group gets older, due in some measure to the fact that those who have wanted to leave have left teaching. However, there is heretofore unreported evidence of an increase in desire for career change among the older group with advanced education. Unfortunately, the statistics do not reveal whether those who wish to change are teachers who have newly reached higher levels of educational attainment or teachers who have held advanced credentials for some time. The percentages in Table 4.8a also suggest that, for the teachers in the sample, the holding power of education upon those in their early 20's diminishes by the upper 20's. Also, many of the younger teachers may have left even though they didn't "desire" change. The age group including teachers 25 to 29 produces almost equal proportions of teachers wanting career change -- 20% of the bachelor's degree holders and 19% of the more educated of the group. It is now possible to look back to the older

(over-30) age group in Table 4.8, and discern a different pattern in the relationship between educational attainment and desire for career change. Almost twice the proportion of more educated single female elementary teachers desire job change than do the lesser educated teachers of the same type (25% to 13%, respectively).

The results for the single female high school teachers are somewhat similar to those indicated above for elementary teachers. That is, almost twice the percentage of older, more educated teachers want career change compared to the lesser educated teachers. Opposite indications are found, however, among the junior high teachers. Higher educational attainment is related to higher percentages of teachers wanting career change among the younger, not the older, teachers.

The Career Intentions of Married Female Teachers: It has already been emphasized that married female teachers are different from single females in respect to the influence of age and education on their career intentions. Larger percentages of married females are identified with teaching in their older years; this is a major example of one of the great changes taking place in the labor force. The data (Table 4.9) on elementary classroom teachers suggest the question--may advanced education taken while working full time after the age of 30 be a significant factor influencing the career aspirations of married women? Surprisingly, there is practically no information available on this relatively new

segment of the labor force.

The data presented in Table 4.9 is most revealing of elementary classroom teachers because of the large numbers involved. In contrast, smallness of numbers suggested combining the data on junior and senior high school teachers.

Table 4.9

PERCENTAGE OF MARRIED FEMALE TEACHERS
DESIRING CAREER CHANGE ACCORDING TO
EDUCATIONAL ATTAINMENT, BY TEACHER
ASSIGNMENT-LEVEL

Assignment Level	Educational Attainment	Age Group		
		to 29	30 & More	All
Elementary Class R'm Tr.	Bachelors	(72)13	(92) 11	(164)12
	Masters	(19)16	(60) 17	(79)16
High School Class R'm Tr.	Bachelors	(16)44	(19) 11	(35)26
	Masters	(6)33	(43) 9	(49)12

Both age groups of elementary teachers yield results that suggest that graduate education tends to influence the attitudes of married female elementary teacher towards career change. The older (30-and-over) age group is more important because of the larger proportion of teachers included and because of the higher educational attainment of many of them. Eleven percent of the bachelor's degree holders wish to change careers but half again as many of master's degree holders -- some 17% desire to leave teaching.

Supplementary Table 4.9a indicates other interesting

relationships when educational attainment and age are refined.

Table 4.9a

PERCENTAGE OF MARRIED FEMALE ELEMENTARY
TEACHERS DESIRING CAREER CHANGE ACCORDING
TO EDUCATIONAL ATTAINMENT

Educational Attainment	Age Group		
	30 to 34	35 to 44	45 & More
Bachelors	(10) 0	(23) 9	(18) 6
Beyond B.	(16) 38	(40) 18	(45) 9
All	(26) 23	(63) 14	(63) 8

One important indication is the consistency of the direct relation between the variables even with the finer age breakdown. It is with the group of teachers in their early 30's that education is most strongly suggested as a career-disrupting factor. Thirty-eight percent of the more highly educated teachers of the sample desired career change, as opposed to none of the less educated teachers. The two older age categories (35-to-44 and 45-up) indicate a general tendency toward career stability regardless of the level of the teacher's education. However, the relationship between education and desire for career change is still very evident in the 35-to-44 age group where twice as many teachers with graduate work indicated a desire to leave teaching.

Summary and Discussion of Results

The introductory sections of this chapter described each of factors that were used in the analytical sections and told how and why some factors were refined and others combined. The results of the analyses appear to have justified this initial effort, for one of the first conclusions that can be drawn is that investigators of the career patterns of teachers must seriously consider the inclusion of such additional factors as age, marital status and assignment-level, as well as sex.

The results obtained in the analytical sections of this major chapter serve to complement and supplement the results of the major government study of the career patterns of beginning teachers previously discussed.⁹ Both studies indicate that with certain teachers an inverse relationship was found between graduate education and desire for career change. This suggests that higher levels of education may serve as a holding influence over young female teachers who might otherwise be less committed to teaching. The government statistics barely hint that education may also have detrimental effects on the career aspirations of some of the teachers but this point is not discussed. The present study with its wider age distribution and more extensive controls lends empirical support to this suspicion, in that with ad-

⁹W.S. Mason, Op. Cit.

vancing education we note increased interest, among certain married male, single female, and married female elementary and junior high school teachers, in alternative careers.

In respect to female teachers one has to look to the older teachers, not the beginners, to the married teachers rather than the single ones, and to the relatively smaller groups of junior high and senior high teachers, in order to discern the groups of female teachers in which education is directly related to a desire for career change. Of the 12 groupings of female teachers previously discussed, seven of them -- which include 61% of all the female teachers who expressed a desire for career change -- indicate a direct relation between education and career change.

The government study indicates a relatively small change in desire for career change among predominantly younger men teachers -- a 4% difference between bachelor's degree holders and those with more than a bachelor's degree. This compares to a 16% difference for beginning female teachers. The present study, however, indicates that when older men, many of whom are married, are included in the analysis, then a strong relation is suggested between level of educational attainment and the proportion of teachers desiring career change. In contrast to the government study, the nature of this relationship is patently direct. The data suggest that more education influences more potential career disruptions

in all four subgroups of male junior high teachers, in three out of four subgroups of male elementary teachers, and in two out of the four subgroups of male high school teachers.

Finally, the government study notes a more pronounced intention to leave teaching on the part of female teachers compared to male teachers, regardless of education level. The expressed intentions of career change of the wider age-span group covered in the present study are more pronounced among the male teachers than among the female teachers.

A second general conclusion that can now be drawn is that the level of educational attainment of the teacher, at least in this sample, is of major importance in the career decisions of public school teachers. This conclusion deems "inadequate" the common practice of neglecting the factor of educational attainment in studies of the career patterns of teachers. It also serves to raise a question about the several studies in which education was considered but found to be of little consequence. One possible explanation is that additional elements (discussed above) that were shown to be of considerable importance in this study were not attended to in earlier studies.

However, in all fairness, it should be pointed out that only during this present decade have equipment and techniques become widely available to the independent researcher

that enable him to process in reasonable time both a number of factors as well as the large samples necessary to supply adequate-size subsamples.

If the investment in graduate education among teachers has any value to the educational establishment, and if value is also attached to the experience factor, then increased attention must be paid to the career patterns of male teachers, and indeed to those of older female teachers as well, in addition to the attention which in the past several decades has centered largely upon younger female teachers.

Chapter V

WHAT ABOUT TEACHERS WHO HAVE ARRIVED?

The discussion up to this point has taken only classroom teachers into account. The hypothesized assumption that higher levels of education are related to reduced commitment to classroom teaching has been supported by much of the data presented in the previous chapter. One common explanation for this tendency is that people with higher levels of education aspire to greater rewards and tasks which more fully utilize their highest-level skills and newly acquired insights.^{1, 2}

The results obtained in this chapter suggest a corollary hypothesis. If a subsample of teachers of higher status than classroom teachers -- for example, special teachers, consultants, supervisors and principals -- were investigated

¹J. Pfiffner and P. Sherwood, Administrative Organization (Englewood Cliffs: Prentice-Hall, 1960), p. 9.

²Chris Argyris, Organization and Innovation (Homewood: Dorsey Press, 1965), p. 57.

in respect to the relation between their levels of educational attainment and their desire for career change, the results would be opposite to those for lower-status classroom teachers. Such persons have to varying degrees "arrived" in the educational system. Their extra education has paid off. Even though their sights may have been reset to higher levels of attainment, it might be expected that they would be more satisfied to remain at their present level than classroom teachers because they have experienced some significant success. Classroom teachers, in contrast, have not arrived. After their investment in extra education they still find themselves in the same job situation.

Educational Attainment as a Career-Holding Factor among Higher-Status Teachers

The Teachers College (Institute) sample provides information of the sort needed to make a rough test of this hypothesis using subgroups of trained teachers as yet undiscussed (but included in Tables 4.1 and 4.2). This brief investigation, while tangential to the primary concern of the present study -- the classroom teacher -- may add an interesting dimension to the author's main themes.

Two groups of high-status teachers will be examined,

married males and single females, because the largest numbers are found in these groups. It was previously indicated that 37% of all married male teachers in the three school systems covered by the Teachers College sample enjoyed the highest status. Of the single female teachers, 26% were similarly situated. The career intentions of these groups are given below.

It is indicated in Table 5.1 that some 87% of the high status married male teachers were found in the higher age group. This information, as well as the fact that only 14% of all the single male teachers enjoyed similar high-status jobs, suggest two characteristics of male teachers who have "arrived": They are married and have reached middle age.

Table 5.1

PERCENTAGE OF HIGH-STATUS MARRIED MALE TEACHERS
DESIRING CAREER CHANGE ACCORDING TO LEVEL
OF EDUCATIONAL ATTAINMENT, BY AGE

Educational Attainment	Age Group		
	To 29	30 & More	All
Bachelors	(8) 63	(16) 38	(24) 46
Masters	(11) 46	(109) 22	(120) 28
All	(19) 53	(125) 28	(144) 31

The results of the analysis, an inverse relationship between the proportion desiring career change and educational attainment, suggest that education may have career holding power regardless of the age of the high-status, married male teacher.

It is interesting to compare these results with the results obtained from married male high school teachers, indicated in Table 4.7. It will be recalled that high school teachers were less inclined to change their careers than junior high or elementary teachers of the same sex-marital status. Their relatively conservative career aspirations are comparable with those of the higher-status group.

This might be explained by several features possessed by high schools alone among the three levels of grade schools. Department chairmanships may be seen as a not-to-distant reward for the extra investment in graduate education. Also, many high school teachers have strong commitments to their subject areas. The increased subject knowledge attained by graduate study affords them increased professional status and psychic compensation for their investment in graduate education.

Comparing the younger groups among the high school and high status teachers regardless of education, 52% of the high school teachers were inclined to change careers,

while approximately the same number, 53%, of the higher-status educational personnel were similarly inclined. Obviously this is a crucial period in the career of married male teachers. Regardless of the recognition and rewards they have received from the educational systems represented in the sample, large proportions of them are prone to change careers. Education has greater holding power, however, among the higher-status group than among the lower-status teachers. Actually it has little holding power among the lower-status teachers. In the higher age groups of both high- and low-status teachers, fewer are inclined towards career change. As might be expected, the decrease in proportions wanting career change with advancing age is greater in the high-status group than with the low-status teachers. The holding power of education in the older age group is evident in both low and high status. This was not the case with the younger teachers. It would appear, at least in this case, that age and education interact in some complex way to influence the career aspirations of teachers.

The results indicated in Table 5.2 suggest that a desire for career change is much less characteristic of the younger high-status single females than it is of the younger married males discussed above.

Table 5:2

PERCENTAGE OF HIGH-STATUS SINGLE FEMALE TEACHERS
DESIRING CAREER CHANGE ACCORDING TO LEVEL
OF EDUCATIONAL ATTAINMENT, BY AGE

Educational Attainment	Age Group		
	To 29	30 & More	All
Bachelors	(17) 29	(11) 36	(28) 32
Masters	(9) 33	(60) 27	(69) 28
All	(26) 31	(71) 28	(97) 29

While some 53% of the younger males were inclined toward change, Table 5.2 shows only 31% of the younger females so inclined. The percentage of the older high-status group desiring change was identical, 28%, to the married males. It is interesting to observe the negative holding power of education in the case of the younger female high-status group. This is directly opposite to the situation reported from the younger female low-status teachers. It may indicate that most of the high-status single females are located in junior high schools, the area of greatest potential career instability among all regular teachers in this sample. Holding power appears to be associated with higher levels of educational attainment among the older group of female high-status teachers.

A review of the above analyses suggests that education

has holding power in respect to teachers who have achieved higher job status through their education or through promotion. This was the case with three of the four subgroups examined. These results are opposite to those obtained for regular classroom teachers. They support the assumption posed at the outset of this chapter that the effects of education would be different for persons in high-status educational jobs than for teachers with lower job status.

The Effects of Educational Attainment Upon Aspirations For Promotion

Analysis of the career aspirations of high-status teachers suggests a second corollary to the primary assumption under investigation. If indeed education has holding power upon teachers who have already achieved some of the rewards aspired to by those who have invested in graduate education, might not educational attainment also serve as a holding factor upon those regular classroom teachers who aspire for promotion to higher jobs within the school system?

When career change is discussed, the focus is generally upon losses from the corps of teachers. This is the concern of practically all studies of teacher turnover or teacher

career change. However, included among those interested in leaving classroom teaching are a number who aspire to promotion to the higher-level, education-leadership positions for which graduate education is generally a prerequisite. The promotion question is often ignored in respect to professional workers, and especially teachers.

Among classroom teachers who aspire to higher-status educational positions, it would appear reasonable to assume that educational attainment would have holding power. In other words, a greater proportion of teachers with graduate work to their credit would aspire to high status than would teachers without graduate preparation.

The Teachers College sample provides information as to the specific career intentions of the classroom teachers. Table 4.1 indicated that 28% of all married male teachers aspired to higher-level positions in the educational establishment ("up"), compared to 19% of the single males, 9% of the single females, and 5% of the married female teachers. The married males are of particular interest because only within this sex-marital group are more teachers found who desire to rise within education rather than leave the field entirely. The single female group also warrants investigation for the sake of continuity and because of its numerical importance.

According to the percentages indicated in Table 5.3, educational attainment has negative holding power for married male teachers who specifically aspire to higher-level positions.

Table 5.3

PERCENTAGE OF MARRIED MALE CLASSROOM TEACHERS SPECIFICALLY DESIRING CHANGE TO HIGHER LEVEL POSITIONS ACCORDING TO EDUCATIONAL ATTAINMENT, BY AGE

Assignment Level	Educational Attainment	Age Group		
		To 29	30 & More	All
Elementary Class R'm Tr.	Bachelors	(7)	(8)	(15)
	Masters	57	50	53
Junior High Class R'm Tr.	Bachelors	(5)	(21)	(26)
	Masters	80	52	58
Senior High Class R'm Tr.	Bachelors	(12)	(8)	(20)
	Masters	42	25	35
Class R'm Tr.	Bachelors	(12)	(50)	(62)
	Masters	42	36	37
Class R'm Tr.	Bachelors	(8)	(10)	(18)
	Masters	0	30	16
Class R'm Tr.	Bachelors	(11)	(92)	(103)
	Masters	36	16	18

Among the younger elementary teachers, 23% more master's degree holders than bachelor's degree holders aspire for higher positions, i.e., are interested in "vertical mobility." The difference becomes 36% among younger senior high teachers. But a different story is suggested by the results from the older groups of married male teachers. Educational attainment seems to have holding power among the older junior high teachers; however, the opposite is in-

licated for the senior high subgroup, the largest of the six subgroups under examination. Compared to the less educated high school teachers, only half as many of the more educated older teachers wish higher level jobs.

How ironical that many of the older senior high teachers interested in promotion possess only bachelor's degrees and thus are, according to state regulations, ill prepared for the jobs they presently hold. Practically all states now require the master's degree or equivalent education for full certification as a high school teacher.³

Somewhat similar relationships to those described above are indicated for single female high school teachers in Table 5.4.

Table 5.4

PERCENTAGE OF SINGLE FEMALE CLASSROOM TEACHERS DESIRING TO CHANGE TO HIGHER LEVEL POSITIONS ACCORDING TO EDUCATIONAL ATTAINMENT

Assignment Level	Educational Attainment	Age Group		
		To 29	30 & More	All
Elementary Class R'm Tr.	Bachelors	(82) 7	(23) 9	(105) 8
	Masters	(29) 7	(33) 0	(62) 3
Junior High Class R'm Tr.	Bachelors	(25) 8	(8) 0	(33) 9
	Masters	(3) 0	(11) 27	(14) 21
Senior High Class R'm Tr.	Bachelors	(15) 13	(7) 14	(22) 14
	Masters	(5) 0	(33) 12	(38) 11

Regardless of age grouping, the female high school tea-

³W.E.Armstrong and T.M.Stinnett, A Manual On Certification Requirements For School Personnel In The U.S., (Washington, D.C.: National Educational Association, 1965), p. 24.

chers who are more interested in promotion are found among the less educated not the more educated group. The same situation is indicated for the older group of elementary classroom teachers as well as for the younger group of junior high teachers. Only in one of the six subgroups of single female teachers -- the junior high, 30 and over group -- is educational attainment directly related to aspirations for promotion. Here, level of aspiration is clearly realistic. However, with most single female teachers, just as with some of the older male high school teachers, aspirations appear to be unrealistic.

Several additional insights can be gleaned from these results which have bearing on the broader perspective of career change. First, it is obvious from the low proportion of higher-status jobs available that vertical mobility is a realistic hope for relatively few, regardless of educational credentials. The scarcity of higher-status jobs (above classroom teacher) may become even more critical than the percentages of high status jobs indicated in Table 3.1 because higher-status jobs do not appear to be increasing at the same rate as the openings for classroom teachers. Thus, many aspirants to higher jobs in education must adjust their expectations. Their choices may come to remaining in teaching and adjusting to the realities of

the situation; remaining and failing to adjust to reality, or leaving teaching entirely.

Educational administrators have addressed themselves to the last type of career decision and its most obvious ramification: the shortage of teachers. They have concerned themselves with increasing the efficiency of the selection process. Practically no attention appears to have been given, at least in the literature on teacher turnover, to the possibility of altering traditional educational organizations to provide for increased promotional opportunities for teachers.

The second of the three forms of adjustment to lack of opportunity for promotion may be very significant to those educational administrators concerned with student-teacher relations. The question raised is: What effect might a teacher's thwarted career aspirations have on his relationships with students, that is, on student success? Unfortunately, this question can only be raised by this type of study. Hopefully, it will be considered by future investigators.

Chapter VI

ACTUAL JOB CHANGE IN RELATION TO EDUCATIONAL ATTAINMENT

Another form of career change will be examined in this chapter. Here career change is indicated by actual job changes which represent a loss to one school but a gain to another. For this reason job switching within education has been of little concern to those studying turnover in respect to the imbalance between teacher supply and demand. It is the radical type of career desires ("Out") discussed in previous chapters which are of vital concern to educational administrators preoccupied with problems of teacher supply, because if carried out, they bring about overcrowded classroom or necessitate dependence upon uncertified teachers.

It is my contention that the form of turnover analyzed in this chapter, even though relatively neglected by educational administrators, is a factor related to: career problems of teachers, teaching staff instability, and, above all, the quality of education.

Inter-school mobility is an indicator of internal ad-

ministrative efficiency. It is also, for many teachers, the prelude to the radical type of career change previously discussed, that is, out of the teaching profession.

The present indicator of career change differs from previously utilized indicators in still another way. It provides information on job mobility decisions actually carried out. The teachers isolated for analysis in this chapter are those within the sample who might be labeled by some investigators as "unstable" because they have actually had a number of different teaching jobs. Here past behavior will be analyzed in relation to level of graduate education attained. Previously, intention, or desire to change careers, was under examination.

Job switching is indicated by large proportions of teachers within the sample. This indicator of job mobility has advantages for study as well as disadvantages compared with other indicators. Some readers may have the feeling that conclusions previously drawn, in respect to the hypothesized relationship between educational attainment and career change, were inadequately supported because they were based on mere intentions--attitudinal type data. They might draw some comfort from the realization that many studies of job satisfaction are built upon similar foundations, but would feel more comfortable with behavioral type indicators such as the one examined in this chapter.

For the same reason, many industrial administrators depend upon turnover statistics as a barometer of dissatisfactions. In this sense, the present chapter adds another dimension to the study. It helps to validate results previously obtained and lends support to conclusions previously drawn.

As for the disadvantages of the behavioral type indicator, the most obvious is that job instability is directly linked to age. The greater the age or experience in teaching the greater the opportunity to accumulate more ex-employers. This disadvantage will be overcome to some degree by controlling for age. A second disadvantage is that the sample does not include the teacher whose second or third job change was out of education all together. In other words, concentration upon job changes within education serves to underestimate the magnitude of career change, a more general factor. The attitudinal factors, on the other hand, offered more comprehensiveness. In later chapters devoted to the Postcensal data, behavioral indicators of a more comprehensive nature will be used. Thus, by utilizing both attitudinal and behavioral indicators, objections to the subjectivity of any single indicator of career change should be overcome, especially where fairly consistent results are obtained.

The New Factors: Since the primary factor, educational attainment, is exactly the same as described in Table 4.1,

there is little need to again describe this dimension. There is a need, however, to indicate how the dependent variable, number of jobs in education, is constituted. Table 6.1 indicates the number of jobs that the 1,252 teachers in the sample have held including their present job.

Table 6.1

PERCENTAGE DISTRIBUTION OF NUMBER OF
JOBS HELD IN EDUCATION, BY SEX-MARITAL STATUS

Number Of Jobs In Education	Male		Female	
	Single	Married	Single	Married
1	40	31	46	32
2	37	33	26	31
3 or More	23	36	29	37
Total: %	100	100	100	100
n	92	415	401	444

Thus, not only have many teachers in the Institute sample indicated a desire to leave their teaching jobs but also many have changed from one teaching job to another. The literature on teacher turnover emphasizes the obvious--married teachers do switch jobs. It is customary for middle-class women to accompany their husbands to other locations as the men work their way up the promotional ladder in large organizations.¹ It was also previously mentioned that, regardless of sex, many teachers switch from one school to another in

¹W.L.Cunningham, "A Study Of Teacher Turnover In Selected Districts Or New York State" (unpublished Doctor's dissertation, Teachers College, Columbia University, 1959), p. 19.

the New York City and other large school systems.² The figures above indicate that suburban teachers also switch jobs. This differs from the job-switching habits of urban teachers because a job switch in suburbia is usually a change to a different school system.* It should also be noticed that while many married female teachers do a considerable amount of switching, 37% had three or more teaching jobs. A high mobility pattern is also indicated for the single female teachers.

Some 29% of the single female teachers have had three or more jobs in education. While the figure represents a significant level of job mobility for the single female teachers, lower than the married teachers, actually the case of the unmarried teachers may be found to be much more crucial when the often neglected age factor is taken into consideration. The unmarried female teacher is younger than her married counterpart and has had less time and opportunity to change jobs. In other words, data to follow may show that the frequency of job mobility is greater for certain unmarried teachers than the figures above indicate.

*

This form of error raises questions as to the representativeness of the factor. It is felt that the error would result in an understatement of the phenomenon being analyzed. For this reason the error is not considered critical in this type of study.

²M. Silverman, "Principals-What Are You Doing To Teacher Morale?", Educational Admin. And Supervision 43 (April 1957)

Before examining the effects of age and educational attainment, the overall job mobility patterns of the male teachers in the sample deserve comment. Married male teachers have in this preliminary type of analysis the same job mobility characteristics as their female counterparts. This pattern could hardly be explained as "unavoidable turnover" attributable to a spouse advancing up the career ladder. It would not be unreasonable to reconsider the case of the married female teacher, reexamining whether her departure from the teaching job at hand was completely attributable to her ambitious husband. Perhaps she encouraged the change because of an unhappy job situation. The question of interest in the present study that applies here is whether or not greater proportions of more educated or less educated women are involved in job changes attributed to husband following.

Single male teachers tend towards less job switching than the three other groups. Only 23% had held three or more jobs in education compared to 29% for the single females.

However larger proportions of single male teachers than any other group have had one job previous to their last indicated job. Thirty-seven percent of the single male teachers had held two jobs in education while only 33% of their married male associates had changed jobs so frequently.

Since sizable percentages of teachers indicated having had three or more jobs of education, in all sex-marital categories, it would seem practical to use this increment as the indicator of actual job change. The data is specified according to age in Table 6.2.

Table 6.2

PERCENTAGE OF TEACHERS WITH
3 OR MORE JOBS IN EDUCATION ACCORDING
TO AGE, BY SEX-MARITAL STATUS

Age Group	Male		Female	
	Single	Married	Single	Married
24 and Less	(18) 44	(7) 15	(102) 11	(52) 4
25 to 29	(21) 5	(47) 11	(63) 11	(62) 13
30 to 34	(18) 22	(77) 13	(36) 14	(32) 0
35 to 44	(18) 11	(84) 18	(32) 13	(90) 12
45 to 54	(1) 0	(31) 25	(30) 13	(72) 7
55 & More	(0) 0	(11) 0	(24) 8	(24) 4

Interesting differences are noticed within each of the four sex-marital sub-groups as well as between sub-groups. For example, single males less than 24 years of age contain the highest proportion of teachers with three or more jobs (44%) of all cells in Table 6.2.

This finding is contrary to the common assumption of an increasing number of jobs held as the individual's age and work experience increase. The same finding noted for single males is also indicated for the youngest level of married males (15%) and the second youngest level of married females (13%). The percentages given for the single

males and the married females were the maximum percentages indicated for any age level with those sex-marital groupings. It is further indicated, in respect to these two groupings, that there is no indication of any regular pattern in the percentages of teachers with 3 or more jobs according to age. The patterns here are irregular rather than following the common assumption of "more age-more jobs."

The common assumption is indicated, however, within one sub-group, the married males. Starting from the 25 to 29 age bracket, through the 45 to 54 age bracket, one observes a regular increase in the proportion of teachers who have held 3 or more jobs, from 11% for the younger group to 25% for the older group.

This preliminary analysis leaves little doubt that sizable proportions of teachers of all ages and sex-marital statuses characteristically change jobs more than once. The question that will be examined in the sections that follow is--to what extent does level of education relate to patterns of what might be called "job instability."

Is Educational Attainment An Important Factor Among Teachers With Job Instability?

A first examination at the hypothesized relationship between educational attainment and the behavioral indicator under consideration in this chapter, without regard for age or assignment-level, is outlined in Table 6.3.

Table 6.3

PERCENTAGE OF TEACHERS WITH 3 OR
MORE TEACHING JOBS ACCORDING TO THEIR
EDUCATIONAL ATTAINMENT

Educational Attainment	Male		Female	
	Single	Married	Single	Married
Bachelors	(33) 12	(52) 19	(163) 10	(196) 28
Masters	(44) 20	(194) 26	(120) 29	(131) 42
All	(77) 17	(246) 25	(283) 18	(327) 34

As in the previous chapter, educational attainment is represented by the percentages of those possessing bachelor's degrees and those possessing the first graduate degree. The results indicate that the higher level of education is directly associated with considerably higher percentages of teachers who have had three or more jobs in education. Among the single female teachers especially, in whose case Table 6.2 suggested a relatively consistent pattern of job instability regardless of age, almost three times as many teachers with graduate degrees may be called unstable as compared to the lesser educated single female teachers. The same relationship, more job instability related to more education, is evident in the teachers of all other sex-marital groups.

Several distinctions are indicated between the male and the female teachers. The categories of female teachers,

both single and married, indicate higher proportions of job instability than their male counterparts. This is especially true for the married female teachers, both with bachelor's degrees and with master's degrees.

In addition the educational factor appears to influence the proportion of job-unstable teachers much more so among the female than the male teachers. The percentage differences, in Table 6.3, according to education, are 8% and 7% for the males but 19% and 14% for the females, respectively.

Previous chapters have shown that age must be taken into consideration in the final analysis. The married male teachers are represented in Table 6.4 with a cross-tabulation of their educational attainment and percentage with a history of three or more jobs in education, also taking into account both teaching assignment and age. It will be noticed that the age split with the new indicator of career change occurs at age 35 rather than at 30, as was the case with the attitudinal-type data. The explanation for this difference is simply because age has a greater relationship to the indicator of job change itself than was the case previously. Also, it appears that the nature of the relationship between the principal factors in this chapter changes in the mid-thirties. This

trend is particularly evident among the married males of the sample. Age, then, is split at a point where it will change the character of the results least.

Table 6.4

PERCENT OF MARRIED MALE TEACHERS WITH 3 OR MORE JOBS
IN EDUCATION ACCORDING TO EDUCATIONAL ATTAINMENT

Assignment Level	Educational Attainment	Age Group		
		To 34	35 & More	All
Elementary Class R'M Tr.	Bachelors	(14) 14	(3) 67	(17) 24
	Masters	(15) 27	(12) 8	(27) 19
Junior High Class R, M Tr.	Bachelors	(16) 6	(2) 100	(18) 17
	Masters	(32) 6	(32) 53	(64) 30
Senior High Class R'm Tr.	Bachelors	(11) 0	(6) 50	(17) 18
	Masters	(34) 24	(68) 28	(102) 26

Among the younger teachers graduate education is directly associated with larger percentages of teachers who, because they have had three or more jobs in education, might be classified as job-unstable. This relationship is strongly in evidence among the elementary and senior high school teachers below 35 years of age. In the case of the latter group, none of the bachelor's degree holders could be termed unstable; however, 24% of the master's degree holders had indicated a high degree of job change. As for the lack of any type of relationship between the principal factors among junior high teachers, there is no ready explanation.

The older group of married male teachers appear to differ completely from their younger associates. Higher

education appears to be associated with greater job stability in the case of all three levels of teaching assignment. This trend is most obvious among the elementary school teachers, where 67% of the bachelor's degree holders indicated high job change while only 8% of the master's degree holders can be characterized as having job instability. One might interpret the results for the older group of teachers with suspicion for two reasons. First, the numbers of holders of bachelor's degrees in the subsample is very low and therefore the probability that the percentages may be due to random change is relatively high. Second, there is the relatively high proportion of master's degree holders with unstable job mobility patterns, 53% of the junior high teachers and 28% of the senior high school teachers. In reviewing the various subgroups of married male teachers the results are most reliable among the younger elementary and senior high school teachers. Here, more education is associated with higher proportions of job instability.

Table 6.5

PERCENTAGE OF SINGLE FEMALE TEACHERS WITH 3 OR MORE JOBS IN EDUCATION ACCORDING TO EDUCATIONAL ATTAINMENT

Assignment Leve.	Educational Attainment	Age Group		
		To 34	35 & More	All
Elementary Class R'm Tr.	Bachelors	(92) 5	(16) 31	(108) 9
	Masters	(39) 18	(27) 22	(66) 20
Junior High Class H'm Tr.	Bachelors	(23) 9	(5) 40	(28) 14
	Masters	(4) 50	(7) 57	(11) 54
Senior High Class R.m Tr.	Bachelors	(17) 6	(5) 20	(22) 9
	Masters	(14) 29	(26) 46	(40) 40

Table 6.5 reveals a similar pattern of relationships for the younger single female teachers and for the younger married male group described above. The younger group of single female teachers is characterized by larger percentages of master's degree holders than bachelor's degree holders with high job instability. This pattern also holds true for the junior high teachers. Among the most numerous elementary school group, only 5% of the bachelor's were characterized by high job instability while the percentage of master's degree holders similarly characterized was more than three times as much, or 18%. In the case of the older single female teachers, who tend by reason of their sexual status to fit the image of the "old-maid" school teacher, job mobility patterns could hardly be described as old fashioned. Not only are they much more inclined towards job change than their younger counterparts but, in addition, those at the high school levels with graduate degrees are especially prone to job switching. Among the older high school teachers, for example, 20% of the bachelor's are indicated as having had three or more teaching jobs while more than twice as many master's degree holders were similarly described (46%). Of the six subgroups of single female teachers indicated, only among the older elementary school teachers may higher education be interpreted as a holding factor.

The married female teachers in Table 6.6 are the last of the sex-marital groups to be analyzed in respect to the hypothesized relationship between educational attainment and the objective indicator of career change labeled as job instability.

Table 6.6

PERCENTAGE OF MARRIED FEMALE TEACHERS WITH 3 OR MORE JOBS IN EDUCATION ACCORDING TO EDUCATIONAL ATTAINMENT

Assignment Level	Educational Attainment	Age Group		
		To 34	35 & More	All
Elementary Class R'm Tr.	Bachelors	(83) 15	(79) 35	162)25
	Masters	(32) 22	(47) 40	(79)33
Junior High Class R'm Tr.	Bachelors	(11) 36	(14) 50	(25)44
	Masters	(9) 55	(17) 53	(26)54
Senior High Class R'm Tr.	Bachelors	(5) 40	(4) 50	(9)44
	Masters	(3) 0	(23) 65	(26)58

Like their unmarried associates, the married female teachers are indicated as having high percentages of job instability among the more highly educated teachers. In five out of the six subgroups higher education is related to more teachers with job instability. The one exception, the younger senior high school teachers, lack master's degree holders entirely. Thus, it cannot be said that the data in this cell have significance. Generally speaking, the older teachers are characterized by larger percentages of job switching than the younger teachers. The direct effects of graduate education upon job instability are most evident in the younger

subgroup of junior high teachers where half again as many master's as bachelor's holders were indicated as have high job instability, i.e. 55% compared to 36%, respectively.

Summary and Discussion Of Results

The overall pattern of results in this chapter is one of increased job change associated with the highest level of educational attainment, the master's degree. This was the pattern in 12 out of the 18 subgroups studied. The results were more consistent with the female teachers than the male ones and with the younger teachers of the various groups rather than with the older teachers.

It would appear that the result obtained above, utilizing a behavioral indicator of job mobility, tend to generally replicate the results obtained in previous chapters with the attitudinal type indicators. In both procedures a majority of the subgroups of teachers displayed the hypothesized direct relationship between level of education attained and a tendency for the teacher to take leave of his teaching job. Both types of indicators were sensitive to the age of the teacher as well as to the teacher's assignment level, not to mention the sex-marital factor. This last factor in particular brings out the complex nature of the turnover process: married women who follow their job switching husbands and single females seeking more sociable environments.

Chapter VII

EDUCATIONAL ATTAINMENT AND THE STATUS QUESTION

The effects of graduate education upon job instability were explored in the previous chapter. Graduate education of itself does not alienate the teacher from his teaching career. Educational attainment works together with other factors in the teaching job environment to influence the value system of the individual. The educational establishment -- that is, the makers of certification policy, the curriculum planners and the administrators of teacher selection, placement, and professional development -- all influence the teaching job environment.

More is involved in supplying the basic psychological needs, or ego needs, than job involvement alone, even though the influence of the work system is immediate and has major socializing effects upon the individual. As Dubin points out: "There is real continuity between childhood experiences in the society and adult experiences in the work environment."¹

¹Robert Dubin, Human Relations In Administration (Englewood Cliffs, Prentice-Hall, 1961), p. 53.

The discussion in this chapter will center on the social origins of the teachers. The major assumption is that certain elements of the teacher's social origins, elements that in particular are status reference points, may have important effects in adulthood in respect to job satisfaction and particularly to the desire to change careers. The work situation has come to be commonly associated with ego satisfactions, but only recently have social norms and values been considered as relevant to job attitudes. The Teachers College data will be examined to see if educational analysis is simply masking a "self selected" sample. In such a case education may indicate people whose educational attainment is closely a result of earlier forces that contribute to career decisions of which education is a special case.

The Indicators Of Social Origins

One does not have to go back in history beyond the present century to find a society where the career of the son was determined primarily by the career of the father. Neither mother or daughter figured into the career-succession process since the home role was still an all-consuming one for most women.

Today's career process bears little resemblance to that

of the past. Increasingly, career aspirations are toward higher status, and more "meaningful" achievement than that achieved by one's parents. In many respects the strivings of young blacks today is the most dramatic example of how the new generation, regardless of race, wishes to do better than the old. Another new dimension of the career process is the exponential increase of women in the work force. The young man of today may have his mother's career as well as his father's as a status reference point. A question also arises in respect to the young female professional, a group which includes the majority of the new teachers. Are their career aspirations linked more strongly to their father or to their mother?

Customarily the father's occupation serves as the indicator of socio-economic status. Another indicator which is coming into use is the father's level of educational achievement. Obviously there is usually a close connection between the two factors. The educational indicator has special relevance to the theme of this study; but, in addition, educational attainment has been given a more important role in our society than ever before in deciding who is admitted into the choice jobs and occupations.

In this chapter, the author seeks to explain the effects of education upon teacher career aspirations in respect to the social origins of the teacher. The educational attain-

ment of the father, the educational attainment of the mother and whether or not either parent was a teacher will be taken into consideration.

Father's Education: Examination of the educational attainment of the fathers of the teachers included in the Teachers College sample indicates that the fathers of female teachers have more education than the fathers of male teachers, as shown in Table 7.1.

Table 7.1

PERCENTAGE OF TEACHERS WITH FATHERS OF VARIOUS LEVELS OF EDUCATIONAL ATTAINMENT, BY SEX-MARITAL STATUS

Father's Educational Attainment	Sex-Marital Status			
	Sing. Male	Mar. Male	Sing. Fem.	Mar. Fem.
Grade School	44	51	31	35
High School	36	32	41	38
College	20	18	28	27
All	(89)100	(424)100	(400)100	(443)100

Some 28% of the fathers of female teachers obtained college educations while less than 20% of the fathers of male teachers reached similar educational levels. If, indeed, individuals manifest greater career aspirations when their parents had attained relatively low levels of education, then the data should indicate a greater general tendency toward career change among male teachers of the sample than among female teachers. Previous findings in Chapter 4 support this assumption. However, greater support would be forthcoming

if similar results were yielded for each sex-marital subsample where father's education was controlled.

This type of analysis is first made in respect to the married male elementary teachers of the sample, the numbers of single male teachers being too small to permit reasonable results. It was found that father's educational attainment did supply additional information about the career aspirations of married male elementary teachers as indicated in Table 7.2.

Table 7.2

PERCENTAGE OF MARRIED MALE ELEMENTARY TEACHERS
DESIRING TO CHANGE THEIR CAREERS "UP" OR "OUT" OF
TEACHING ACCORDING TO THEIR EDUCATIONAL ATTAINMENT,
BY FATHER'S EDUCATIONAL ATTAINMENT

Father's Education	Teacher's Education	"Up"		"Out"	
		To 29	30&More	To 29	D & More
Less Than College	Bachelors	(6) 67	(7) 43	(6) 17	(7) 14
	Masters	(5) 80	(21) 52	(5) 20	(21) 33
College	Bachelors	(1) 0	(1) 100	(1) 0	(1) 0
	Masters	(0) 0	(0) 0	(0) 0	(0) 0

The initial proposition that the more educated teachers of the less educated parents would express greater desire for career change is partially supported in the case of the elementary teachers. The more educated of this subgroup were more inclined towards career change than the less educated, regardless of age or direction of change. There were too few teachers of college-educated fathers to either support

or reject the initial proposition. Career change for the younger as well as older teachers of the less educated fathers meant primarily "up."

The subgroup of married male high school teachers (junior and senior) is large enough to permit a full analysis of the effects of father's education, (Table 7.3). Concentrating first on those teachers with "less than college educated" fathers, the same results are found as with the elementary teachers desiring promotion ("up") regardless of age.

Table 7.3

PERCENTAGE OF MARRIED MALE JUNIOR AND SENIOR
HIGH SCHOOL TEACHERS DESIRING TO CHANGE THEIR CAREERS
"UP" OR "OUT" OF TEACHING ACCORDING TO THEIR EDUCATIONAL
ATTAINMENT, BY FATHER'S EDUCATIONAL ATTAINMENT

Father's Education	Teacher's Education	"Up"		"Out"	
		To 29	30&More	To 29	30&More
Less Than College	Bachelors	(16) 19	(16) 19	(16) 38	(16) 19
	Masters	(18) 39	(111) 24	(18) 22	(111) 18
College	Bachelors	(4) 50	(2) 100	(4) 25	(2) 0
	Masters	(5) 40	(31) 19	(5) 20	(31) 32

The more educated teachers of less educated fathers want change, more so than their less educated colleagues. These results are meaningful because the opposite results are indicated for the teachers with college educated fathers. Regardless of age, the more educated teachers

in this subgroup are more inclined to stay in teaching than their less educated colleagues.

The social background of the married male high school teachers, as indicated by father's education, is not as general an influence among those high school teachers wanting "out" as it was among those wanting "up." It appears that among the younger teachers who want "out" the desire remains strongest among the bachelor's degree holders, regardless of father's education. There may be some significance, however, to the fact that the largest percentage of those who wanted "out", 38%, occurred in the subgroup whose fathers were less educated than they.

The results suggest, at least for the married males of the sample, that a father's education makes a difference in specifying how the teacher's educational attainment influences his career aspirations. The results apply particularly to those teachers aspiring for promotion.

Table 7.4

PERCENTAGE OF SINGLE FEMALE ELEMENTARY TEACHERS DESIRING TO CHANGE THEIR CAREERS "UP" OR "OUT" OF TEACHING ACCORDING TO THEIR EDUCATIONAL ATTAINMENT, BY FATHER'S EDUCATIONAL ATTAINMENT

Father's Education	Teacher's Education	"Up"		"Out"	
		To 29	30&More	To 29	30&More
Less Than College	Bachelors	(52) 4	(17) 12	(52) 22	(17) 6
	Masters	(21) 10	(24) 0	(21) 5	(24) 29
College	Bachelors	(30) 13	(6) 0	(30) 10	(6) 0
	Masters	(8) 0	(9) 0	(8) 13	(9) 11

The single female group is of particular interest because it possesses the highest percentage of college-educated fathers, 28% (Table 7.1), and also the highest percentage of college-educated mothers, some 20% (Table 7.6). The fact that college-educated mothers are more numerous than college-educated fathers further suggests the relevance of mother's education as an explanatory factor. The educational attainment of the father will be considered first in Table 7.4.

Numerically, the most important group of single female teachers is the elementary classroom teacher. In the case of these elementary teachers (Table 7.4) whose fathers have less than a college education, one finds a positive relationship between teachers' education and the percentage of teachers wishing to leave their teaching posts in two out of the four categories. Unlike the results obtained for the married men, in which case the positive relationship was evident regardless of age group or intention to go "up" or "out. In the first case, 4% of the bachelor's wanted "up" while 10% of the master's were similarly inclined. The result was particularly significant because the opposite pattern, an inverse relationship between the teacher's educational attainment and the percentage of those wanting "up," was indicated for those teachers whose fathers had achieved college educations. In other words, among the

younger elementary teachers wanting promotions, the combination of a graduated degree and a large status discrepancy between father's education and one's own education appears to relate to an increased desire to leave teaching for higher-level educational positions. The opposite situation is indicated for the teachers who have equal status with their fathers. Graduate education might be conceived as having holding power in the latter case.

It is interesting to note that the relative status of father and daughter has results opposite to those described above, in the case of the elementary teachers who want "out." It might be said that graduate education has holding power upon the group of younger female elementary teachers with less educated fathers. On the other hand, graduate education appears positively related to desire for career change among the younger teachers of college-educated fathers.

These results might be summarized by the observation that the education of the teacher's father appears to be an influential factor on the career aspirations of the younger of the single female elementary teachers of the sample. However, the effects vary depending upon the teacher's inclination to go "up" or to go "out" of her teaching position.

Among the single female junior and senior high school teachers (Table 7.5) only with the two older group of teachers is the status discrepancy between father and daughter asso-

ciated with a direct relationship between education and desire for career change. In the case of this status discrepancy, that is, status mobility on the part of the teacher, it is the most highly educated teachers who predominantly want "out." Eighteen percent of the older master's degree holders so indicated in comparison with none of the lesser educated teachers. Among the group of teachers with status equality, graduate education has holding power among both age groups wanting "out".

Table 7.5

PERCENTAGE OF SINGLE FEMALE JUNIOR AND SENIOR HIGH SCHOOL TEACHERS DESIRING TO CHANGE THEIR CAREERS "UP" OR "OUT" OF TEACHING ACCORDING TO THEIR EDUCATIONAL ATTAINMENT, BY FATHER'S EDUCATIONAL ATTAINMENT

Father's Education	Teacher's Education	"Up"		"Out"	
		To 29	30&More	To 29	30&More
Less Than College	Bachelors	(27) 15	(10) 10	(27) 7	(10) 0
	Masters	(5) 0	(33) 15	(5) 0	(33) 18
College	Bachelors	(13) 0	(5) 0	(13) 31	(5) 20
	Masters	(3) 0	(11) 18	(3) 0	(11) 9

While 20% of the bachelor's want "out," only 9% of the master's are similarly inclined.

Mother's Education: Many teachers of the sample have highly educated mothers, as well as highly educated fathers, according to the data in Table 7.6.

Table 7.6

PERCENTAGE OF MOTHERS OF TEACHERS WITH VARIOUS LEVELS OF EDUCATIONAL ATTAINMENT, BY TEACHER'S SEX-MARITAL STATUS

Mother's Educational Attainment	Sex-Marital Status			
	Sing. Male	Mar. Male	Sing. Fem.	Mar. Fem.
Grade School	41	49	31	36
High School	46	40	50	47
College	13	11	20	17
All	(90)100	(425)100	(396)100	(444)100

At this point the relative status of mother and daughter will be taken into consideration regarding the career aspirations of the single female teacher. The results obtained above should enable a comparison of the relative influence of the female teacher's father and her mother. Traditionally, the father was the status referent. Today, with the increasing proportion of middle-aged mothers with college educations it would not be unreasonable to find that the mother also serves as a status referent to whom her grown-up children relate. Table 7.7 provides this information for single female elementary teachers.

For the younger elementary teachers wanting "up" and wanting "out", in Table 7.7, almost the same patterns are discerned with mother referents as with father referents. A positive relationship is indicated between educational attainment and the percentage of teachers desiring "up,"

and an inverse relationship is indicated in the case of the younger teachers wanting "out." Both cases occur among the

Table 7.7

PERCENTAGE OF SINGLE FEMALE ELEMENTARY TEACHERS WANTING TO CHANGE THEIR CAREERS "UP" OR "OUT" OF TEACHING ACCORDING TO THEIR EDUCATIONAL ATTAINMENT, BY MOTHER'S EDUCATIONAL ATTAINMENT

Mother's Education	Teacher's Education	"Up"		"Out"	
		To 29	30&More	To 29	30&More
Less Than College	Bachelors	(62) 5	(19) 11	(62) 17	(19) 5
	Masters	(22) 9	(33) 3	(22) 9	(33) 24
College	Bachelors	(19) 16	(3) 0	(19) 16	(3) 0
	Masters	(6) 0	(2) 0	(6) 0	(2) 0

teachers with social mobility, thus duplicating the results obtained when fathers were used as status referents. That educational preparation appears to have holding power in respect to the single female elementary teachers with college-educated, similar-status mothers is also a duplication of results obtained with these same teachers' fathers. It is not necessary to go into further detail to conclude that, while some differences do exist in respect to the influence of the father's status and the mother's status on the career intentions of their teacher-daughters, both parents may be considered as status reference standards, exerting influence on the career patterns of their teacher-daughters. In both cases the influence is different depending upon whether their daughters desire to leave education or to be promoted.

Parents' Occupation: One traditional indicator of social origins is father's occupation. In the study of beginning teachers, 46% of the teachers came from families of white-collar fathers, 36% from blue-collar families and 18% from farming families. Teaching fathers were indicated for only 5% of the beginning teachers.²

Information of this type led the authors of the study of beginning teachers to conclude that many teachers are upward mobile. As the sons and daughters of blue-collar workers, clerks and farmers, they were improving their social status by becoming teachers.³

The results previously analyzed in respect to mother's education suggest that the mother's occupation also be considered as a status referent. This factor is especially relevant in a study of teachers because of the long tradition of female teachers in this country. Interestingly enough in the study cited above, it was found the occupational inheritance was greater among beginning women than among beginning men teachers.⁴ For these reasons it seems appropriate to use "parents' occupation" as the indicator of the occupational origins of the Institute sample of teachers. Table 7.8 indicates that as with the study cited above, female teachers come from families of teachers more so than do male teachers.

²W. S. Mason, The Beginning Teacher (Wash., D.C.: U. S. Government Printing Office, 1961), p. 12

³Ibid.

⁴W.S. Mason, Op. Cit., p. 15.

Table 7.8

PERCENTAGE OF TEACHERS WITH PARENTS WHO ARE
TEACHERS BY OCCUPATION, BY TEACHERS SEX-MARITAL STATUS

Parent's Occupation	Teacher's Sex-Marital Status			
	Sing. Male	Mar. Male	Sing. Fem.	Mar. Fem.
Teacher	9	14	18	16
Non-Teach	91	86	82	84
All: %	100	100	100	100
n	86	408	390	433

One might anticipate that results similar to those obtained when parent's education was used as a control factor would be repeated when the primary factors, educational attainment and desire for career change, were controlled for occupational inheritance. It is first necessary to establish the relationship between parents' education and parents' occupation. The assumption is that the lower level of parent education is equivalent to the nonteaching occupation of the parent or conversely, from the point of view of status discrepancy, highly educated parents have comparable status with parents whose occupation is teaching. This assumption is supported by studies of ascribed status,⁵ as well as by the reality that teachers tend to be highly educated persons. On this basis the expectation would be that teachers with high educational

⁵B.C. Rosen, "The Reference Group Approach To The Parental Factor In Att'tude And Behavior Formation", Social Forces, 34 (1955), pp. 137-144..

attainment will tend to desire to remain at teaching if teaching runs in the family. Table 7.9 indicates that this assumption holds for married male junior high school teachers but not for married male senior high school teachers.

Table 7.9

PERCENTAGE OF MARRIED MALE TEACHERS WHO DESIRE TO CHANGE THEIR CAREERS "UP" AND "OUT" FROM TEACHING ACCORDING TO THEIR EDUCATIONAL ATTAINMENT, BY PARENT'S OCCUPATION

Assignment Level	Parent's Occupation	Teacher's Education	Age - 30 & More	
			"Up"	"Out"
Junior High School	Non-teacher	Bachelors Masters	(6) 0 (45) 36	(6) 0 (45) 22
	Teacher	Bachelors Masters	(2)100 (5) 40	(2) 0 (5) 0
Senior High School	Non-teacher	Bachelors Masters	(7) 28 (73) 18	(7) 43 (73) 16
	Teacher	Bachelors Masters	(1) 0 (9) 11	(1) 0 (9) 22

The data examined are for the older group of teachers because only this age group is large enough to yield meaningful percentages. It is the junior high school teachers with master's degrees rather than those with bachelor's degrees who wish to leave teaching, particularly if teaching is not in their family. This relationship exists regardless

of whether they want to climb "up" or "out" of the teaching profession. While educational attainment appears to have holding power upon junior high teachers from a teaching family, this is not the case for the married male senior high school teachers. With this subgroup, educational attainment may be said to have holding power on those teachers without a teaching heritage. These results appear dissimilar from the results obtained for married male teachers using the educational attainment of the father. However, the two sets of data cannot be accurately compared. It cannot, therefore, be said that parent occupational status has a different influence upon the career desires of their children than does parent educational status. What can be said is that both status indicators appear to influence the career decisions of the next generation, but in different ways.

Offices Held by a Teacher in Educational Associations

This chapter has been devoted to explanations of the relation between educational attainment and the career intentions of teachers using various social referents to take into account the psychological effects of status upon career aspirations. Generally the results indicate that status as well as educational attainment influence the teacher. One

additional explanatory variable will be analyzed, the number of offices that the teacher holds in educational associations. This is a different type of factor than the status factors already analyzed.

It is popular knowledge that teachers are joiners of many organizations. One reason is the existence of different teacher associations at many levels in the "educational establishment." Another reason is that there are many different types of teachers, hence many different types of teacher organizations. Also, the fact that teachers exist in such large numbers enables the existence of numerous associations. Data from the Teachers College sample indicate, furthermore, that a single teacher can belong to a number of different organizations. Table 7.10 indicates that joining patterns vary widely from few memberships to many memberships regardless of the sex-marital status of the teacher.

Table 7.10

PERCENTAGE DISTRIBUTION OF TEACHERS WITH VARIOUS
NUMBERS OF ASSOCIATION MEMBERSHIPS

Memberships In Educational Organizations	Sex-Marital Status			
	Sing. Male	Mar. Male	Sing. Femal	Mar. Femal
2 or less	17	11	10	12
3	24	24	30	28
4	18	19	18	18
5	22	19	15	21
6 and More	18	27	27	21
All	(92)100	(434)100	(410)100	(453)100

If indeed teachers are such great joiners, is it not reasonable to predict that membership in organizations might be one avenue for achieving ego satisfactions? There are several bases for such an assumption. To begin with, there is no evidence to support an assumption that ego-satisfactions can only be obtained from the job, even though the literature of job satisfactions (by omitting consideration of non-job factors) may imply that the job is the major if not exclusive source of professional satisfaction to workers. A group of Harvard professors of education list three areas of professional responsibility of the teacher: to the child in the classroom; to the parent outside the classroom; and to the profession through various types of contributions.⁶ Obviously each can be a source of considerable satisfaction to the teacher. Might there even be a logical connection between the effectiveness of the professional development of the teacher and his ability, as well as motivation, to participate in more than just classroom activity?

Armed with these assumptions it is anticipated that the greater the voluntary activity of the teacher, the greater will be his tendency to remain in teaching, and -- contrary to certain previous results -- this will apply to the teacher with graduate education.

Although number of memberships could theoretically

⁶New England School Development Council, Teacher Competence And Its Relation To Salary, (Cambridge: NESDEC, 1956), p. 13.

be utilized as the explanatory variable, another factor, number of offices held in educational associations, will be used in the present analysis. The great volume of the memberships suggests that many of these might be nothing more than paper relationships and therefore afford the teacher small satisfaction. In contrast, officership implies a more intensive devotion to this different type of professional activity. The data indicates that 27% of the single male teachers, 37% of the married male teachers, 69% of the single female teachers, and 27% of the married female teachers held office in at least one association. In fact, more than half of the indicated percentages in each category except the married females held at least two offices. This data has been related to the primary factors, educational attainment and desire for career change, and the results indicated in Table 7.11. Here again married males are utilized to demonstrate that officership in educational associations does influence career changing behavior. It is apparent among all three assignment levels, and especially among the older age group wanting "up." The elementary and junior high teachers were combined because of the similarity of their results.

Table 7.11

PERCENTAGE OF MARRIED MALE TEACHERS DESIRING CAREER
CHANGE ACCORDING TO EDUCATIONAL ATTAINMENT, BY OFFICES
HELD IN EDUCATIONAL ASSOCIATIONS

Assignment Level	Offices In Educational Associations	Teacher's Education	"Up" Age: 30 & +
Elementary and Junior High School	None	Bachelors Masters	(13) 23 (47) 40
	One or More	Bachelors Masters	(4) 75 (16) 69
Senior High School	None	Bachelors Masters	(8) 38 (71) 15
	One or More	Bachelors Masters	(2) 0 (22) 23

The factor of holding office appears to have some influence upon teachers who aspire to higher level positions, although there is no way to indicate which factor is cause and which is effect. The data in Table 7.11 also suggests that the holding of office influences senior high teachers and lower level (elementary and junior high) teachers dif-

ferently. Considering the lower level teachers first, the data indicated most noticeably that the holding of office is strongly associated with the desire for vertical mobility regardless of the level of educational attainment of the teacher. It is only among those teachers not holding office that educational attainment is directly related to the percentage of teachers wanting "up." The 17 point difference is sizable between the 23% of the bachelor's who want "up" and the 40% of the master's similarly inclined. The 6 point difference that might be attributable to education in the case of the office holders is minor compared to the large percentages of both bachelor's and master's, 75% and 69%, respectively, who want "up."

If it can be concluded from the data on the lower level teachers that the holding of office, like the attainment of higher levels of education, influences some teachers to want to leave teaching, such an effect is not so obvious in respect to the married male senior high teachers. Educational attainment appears to exert holding power among the non-office holders, 23% less master's degree holders want "up" compared to bachelor's degree holders. Previous results have already indicated that educational attainment has different effects on junior high teachers than on senior high teachers and the early results are supported by the results obtained from the

data of Table 7.11. It would be difficult to draw implications from the difference in percentages among the senior high office holders because of the scarcity of bachelor's degree holders. However the 7% difference between the master's holding office and master's not holding office does tend to support the obvious implications suggested by the data obtained from the lower level teachers, i.e. the holding of office does relate to a greater desire among married male teachers to seek higher-level jobs in education.

Summary and Conclusions

This chapter has added a new dimension, a social one, to the framework of analysis discussed in previous chapters. The intention was to ascertain if teachers' social origins in any way further specified the direct relationship between a teacher's educational attainment and his tendencies toward career mobility, a phenomenon frequently found in previous chapters. Teacher's origins were represented by three different factors: father's education, mother's education, and whether or not either parent was a teacher by occupation. The first two indicators possess high intrinsic interest because of the centrality of educational background in this study. Mother's education was relevant because of the dominance of women in the teaching occupation. Occupational

heritage was considered because of its traditional role as a career determinant, although, in this chapter, the occupation of both parents is considered.

A second type of social factor was also utilized in the effort to explain the primary relationship between the teacher's educational preparation and his career aspirations. Rather than social origins, the referent here was officer-ship in the voluntary professional associations that teachers commonly join. The indicator of involvement was the number of offices held by the teacher simultaneously.

It was found that the education of the teacher's father was related to the career aspirations of the teacher, in the case of married male teachers. The more educated teacher-sons of less educated fathers appeared inclined to make career changes in greater proportions than their less educated peers. This was especially the case among those teachers aspiring to higher-status jobs.

Numerically, the most important group of single female teachers is the younger group of elementary school teachers, and a similar relationship was found among them as among the men just discussed. It was the more educated teachers with less educated fathers who were most inclined to seek career change by moving "up." This result also held for the older portion of the elementary teachers wanting "out" of education

altogether. Interestingly, the opposite held for the younger single female teachers wanting "out." Higher educational attainment appears to be a holding factor for the daughters of less-than-college-educated fathers, but not so for the daughters of college-educated fathers.

The results obtained when mothers' education was factored in were surprisingly similar to those indicated above. Of course, college-educated fathers and mothers are often found in the same family and this might explain the duplication of results. The least one could conclude from the results is that, as far as single female teachers of the sample were concerned, father and mother both appear to influence the career aspirations of their teaching daughters.

Looking at a more traditional status indicator, occupational heritage, additional information is obtained about the relationship between the teacher's educational preparation and his career aspirations. Among the married male junior high teachers, the sons of teacher parents were more inclined to stay in teaching if they possessed master's degrees than if they had attained only the bachelor's degree. The opposite was indicated among the sons of non-teaching parents, who tended to want promotions. In other words, vertical mobility was indicated most prominently among the more educated sons of presumably lower-status non-teaching parents.

Opposite results were found for the high school teachers among the married males. Generally more wanted "out" than "up." Contrary to the junior high teachers, higher educational attainment did not appear to possess holding power for the sons of teachers, but only for the sons of non-teachers.

The final analysis in this chapter considered a form of professional activity outside the classroom, officerships in educational associations. Whereas the other social indicators were historical, this factor existed in the "here and now" of the teacher. When attention was directed to the married male teachers aspiring for promotion "up", which previous results suggested to be most influenced by status reference factors, interesting differences were discerned between office holders and non-office holders. Among elementary and junior high teachers, the combination of graduate education and not holding office made for higher proportions of teachers desiring career change. Among the office holders, higher educational attainment had a slight holding power. However, the effects of office holding seems much more important than the effects of educational attainment. Office holders in general were much more prone to aspire for promotion "up" than non-office holders.

The uniqueness of high school teachers is again demonstrated. The office holders were more inclined to stay

in their jobs and educational attainment appeared to have greater holding power for this group than for the non-office-holding group.

In conclusion, all the status indicators, whether historical or in the teacher's present experience, combine with educational attainment to influence the career aspirations of many of the teachers of the sample. The effects fall differently on different sexes, different assignment levels and different age groups. Nevertheless, certain relationships are obvious. The desire for promotion appears to be more influenced by status distinctions than intentions to leave education altogether. While the sample is not large enough to draw firm conclusions, the results obtained do support an interrelationship between a personal experience factor, such as education, and social status factors. Future studies might profitably concern themselves with such questions as the relative importance of various social referents depending upon the age and experience of the individual. Might social origins be most important, for example, to younger people just starting on the career path, while status references in the "here and now" exert more influence upon the career aspirations of more experienced teachers?

Chapter VIII

SOCIAL BACKGROUND AND EDUCATIONAL ATTAINMENT

Educational attainment has helped to better understand the career and job patterns of teachers. Also, several other factors have been used to elaborate upon the hypothesized relationship between educational attainment and teacher mobility. Yet educational attainment itself warrants elaboration. There is much information describing the educated but very little on why they undertook higher education.

So far, educational attainment has been specified by years of college education, sex-marital status, teaching assignment level, and by age. This suggests the type of teacher who reaches high educational attainment. Information is also available about when increased educational attainment is obtained. For example, it was indicated that most bachelor's degree holders prefer to commence their teaching careers and take graduate work part-time. For many teachers this means starting work with provisional certification,

hoping to qualify for full certification upon attainment of a master's degree or a year or two of graduate credits.

Several studies have briefly touched upon the social backgrounds of teachers. In one, it was found that the larger the community of origin, "the better educated is the teacher."¹ In the same study it was concluded that the most "poorly" prepared beginning teachers came from families of farming and laboring fathers.

In earlier chapters of this report several factors descriptive of the social origins of teachers were utilized. They contributed to a fuller understanding of the relationship between educational attainment and teacher mobility. These same factors can be used to better understand why some teachers elect to continue their professional education. There is still considerable ambiguity as to the identity of the teachers who attain more education. Perhaps it is simply a matter of conformity in the sense that those teachers who chose to remain in education also commit themselves to educational administration's expectation that they will continue their education. On the other hand, there are suggestions that the social origins of the teacher influence his tendencies to pursue graduate education.

The Institute sample of teachers offers several advantages to elaborate upon the forces influencing educational attainment. As already indicated, several social-origin

¹W.S. Mason, The Beginning Teacher (Washington, D.C.: U.S. Government Printing Office, 1963), p.80.

type factors are available. Father's education, parent's occupation, and the number of offices held by the teacher in organizations can be cross-tabulated against educational attainment in the sections that follow. The sample is homogeneous in respect to the teachers accessibility to graduate-level schools and the region of their residence. In addition, several relevant control factors, such as sex-marital status and assignment, can be brought into the analysis of educational attainment to make the results more specific than would otherwise be the case. Most of the sub-samples are of adequate size so that the Chi-Square test can be used to evaluate the strength of the relationships.

The Relative Importance of the Social Origin Factors

Chi-Square tests for significance enable one to establish which of the social background factors used was most important. Table 8.1 indicates that father's education is more important in explaining the level of educational attainment of teachers than parent's occupation. While offices in educational associations produced even more highly significant cross-tabulations than the other two factors, later discussions will bring out that this is not really a social origin factor. For this reason it will be kept aside for later discussion.

Table 8.1

Chi-Square Significance Tests On 96 Cross-Tabulations Of Educational Attainment And One Of Three Different Social Background Factors, By Sex-Marital Status, By Assignment

Sex-Marital Status	Assign-ment Level	N	Social Background Factors		
			Father's Education	Either Parent Tier	Offices in Ed., Assoc's
Single-Male	Elem.	19	N.S.	N.S.	.05
	Jr. Hi.	19	N.S.	N.S.	N.S.
			N.S.	N.S.	.001
			N.S.	N.S.	.01
	Sr. Hi.	35	N.S.	N.S.	N.S.
All	73	.05	N.S.	N.S.	
Married-Male	Elem.	41	N.S.	N.S.	.05
	Jr. Hi.	82	.10	N.S.	.05
			.05	N.S.	.05
			N.S.	N.S.	N.S.
	Sr. Hi.	121	N.S.	N.S.	N.S.
All	244	.10	.10	N.S.	
Single-Female	Elem.	177	N.S.	N.S.	N.S.
	Jr. Hi.	47	.01	N.S.	N.S.
			.02	N.S.	N.S.
			N.S.	N.S.	.02
	Sr. Hi.	60	.10	.05	.005
All	284	.10	N.S.	.10	
Married-Female	Elem.	238	N.S.	N.S.	.07
	Jr. Hi.	49	N.S.	N.S.	.05
			N.S.	N.S.	.02
			.05	N.S.	.05
	Sr. Hi.	33	.05	N.S.	.02
All	320	N.S.	N.S.	N.S.	
			N.S.	N.S.	N.S.

Note: Upper chi-square is for 4-way split of educational attainment.
 Lower chi-square is for 2-way split of educational attainment.
 N.S. means that the cross-tabulation is not significant.

Father's education will be examined first. A comprehensive table listing the results of all cross-tabulations in which this factor was included can be found in the appendix. Only those analyses which yielded interesting or significant Chi-Squares will, however, be discussed below.

Father's Education: Single male teachers are the smallest sex-marital category. However, Table 8.2 indicates that father's education is significantly related to teachers' educational attainment among the 35 high school teachers of the group.

Table 8.2

EDUCATIONAL ATTAINMENT OF SINGLE MALE
HIGH SCHOOL TEACHERS ACCORDING TO
FATHER'S EDUCATIONAL ATTAINMENT
(in percent: .05 level)

Teacher's Educational Attainment	Father's Educational Attainment		
	Grade School	Senior High	College
Bachelors	0	38	44
Masters	100	62	56
All: %	100	100	100
n	13	13	9

Larger percentages of children of less educated fathers attain graduate degrees than do children of more educated fathers. Even though the majority of teachers of any indicated social origin attained graduate degrees, all the sons

of fathers with low levels of education possessed master's degrees, while only 56% of the sons of college-educated fathers reached the same level of educational attainment.

The pattern described above is repeated in the case of the married male teachers of the sample who teach at the elementary level, as indicated in Table 8.3.

Table 8.3

EDUCATIONAL ATTAINMENT OF MARRIED MALE
ELEMENTARY SCHOOL TEACHERS ACCORDING TO
FATHER'S EDUCATIONAL ATTAINMENT (in
percent: .05 level)

Teacher's Educational Attainment	Father's Educational Attainment		
	Grade School	Senior High	College
Bachelors	26	50	100
Masters	74	50	0
All: % n	100 27	100 12	100 2

Among the 27 sons of fathers who had not completed a high school education 74% obtained a master's degree. All teaching sons of college graduates, on the other hand, failed to reach a similar level of professional development. However, the number involved is too small to hold up for com-

arison. The trend is identifiable among the sons of high school graduates. Only 50% of this group attained the master's degree.

The pattern described above does not typify all married male teachers in the sample. It is insightful to compare the percentages of just master's degree holders from among the married male elementary, junior high and the senior high school teachers with respect to their father's educational attainment. While these sub samples did not individually yield cross-tabulations with significant Chi-Squares, when the results are assembled, as in Table 8.4, interesting information is obtained.

Table 8.4

PERCENTAGE OF MARRIED MALE TEACHERS
AT VARIOUS ASSIGNMENT LEVELS WHO HOLD
MASTER'S DEGREES ACCORDING TO FATHER'S
EDUCATIONAL ATTAINMENT

Teacher's Assignment Level	Father's Educational Attainment		
	Grade School	Senior High	College
Elementary	(27) 74	(12) 50	(2) 0
Junior High	(34) 79	(15) 71	(13) 72
Senior High	(54) 83	(26) 81	(23) 96
All	(108) 80	(47) 72	(36) 82

What is most apparent in the Table above is that -- regardless of the education of the teacher's father -- the

higher the assignment level, the larger the proportion of teachers with master's degrees. This is not new information. It has already been recognized that the single salary plan which encompasses both elementary and secondary teachers does not remove the gap in average salary between the several levels. High school teachers continue to attain more education than lower-level teachers and continue to be paid higher.

The second type of information indicated in Table 8.4 is seen in the varying pattern of percentages in each of the three rows. The inverse relationship between the elementary teachers' educational attainment and that of their fathers has already been discussed. This pattern begins to change with the junior high school teachers, especially in respect to those with high school educated and college-educated fathers. There is practically no difference in the proportion of teachers with master's degrees between these two different social-background categories. The pattern of percentages continues to change at the next highest assignment-level, the senior high school teachers. The largest proportion of high school teachers possessing master's degrees, some 96%, occurs among those with college-educated fathers. The pattern found among the high school teachers is almost the reverse of that found among elementary school teachers, when the teachers' educational attainment is cross-tabulated against the educational attainment of their fathers.

A somewhat different pattern of relationships is indicated for the single female teachers of the Institute sample.

It will be recalled from Table 8.1 that the single female teacher category contained the largest number of significant and near significant cross-tabulations. One reason is because of the large number of elementary school teachers. The matrix for elementary school teachers incorporated in Table 8.5 differs from those examined above because four categories of teacher's educational attainments can be shown.

Table 8.5

EDUCATIONAL ATTAINMENT OF SINGLE FEMALE
ELEMENTARY TEACHERS ACCORDING TO FATHER'S
EDUCATIONAL ATTAINMENT (in percent; .05 level)

Teacher's Educational Attainment	Father's Educational Attainment		
	Grade School	Senior High	College
Bachelors	39	62	53
Bachelors+	11	8	15
Masters	31	18	21
Masters +	19	12	11
All	(54) 100	(60) 100	(63) 100

Two patterns of relationships are evident from this chart, one of which was not discernible before because of the detail. I am referring to the similarity of patterns found by comparing the bachelor's and bachelor's plus cate-

gories with the master's and master's plus categories. In each case there are smaller percentages of teachers in that category with additional credits beyond the degree. It might be concluded from this information that within this subsample the master's degree is more numerous than the bachelor's degree with additional credits. This is especially true for the teachers of lesser educated fathers.

The general pattern in the data is one of increased educational preparation among the teachers with fathers of relatively little educational background. This is evident in the master's plus category where the percentages of teachers according to father's educational attainment is 19, 12, and 11 respectively. It is also evident when the two categories of master's degree holders are combined, yielding percentages of 50, 30, and 32 respectively.

The patterns of educational attainment for the other groups of single female teachers, those at the junior high and senior high levels, are shown in Table 8.6. This table is comparable in design to Table 8.4.

Increasing proportions of master's degree holders occur at the senior high level compared to the elementary level of teaching regardless of the social origins of the single female teachers described in Table 8.6. Also similar to the married males, are changes in the pattern of relationships between teacher's education and father's

education, comparing elementary teachers with high school teachers. Among the single female elementary teachers, higher proportions of master's degree holders were found among the

Table 8.6

PERCENTAGE OF SINGLE FEMALE TEACHERS WHO
HOLD MASTER'S DEGREES ACCORDING TO FATHER'S
EDUCATIONAL ATTAINMENT

Teacher's Assignment Level	Father's Educational Attainment		
	Grade School	Senior High	College
Elementary	(27) 50	(18) 30	(17) 27
Junior High	(4) 26	(9) 43	(1) 8
Senior High	(11) 79	(14) 54	(13) 65
All	(42) 51	(41) 38	(31) 33

daughters of the least educated fathers. The pattern among senior high teachers is, however, not linear. The largest percentage of more educated teachers is found among the daughters of the least educated fathers, similar to the elementary group; however, the second largest percentage of master's degree holders was found with college-educated fathers, unlike the elementary group.

Turning to the married female teachers, a revealing matrix was obtained when bachelor's degree holders and master's degree holders at the junior high level were com-

pared according to the educational preparation of their fathers.

Table 8.7

EDUCATIONAL ATTAINMENT OF MARRIED FEMALE
JUNIOR HIGH TEACHERS ACCORDING TO FATHER'S
EDUCATIONAL ATTAINMENT (in percent; .05 level)

Teacher's Educational Attainment	Father's Educational Attainment		
	Grade School	Senior High	College
Bachelors	75	56	24
Masters	25	44	76
All	(16) 100	(16) 100	(17) 100

The pattern of relationships in Table 8.7 is one of high percentages of more educated married female teachers from among the daughters of the more educated fathers. This is a different type of result than has been found in previous sections. A comparison of the percentages of just master's degree holders at the various assignment levels is made in Table 8.8.

Practically no percentage change is noticed for the elementary teachers according to father's education in contrast with elementary teachers of other sex-marital statuses. Trends are obvious for the less numerous higher-level teachers, especially the junior high teachers. The senior high teachers indicate a tendency opposite to that of the junior high teachers. Similarly to the other sex-marital groups, higher percentages of married female senior high

Table 8.8

PERCENTAGE OF MARRIED FEMALE TEACHERS
WHO HOLD MASTER'S DEGREES ACCORDING TO FATHER'S
EDUCATIONAL ATTAINMENT

Teacher's Assignment Level	Father's Educational Attainment		
	Grade School	Senior High	College
Elementary	(27) 32	(31) 32	(19) 34
Junior High	(4) 25	(7) 44	(13) 76
Senior High	(10) 77	(5) 71	(9) 69
All	(41) 36	(43) 36	(41) 48

teachers are found to possess a master's degree among those of less educated fathers than among the teachers whose fathers were college graduates.

Summary and Conclusions--The relationship Between Father's Education and Teacher's Educational Attainment

The twelve groups of teachers in the Institute sample have been studied in regard to the relationship between the teachers' educational attainment and the educational attainment of their fathers. Within each sex-marital group at least one of the three categories of assignment level yielded

a cross-tabulation which proved significant at the .05 level, using the Chi-Square test. Among the males, single high school teachers and the married elementary teachers showed significant relationships. The table of married high school teachers gave near-significant relationships. Among the female teachers, significant relationships between teachers' and fathers' educational attainments were discovered for all the elementary teachers. The single high school teacher tables tested out as near-significant. The married female teachers produced significant results in the junior high category. From this information alone it can be concluded that relationships of the type discussed do exist in a number of cases within the Institute sample. However, as was the case in previous chapters the relationships between the factors under examination can not be generalized to all teachers. I would go further to say that, if the relationship between the teacher's educational attainment and that of his father is of any consequence to policy making or administrative practice, it is vital that the relevant type of teacher be specified. This is not currently the general practice in reporting research of this type.

So far, discussion has been limited to the statistic aspects of the analysis. The nature of the trends also justify review. Research previously reviewed suggests that teachers with relatively low levels of educational preparation

tend to come from parents of modest occupational and educational backgrounds.² The opposite relationship is suggested by results obtained from the single male high school teachers, the married male elementary teachers, the single female elementary teachers, and from the total group of single female teachers. Only in the case of the married male senior high and the married female junior high school teachers does the data suggest that lower levels of parent education are associated with lower levels of educational preparation on the part of teacher sons and daughters.

The literature on social origins mentions little in respect to the social origins of the most educated professional people. The teachers data analyzed here suggests, if anything, that most of the teachers with graduate degrees seem to come from families of modest educational backgrounds.

Occupational Heritage In Relation to Teacher's Education:

The well-recognized concept of occupational heritage was introduced and discussed in the previous chapter in relation to the career mobility of teachers. Might not the same social-origin factor be related to a teacher's motivation to take advanced professional education? One might assume that a direct relationship exists between whether or not a parent was a public school teacher and whether or not a teaching

²W. S. Mason, op. cit. p.80.

son or daughter obtained a master's degree. In other words, it would not seem unreasonable to assume that a teacher whose parent had been a teacher would be most motivated to take graduate work in teaching. The rationale here is that a young teacher would wish to associate himself with advanced techniques rather than with the old ways of teaching used by his parents. He would wish to utilize new information, knowledge and materials, and perhaps he would wish to prepare himself to rise to a higher level in the educational establishment than his parent had attained.

As plausible as this argument sounds, relatively few cross-tabulations were found to be statistically significant when parent's occupation was compared with teacher's educational attainment. Only in the case of the single female junior high teachers was a significant relationship indicated. One reason why significant relationships were lacking is simply that small proportions of teachers, regardless of education, came from teaching parents, only 10% of the male teachers and 17% of the female teachers in the Institute sample.

Table 8.9 indicates the nature of the relationship between parent's occupation and the educational attainment of the single female group of junior high school teachers.

The data for the subgroup examined below suggests that, contrary to expectations, a significantly larger proportion

of master's degree holders came from families where teaching

Table 8.9

EDUCATIONAL ATTAINMENT OF SINGLE FEMALE JUNIOR
HIGH TEACHERS ACCORDING TO PARENT'S OCCUPATION
(in percent; .05 level of significance)

Teacher's Educational Attainment	Was Either Parent A Teacher?	
	Yes	No
Bachelors	100	69
Masters	0	31
All	(8) 100	(35) 100

was not an occupational heritage. These results are interesting enough to warrant analysis of some of the other subgroups among single female teachers. As previously discussed, even though various tables lack statistical significance, valuable information may be gleaned where the results of a number of related tables are consistent in their implications.

Some consistency is apparent among the elementary and junior high levels, with higher proportions of more educated teachers originating from families where teaching is a new occupation. One can observe, by turning to the appendix tables that this same trend is consistent with the married male and

the married female teachers.

Table 8.10

PERCENTAGES OF SINGLE FEMALE TEACHERS
WHO HOLD MASTER'S DEGREES ACCORDING
TO PARENT'S OCCUPATION

Teacher's Assignment Level	Was Either Parent A Teacher?	
	Yes	No
Elementary	(26) 35	(135) 40
Junior High	(8) 0	(35) 31
Senior High	(11) 73	(49) 63
All	(45) 38	(219) 44

The pattern is different for the senior high school teachers in Table 8.10 and also for the single sex-marital groups. Larger proportions of master's degree holders stem from parents who were teachers in the case of the high school teachers of the sample.

Summary and Conclusions--The Relationship Between Teacher's Educational Attainment and Occupational Heritage:

While the data on occupational heritage were not as strong as that on the educational attainment of the teacher's father, they provided some information because of the consistency of the results. The results were generally contrary to the common sense assumption that larger propor-

tions of the most educated teachers, those with master's degrees, came from families with an occupational heritage of teaching. At the lower assignment levels, the master's degree holders tended not to come from families of teachers, just as was indicated earlier, they tended not to come from highly educated fathers. The data in respect to senior high school teachers, on the other hand, tends to conform with expectations. Master's degree holders tend mostly to be associated with families of teachers, just as they tend to be associated with college-educated fathers. It would appear that both indicators of social origins produced fairly similar results. Teachers at the lower levels tend to be socially mobile along the several dimensions discussed, while senior high school teachers tend to be more socially stable.

Offices in Educational Associations in Relation to Teacher's Educational Attainment:

It has been hinted several times that officerships held in educational associations is a different type of social dimension than the others discussed. It is always difficult to impute causality to behavioral factors and this difficulty is compounded when one can not be sure of the time sequence. There is no information indicating whether a teacher achieved his association office first or his advanced education first. Nevertheless, it is an interesting

factor to consider briefly, since, as discussed in the previous chapter, teachers appear to be "joiners" by fact as well as by reputation. This may be important to their career patterns and to their patterns of educational attainment.

Table 8.1 indicated that several cross-tabulations involving this factor are statistically significant or near significant. This is the case especially among male elementary teachers and female secondary teachers, both of which groups of teachers are especially prone to career change. Might officerships in educational associations be one way for teachers to obtain satisfactions that might be difficult for them to achieve in their local job situations? Or, might officers be selected from among the more educated teachers? Unfortunately, we can do little more in this study than pose these questions for future investigators.

A review of the detailed tables in the appendix indicates complete consistency in the pattern of relationships between number of officerships and the educational attainment of teachers. Thus there is little to be gained in extracting more than just the percentages of master's degree holders in each of the sex-marital categories according to number of officerships.

The overall trend is clear and consistent. Regardless of sex-marital status, and regardless of assignment

Table 8.11

PERCENTAGES OF TEACHERS WHO HELD MASTER'S
DEGREES ACCORDING TO NUMBER OF OFFICES HELD
IN EDUCATIONAL ASSOCIATIONS

Sex-Marital Status	Number Of Offices Held In Educational Associations	
	None	One Or More
Single Male	(57) 49	(18) 78
Married Male	(178) 75	(70) 87
Single Female	(208) 38	(73) 55
Married Female	(258) 38	(68) 44

level, there is a direct relationship between proportion of graduate-degree holders and the number of offices held in educational associations. The relationship is strongest among single male teachers: 78% of these holding office possess master's degrees while only 49% of the non-office holders are master's. One might anticipate larger percentages of graduate degree holders among the married office holders than the single office holders. This is true for the males but not for the females. One probable explanation is that married women have less time for both office holding as well as for attaining graduate degrees.

It is difficult to draw conclusions from the data because of the methodological difficulties mentioned. However, the author believes he has amply demonstrated why this social

factor is worthy of consideration in any subsequent effort to form a better understanding of the career mobility and job satisfactions of public school teachers.

Chapter IX

CAREER CHANGES OF TEACHERS AND EDUCATIONAL ATTAINMENT: POSTCENSAL SAMPLE

"The Postcensal Sample," is analyzed in this chapter. The data came from a study of some 40 scientific, technical and professional occupations made by the National Opinion Research Center for the National Science Foundation. Sample selection, data collection and data processing were done by the Bureau of the Census. The 1960 population census was used as the baseline for planning and selecting representative samples.¹ The Postcensal data, gathered more than eight years ago, contains information on the educational background, career movements, job attitudes and demographic characteristics of teachers. This information remains relatively unreported.

The data enables educational attainment to be cross-tabulated with various indicators of career change.

¹M. A. Schwartz, The U. S. College Educated Population, 1960, N.O.R.C. Report #102 (Chicago: Univ. of Chicago, 1965), p. 6.

The working hypothesis -- the higher the level of educational attainment the greater will be teacher career instability -- can be further investigated.

In dealing with the Postcensal data, "career-type decisions" are taken to mean a change of profession -- "out," "Participation-type decisions" on the other hand, involve little or no change in profession but rather a lateral change in educational employer. The turnover that results from this type of decision may be a reflection against the internal efficiency of the particular school system.² In this chapter the educational attainment of the Postcensal sample of teachers will be cross-tabulated against indicators of both types of career decisions.

Method

The comprehensive questionnaire designed for the Postcensal study (see Appendices) requested information at several points in time. All information about the respondent was obtained in the late spring of 1962. Information was requested about the individual's status in April of 1960, when the 1960 census was taken, and also in 1962. The information elicited for 1960 and 1962 was largely of the same type. This feature permitted a follow-up of various aspects of career change for persons employed in 1960, over a two-year period.

²J.G. March and H.A. Simons, Organizations (New York: Wiley, 1958), Chap. 4.

This chapter will deal primarily with indicators of turn-over during the two-year period which represent major career-type ("out") changes. Job changes representing decisions to switch jobs within the profession will only be briefly discussed.

The analysis of the relationship between educational attainment and the career-change indicators will be structured in the same manner as in previous chapters. Each cross-tabulation will be controlled for type of teacher, sex and age wherever the size of the working sample permits. In practically all cases, as might be expected, the factors will somewhat differ from variables previously used. (See Table 9.1)

The Variables

Educational attainment continues as the independent variable. However, highest degree held is the major measure of educational attainment produced by the Postcensal questionnaire. While information on years of education was elicited, five or more years of education beyond high school is the only category available that applies to graduate study. This classification, however, enables the addition of a new category, bachelor's plus, to the four other categories:

no college degree, bachelor's degree, master's degree and doctorate. It would appear in comparing the frequency distributions of the two different measures of educational attainment that years of education is just as important a measure of educational attainment in respect to teachers as degrees held. Among the professions in general, by contrast, the principal measure of higher educational attainment is degree held.

Table 9.1 indicates the proportion of teachers at each of the five levels of educational attainment as of May 1960, differentiated by sex and type of teacher. The high proportion of master's degree holders among males compared to females is particularly noticeable. Almost 40% of male secondary, and 12% of the female elementary school teachers, possessed master's degrees in 1960. These proportions are large enough to make the master's degree a meaningful increment of analysis for the Postcensal sample of teachers. The educational progress of the same teachers over the two-year period is also indicated. While the educational gain is interesting in itself, the 1962 figures will not be used in the discussions that follow.

We can now examine the various career-change indicators, each of which will be cross-tabulated against educational attainment.

The first career-change indicator listed in Table 9.1

TABLE 9.1 DISTRIBUTIONS OF RELEVANT TEACHERS CHARACTERISTICS ACCORDING TO YEAR, TYPE OF TEACHER, AND SEX (Percent)

TEACHER CHARACTERISTIC	1960				1962			
	Elementary		Secondary		Elementary		Secondary	
	Male	Female	Male	Female	Male	Female	Male	Female
<u>AGE</u>								
Under 25	8.4	9.4	5.5	8.4				
25 - 34	41.8	18.5	28.3	18.8				
35 - 44	24.8	18.3	26.2	20.0				
45 - 54	17.6	33.3	18.4	28.8				
55 & over	7.5	20.5	11.6	24.0				
Totals	100.0	100.0	100.0	100.0				
	n	1631	1079	834				
<u>HIGHEST DEGREE ATTAINED</u>								
No Degree	10.7	34.0	8.3	10.6	8.4	28.9	6.7	9.1
Bachelor's	14.0	33.7	14.2	33.9	15.2	39.7	15.3	36.0
Bachelor's +	36.1	17.4	32.4	24.0	22.3	14.4	24.3	20.4
Master's	36.1	11.9	39.5	27.6	53.1	16.9	51.6	33.8
Doctorate	1.0	0	1.5	.4	1.0	0	2.0	.8
Unreported	2.4	3.0	4.0	3.6	0	0	0	0
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	n	1631	1079	834	335	1631	1079	834
<u>EMPLOYMENT STATUS</u>								
Working	99.1	97.7	97.8	96.6	49.3	17.6	55.3	19.6
Not at Work	-	1.0	.7	2.7	49.6	68.9	42.5	65.6
Unemployed	0	0	0	0	.3	.8	.6	.8
Out Labor Force	0	0	0	0	.9	12.8	1.6	13.8
Unreported	.9	1.3	1.5	.7	0	0	0	0
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	n	1631	1079	834	335	1631	1079	834
<u>SECTOR OF WORK</u>								
Private	0	0	0	0	2.2	1.1	2.6	1.4
Government	100.0	100.0	100.0	100.0	97.2	98.6	95.9	98.3
Own Business	0	0	0	0	.6	.4	.6	.3
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	n	1631	1079	822	320	1411	1055	712

TABLE 9.1 (Continued)

TEACHER CHARACTERISTIC	1960				1962			
	Elementary		Secondary		Elementary		Secondary	
	Male	Female	Male	Female	Male	Female	Male	Female
<u>OCCUPATION:</u> Elem. Teacher	100.0	100.0	0	0	88.0	97.0	1.0	2.0
Sec. Teacher	0	0	100.0	100.0	6.0	1.0	92.0	94.0
Other TR. & C.	0	0	0	0	6.0	2.0	7.0	3.0
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	335	1631	1079	834	335	1621	1079	834
<u>NUMBER OF</u> <u>EMPLOYERS:</u> 1					39.1	26.5	36.3	29.2
2					26.0	18.6	26.4	18.2
3					13.8	14.7	14.7	27.0
4 & More					14.1	23.6	15.3	24.0
Unreported					7.0	16.6	7.2	11.5
Totals					100.0	100.0	100.0	100.0
					327	1583	1088	866

is employment status. This variable deserves first consideration because the most radical type of career decision is to leave the labor force, and because this type of action was taken by sizable proportions of teachers from the 1960 Postcensal sample. The large percentages of teachers "not at work" suggest that many respondents had already started their summer vacations. It may be assumed that more teachers would have exited from the labor force if more questionnaires had been turned in later. Most of the teachers leaving the profession during the two-year period were females, 12.8% from elementary teaching positions, and 13.8% from secondary teaching positions, where the most highly educated female teachers are located. This suggested relationship between a higher level of educational attainment and increased career change is investigated in the first detailed analysis that follows.

The second career-change variable to be analyzed is sector of work. Table 9.1 indicates that of the teachers in government employment in 1960, i.e. public school systems, more than 2.6% of the males went into private employment, including private school systems, while more than 1.1% of the females did likewise.

It would be well to emphasize that these small percentages become quite meaningful in an analysis of teacher turnover and teacher supply and demand, even though

they might be ignored in other type studies. Two percent of U.S. public school teachers amounts to some 30,000 teachers, a considerable human resource. One analyst of the chronic teacher shortage feels that if the career life of the average teacher could be extended for just two years, the manpower shortage would be eliminated.³ Another perspective on the importance of the 2% loss of government-employed teachers to the private sector can be obtained by comparing this figure with the estimated 10.9% national turnover rate. Of all teachers lost to public education, 20% of the loss might be attributed to career decisions of this type.

A different type of career decision is represented by the third career-change indicator, occupational change. The elementary teachers in the sample who changed their profession between 1960 and 1962 went into 11 occupations in addition to secondary teaching. The secondary teachers who changed during this two-year period entered a total of 19 different occupations, aside from elementary teaching

Table 9.1 lists the three categories of change that simplify the analysis of occupational change: elementary teaching, secondary teaching, and other technical, professional, or clerical (T. P. & C.) positions. The percentages indicate that a larger proportion of male

³W.L. Cunningham, "A Study Of Teacher Turnover In Selected Districts Of N.Y. State" (unpublished Doctor's dissertation, Teachers College, Columbia Univ., 1959)

teachers than female teachers changed professions, with as many male elementary teachers leaving teaching altogether as went over to secondary teaching. Relatively few secondary male teachers switched to elementary teaching. Their career changes took them out of grade-school teaching. Among the females, more secondary teachers changed occupations than elementary teachers, either leaving the profession or shifting into elementary teaching. Twice as many female elementary teachers left teaching as moved into the secondary level.

Number of employers is the last type of career change indicator to be analyzed in this chapter devoted to the Postcensal Sample. It is a different type of factor than those discussed above, involving decisions to cease participating in one school or school system and to join another. This switch of employers in a small proportion of cases, between 1960 and 1962, brought the teacher out of education entirely. However, in the great majority of cases, the career change is a relatively minor lateral move within the grade school teaching professions.

This form of job change counts all the previous employers in the working career of the teacher, up through the year 1962. The frequency distribution in Table 9.1 indicates that fairly large proportions of teachers from all groups have had as many as four or more employers during

their working careers. Female teachers appear slightly more unstable, in this respect, than their male counterparts.

The last factor relevant to this chapter yet to be introduced is age. Even though the small percentages of career changes generally do not encourage further breakdown, age is too important a factor to be completely ignored, and has been used wherever practicable. It may be noted, incidentally, that the female teachers in the Postcensal sample are older than those in the Institute sample. One possible explanation is that the Institute data was obtained earlier in the school year than the Postcensal data. More young female teachers would be included in the earlier study because some young teachers resign from their jobs during the school year.

Educational Attainment in Relation to Career Change in the Postcensal Sample

Employment Status: Analysis of employment status yields results which come close to the results of traditional studies of teacher turnover. Table 9.2 indicates that hardly any male teachers leave the labor force, while considerable numbers of female teachers do so.

Table 9.3

PROPORTION OF FEMALE TEACHERS WHO
LEFT THE LABOR FORCE ACCORDING TO AGE AND
HIGHEST DEGREE HELD (Percent)

AGE	All Teachers % - n	Highest Degree Held - 1960			
		No Degree	Bach.	Bach. Plus	Masters
<u>ELEMENTARY</u>					
24 & less	27.7 - 41	37.8	27.0	14.8	0
25 - 34	23.5 - 68	26.4	27.7	12.3	23.3
35 - 44	5.4 - 15	5.2	6.4	7.8	0
45 - 54	2.6 - 13	3.1	2.2	4.0	0
55 & over	20.1 - 53	23.4	18.9	18.2	10.3
<u>SECONDARY</u>					
24 & less	27.7 - 26	40.0	41.9	25.0	40.0
25 - 34	24.8 - 37	54.5	32.0	7.5	17.4
35 - 44	5.2 - 8	14.3	9.8	3.8	0
45 - 54	2.2 - 5	6.2	1.5	0	2.7
55 & over	19.4 - 35	27.6	26.3	19.4	13.6

Generally, an inverse relationship is found between educational attainment and exit from the labor force for both elementary and secondary female teachers. This is not surprising when one considers that the younger, and therefore the less educated, female teachers leave the labor force in greater proportions than the older, more educated teachers.

More detailed information on labor force exodus is presented in Table 9.3 just for female teachers. Secondary school teachers left the labor force in greater proportions than elementary teachers at practically all ages and levels of education.

Generally, the data indicate that increased education is associated with reduced loss to the labor force. This trend is supported by teachers of most age groups. Educational attainment may exert a holding power on teachers, helping to retain them in the labor force; but, as later results will show, more education does not necessarily retain them in the profession of education.

An exception is found to the general trend in the case of the master's degree holders. Within the important 25-to-34-year age group of elementary teachers, and in the age groups of secondary teachers below 35 years, approximately twice as many master's degree holders leave the labor force than do other female teachers who have

Table 9.4

NEW SECTOR OF TEACHERS' EMPLOYMENT
ACCORDING TO HIGHEST DEGREE HELD
(Percent)

SECTOR OF EMPLOYMENT IN 1962	Highest Degree 1960 - Male				Highest Degree 1960 - Female			
	No Degree	Bach. 4.4	Bach. Plus	Masters	No Degree	Bach. 1.9	Bach. Plus	Masters
<u>ELEMENTARY</u>								
Government	100.0	95.6	95.0	99.0	99.0	98.4	96.7	
Private	0	4.4	5.0	1.0	1.0	1.6	3.3	
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
	36	43	119	120	475	255	181	
<u>SECONDARY</u>								
Government	93.0	93.3	96.8	99.3	97.1	98.6	99.9	
Private	7.0	6.7	3.2	0.7	2.9	1.4	0.1	
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
	86	150	342	421	68	184	212	

(n=3357)

graduate credits, but no graduate degree. Unfortunately, there is no way to tell where these teachers had gone. Probably some went into doctoral programs, but certainly not all. The information about secondary teachers is particularly important since the increased educational requirement imposed by various states for regular teacher certification falls mostly on secondary teachers.

Sector of Teacher's Employment: The second type of career change that resulted in teacher turnover during the two-year period was the decision to leave local government employ and enter into the private sector. The teacher so acting may have chosen to work in a private elementary or secondary school, to work for himself, or to work in business or industry. In any event, he has left public education, and the question is whether or not this type of career decision is related to level of educational attainment. Table 9.4 indicates that greater proportions of male teachers left public school teaching than female teachers between 1960 and 1962. However, it is only among the female teachers that a direct relationship is indicated between educational attainment and leaving government employment. This is most evident among the degree holding female elementary teachers in the sample. More than three times as many master's degree holders moved out of their jobs as did bachelor's degree holders alone.

Male secondary teachers indicated increasing attachment to government employment with each increasing level of educational attainment. This is the only well defined relationship between educational attainment and exodus from government employment among the male teachers.

Occupational Change: The next type of career-change indicator to be analyzed in this chapter involves the decision to leave the professions of public school teaching for an altogether different occupation, or the less drastic decision to change to a markedly different level of public school teaching. The wide variety of new occupations chosen by the public school teachers of 1960 suggests that the motivation behind such moves may be quite complicated. Some teachers stepped out of the professions into occupations usually not taken by college graduates. Other public school teachers moved into higher types of professional activity. In this analysis, we will limit ourselves to exploring how educational attainment related to career movements, both to other levels of public school teaching and to positions wholly outside public education. Table 9.5 gives this information.

The largest proportion of occupational changes during the two-year period took place among the male elementary teachers, particularly those who attained the bachelor's

Table 2.5

NEW OCCUPATION OF TEACHER
ACCORDING TO HIGHEST DEGREE HELD
(Percent)

OCCUPATION 1962	Highest Degree 1960 - Male			Highest Degree 1960 - Female				
	No Degree	Bach.	Bach. Plus	Masters	No Degree	Bach.	Bach. Plus	Masters
<u>ELEMENTARY TEACHERS</u>								
Same Occupation	92.0	85.0	83.0	93.0	98.0	97.0	97.0	93.0
Secondary Teaching	0	7.0	8.0	5.0	1.0	2.0	0	0
Other Prof. Bach. & Cl.	8.0	8.0	9.0	2.0	1.0	1.0	3.0	7.0
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
n	36	46	119	120	473	459	254	183
<u>SECONDARY TEACHERS</u>								
Same Occupation	90.0	88.0	91.0	95.0	91.0	98.0	87.0	97.0
Elementary Teaching	0	2.0	1.0	1.0	4.0	1.0	4.0	2.0
Other Prof. Bach. Cl.	10.0	10.0	8.0	4.0	5.0	1.0	9.0	1.0
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
n	86	151	342	421	68	220	184	210

(n=3272)

degree and those who had attained an additional year or more of graduate credit. Comparing the first three levels of education, a slight but direct relation is indicated between the level of education and the proportion of teachers leaving elementary school teaching, moving to secondary teaching, and moving to other occupations.

The male secondary teachers include the second highest proportion of teachers who left their profession. Unlike the male elementary teachers, however, members of this group did not tend to move to another level of public education. Most male secondary teachers who changed occupations left teaching altogether. Educational attainment is inversely related to career change among secondary teachers. The more education possessed by the teacher, the greater his tendency to stay in his original profession.

The data on female teachers indicate that many secondary teachers as well as elementary teachers moved to other teaching occupations and to non-teaching occupations. Among the secondary teachers, nine times as many bachelors with graduate work as without graduate work moved out of education entirely. An obvious direct relation between the independent and the dependent variables is also indicated for those female secondary teachers switching to elementary education.

The smallest proportion of teachers switching profess-

ions occurs among the female elementary teachers. Relatively few members of this group switch to secondary teaching, in contrast to male elementary teachers. Female elementary teachers do, however, switch to non-teaching occupations, and the more education they possess, the greater the proportion exiting from the teaching profession. Those among this group who possess master's degrees are particularly prone to leave teaching altogether. In fact, the female elementary teachers of the Postcensal sample are unique in this respect. Other groups of teachers with master's degrees tend to remain in their professions, or to switch to another level of public school teaching; the opposite is the case among female elementary school teachers.

Long-Term Job Stability: Long-term job stability is measured by the number of employers for whom the respondent had worked up to 1962. Table 9.6 indicates the proportions of teachers, including some former teachers, at each level of educational attainment, who have held three or more jobs.

A high degree of similarity is found in the pattern of these results regardless of sex or type of teacher. In other words, all four different groups of teachers indicate a typical inverse relation between level of education and job change, comparing non-bachelor's degree

holders with teachers holding bachelor's degrees. However, the three levels of degree holders indicate increasingly larger proportions of teachers who have had three or more employers as educational attainment increases.

Differences are also indicated between the four basic groups in Table 9.6. Secondary teachers with college degrees are generally characterized by greater long-term job instability than elementary teachers, regardless of differences in educational attainment. Female teachers demonstrate more job instability than their male counterparts.

The relationship between educational attainment and job change can be examined more precisely by controlling for age.

Table 9.6

PROPORTION OF TEACHERS HAVING HELD THREE OR MORE EMPLOYERS ACCORDING TO EDUCATIONAL ATTAINMENT, BY ASSIGNMENT LEVEL, AND BY SEX

Assignment Level	Highest Degree 1960			
	No Degree	Bachelors	Bachelors Plus	Masters
Male: Elementary	(30) 37	(41) 17	(117) 22	(114) 40
Secondary	(76) 40	(153) 24	(343) 28	(422) 38
Female: Elementary	(411) 54	(479) 41	(254) 41	(176) 48
Secondary	(71) 52	(268) 40	(198) 48	(227) 50

Table 9.7

PROPORTION OF MALE TEACHERS HAVING HAD THREE OR MORE EMPLOYERS ACCORDING TO EDUCATIONAL ATTAINMENT, BY ASSIGNMENT LEVEL, AND BY AGE

Age	Highest Degree 1960			
	No Degree	Bachelors	Bachelors Plus	Masters
Elementary Teach.				
To 24	(5) 20	(9) 11	(10) 20	(0) 0
25 - 34	(12) 25	(21) 14	(64) 13	(31) 32
35 - 44	(4) 50	(5) 20	(28) 29	(41) 24
45 - 54	(5) 20	(5) 20	(10) 40	(33) 58
55 & More	(4) 100	(1) --	(5) 80	(9) 67
Secondary Teacher				
To 24	(6) 0	(21) 5	(28) 14	(1) --
25 - 34	(23) 26	(73) 14	(169) 15	(126) 27
35 - 44	(18) 39	(27) 41	(82) 37	(134) 35
45 - 54	(11) 73	(22) 45	(44) 43	(105) 46
55 & More	(18) 33	(10) 40	(20) 80	(56) 59

Among the male teachers listed in Table 9.7, in five out of the eight categories a positive relation is indicated between educational attainment and number of employers. It is primarily with the elementary teachers that more education, for degree holders, is associated with job instability. The opposite relationship is seen among high school teachers in the 35-44 and 45-54 age categories.

The figures for the female teachers, broken down by age are indicated in Table 9.8. They lack the uniformity of the results obtained for male teachers. The results

Table 9.8

PROPORTION OF FEMALE TEACHERS HAVING HAD THREE OR MORE EMPLOYERS ACCORDING TO EDUCATIONAL ATTAINMENT, BY ASSIGNMENT LEVEL, AND BY AGE

Age	Highest Degree 1960							
	No Degree		Bachelors		Bachelors Plus		Masters	
Elementary Teach.								
To 24	(34)	21	(63)	8	(25)	8	(2)	--
25 - 34	(42)	43	(127)	35	(59)	25	(30)	30
35 - 44	(63)	64	(106)	45	(51)	33	(39)	56
45 - 54	(161)	60	(127)	51	(94)	56	(70)	46
55 & More	(111)	55	(56)	55	(25)	72	(35)	63
Secondary Teacher								
To 24	(3)	--	(39)	5	(17)	6	(6)	33
25 - 34	(11)	46	(77)	35	(46)	28	(25)	28
35 - 44	(8)	50	(55)	49	(54)	56	(44)	48
45 - 54	(31)	61	(64)	49	(50)	60	(76)	53
55 & More	(18)	50	(33)	64	(31)	65	(26)	58

differ between two general age groups. Comparing elementary level bachelor's degree holders with teachers possessing the same degree plus graduate credits, an inverse relation between level of education and job change is noted for teachers under 45, but a direct relation exists for those teachers 45 years of age and older. The direct relationship is evident in 3 out of the 4 age categories of secondary teachers.

Opposite patterns of relationships are found among the elementary teachers when master's degree holders are compared with teachers possessing only graduate credits. Among

the younger half of the female sample, a direct relation between educational attainment and job change is indicated. The reverse situation holds for the older elementary teachers. The master's degree for the female secondary teachers is associated with lesser proportions of teachers with high job instability, compared to bachelor's degree holders.

Summary

In this chapter dealing with the Postcensal data, educational attainment was cross-tabulated against four different variables, three of which represented one type of career decision carried out during a two-year period between 1960 and 1962. It appears that the largest proportion of career decisions resulted in leaving the labor force and changing to another occupation. Decisions to change from public to private school teaching occurred much less frequently. In addition to these career changes, high proportions of teachers switch teaching jobs three or more times during their careers. The major findings in respect to the hypothesized relationship between educational attainment and these career changes are:

1. An inverse relation was found between level of education attained and the proportion of female teachers

who leave the labor force. Generally, the more education possessed by female teachers, excluding certain master's degree holders, the greater the tendency to remain within the labor force.

2. Female teachers less than 35 years of age are a special case. Those with master's degrees leave the labor force in greater proportions than those with more than one year's graduate education, but without the degree.

3. Occupational change is another form of turnover, which, for several types of teachers in the sample, increases as the level of education increases. This relationship is most in evidence for female teachers leaving the teaching profession entirely. Male secondary teachers are the strongest exception to this trend.

4. When educational attainment is cross-tabulated against number of past employers some feeling for the relationship of education to job instability is obtained. The most consistent finding is that teachers without a bachelor's degree are more unstable in their jobs than those teachers with bachelor's degrees. Comparisons between these two levels of educational attainment are useful for they are not provided by the Institute data.

Looking at bachelor's degree holders, in 7 out of 17 age categories increased graduate education equates with increased job instability, in 6 out of 17 cases in-

creased graduate education is inversely related to job instability, and in the remaining 4 cases little or no relationship is indicated. When bachelor's degree holders without graduate work are compared with master's degree holders it is found that 5 out of 8 age categories of male teachers indicate that more job instability is associated with the additional degree. Among the females, where job stability is generally higher, only in 3 out of 8 cases is more education linked to more job instability.

If for some degree holders it can be said that increased graduate education is linked with increased job instability, then, it can be further said that the link is strongest in the case of blocks of graduate credits than in the case of a graduate degree.

Chapter X

SUMMARY OF THE EMPIRICAL DATA AND CONCLUSIONS

Two completely different sets of survey data have been refined and analyzed in order to explore the relationship between educational attainment and teacher career change. The first set of data, originating with the Institute of Administrative Research, Teachers College, Columbia University, was drawn from a study of teacher characteristics conducted in 1962 involving full sampling of a large number of school systems. Three suburban school systems totaling 1,431 public school classroom teachers were selected from some 16 systems with a total of 19,999 teachers. Only the three selected suburban school systems contained all the data deemed necessary by the author of the present study.

The second set of data was drawn from a national sample of college-educated scientific and professional personnel, entitled A Postcensal Survey of Professional and Technical Manpower, conducted by the National Opinion

Research Center for the National Science Foundation. Elementary and secondary public school teachers were included among some 40 professions for which data was gathered in the Postcensal Survey. Some 1,400 male and some 2,465 female teachers were involved. They came from all types of localities and may be considered representative of American public school teachers.

The two sets of data, so far as practicable, were refined in order to make their analyses yield results that would be complementary and supplementary. Both sets of data cover the same time period, include only public school teachers, are controlled by sex, teaching level, and age, and provide indicators of graduate educational attainment and teacher career change. The various career-change indicators from both sets of data are of two general types: those indicators representing actual or intended career decisions which change the life pattern of individuals, and those indicators that in effect represent decisions to leave one school organization and join another.

The two sets of data differed in several respects. The Institute data is representative, to some degree, of suburban school systems, while the Postcensal data is representative of teachers of all types of public school systems. Another point of difference is with the inde-

pendent variable, educational attainment. The measures of educational attainment utilized from the Institute data are the bachelor's and master's degrees. The Postcensal data provides information, on "no degree" with an intermediate category between the bachelor's degree and the master's degree for those teachers with five or more years of college. Differences also exist in respect to information on career change. Data from the Institute sample are anticipations of future behavior while data from the Postcensal sample indicate actual past behavior.

The Hypothesized Relationship between Educational Attainment and Teacher Turnover

The primary hypothesis of this investigation has been simply this: the higher the level of graduate education of the inservice teacher, the greater will be the inclination towards career change. The preceding six chapters of the analysis provided a pattern of information which could be used to expand this hypothesis, and provide ancillary information as well. As each of the sets of cross-tabulations that made up an analytical chapter was reported, a particular dimension of the hypothesized relationship was brought into focus. This information will now be assembled, and overall results outlined. Then, conclusions will be drawn based

entirely on the results of the empirical data. In the next and final chapter, additional information obtained from personal interviews and from studies of the literature will be interjected. This broadened base of information will support comments on the nature of educational administration, particularly personnel administration, and recommendations for policy changes.

The overall results are presented according to the two previously distinguished types of job change: career-change decisions ("out") and participation-type decisions ("up" or "sideways").

A. Teachers Who Leave Public Education

1. Decisions on the part of young teachers to leave the labor force are considered the most important aspect of teacher turnover by many educational officials, and are correctly associated with female teachers. The data supports those who assume that, generally, turnover of this nature is inversely related to the teacher's level of educational attainment; graduate education serves to lock into the labor force those teachers who are already, to some degree, committed to teaching. The data goes beyond the general assumption, however, indicating two important exceptions. Among elementary and secondary teachers alike,

considerably larger proportions of master's degree holders leave their jobs and the labor force, than do those teachers with graduate credits but lacking their master's degree. Female elementary teachers between 25 and 44 years of age are the other exception. Higher educational attainment is associated with greater turnover when bachelor's degree holders are compared to teachers without degrees.

2. A change from a teaching to a nonteaching occupation is another significant source of teacher turnover.

Male teachers are much more prone to change their occupations than female teachers. When male teachers express a desire for change or actually do change, male elementary teachers tend to stay with education. However, male secondary teachers tend to seek positions outside the profession for which some portion of their education was intended and in which they started their working careers. The tendency among all types of female teachers making career changes of this nature is to move outside of education.

When these forms of turnover are examined in relation to educational attainment, the overview is one of increased turnover among the more educated teachers; the comparison is between college graduates with, and college graduates without, one or more years of advanced education. Male high school teachers are the chief exception to this

finding. Higher proportions of this group of teachers than the other three groups leave public education in general but the more educated male high school teachers tend to remain within their profession.

The master's degree is important in the case of the female elementary teachers who leave the professions of education. Those with this advanced degree are more prone to leave than those without it. In general, smaller proportions of master's degree holders leave teaching compared to teachers at other levels of education. When they do leave, however, they tend to leave public education altogether.

3. A third type of career decision involves changing from public school teaching, the government sector of the economy, to the private sector. For those wanting to remain in teaching, this could mean working in private nonsectarian or parochial schools, environments considerably different from that of public schools. Level of education was found to be directly related to turnover of this type when the bachelor's level was compared with the next higher level of educational attainment. Again, male high school teachers proved to be the exception to the trend.

B. Intra-Occupational Job Change

4. An expressed desire to move into educational administration was found to be particularly important among the male teachers. The greater the amount of graduate education possessed by male teachers, regardless of their level of teaching, the larger the proportion of those wishing administrative jobs. This trend, strongest among male elementary teachers, might be anticipated since advanced education is often required for entrance into educational administration.

5. Weight is given to the results obtained by analyzing long-term job stability because of the objectivity of this indicator of turnover.

Three out of the four groups of teachers demonstrated that more graduate education for them was associated with greater job instability (or greater job mobility, if the reader prefers). This indication resulted when college graduates with considerable advanced credits were compared with those without graduate credits.

6. The data for male teachers from the master's degree level of educational attainment complements the positive trends described above, according to results obtained from the Postcensal data.

7. Comparisons between those bachelor's degree holders with four years of education and those with five years indicate an inverse relationship between level of education and intended teacher job change. The trend, which only the Institute data was sensitive enough to yield, is generally evident among all indicators of turnover, especially with respect to junior high and senior high teachers.

8. An inverse relation between educational attainment and job change is also indicated in part by the Postcensal data. This applies to the important comparison of the no-bachelor's with the bachelor's levels of educational attainment. The inverse trend is also evident among female secondary teachers in respect to their decisions to change occupation.

Conclusions

The summarized results leave little doubt that many of those teachers who attain more graduate education are the same teachers who tend to leave the profession for which they were educated, or change jobs within the profession more frequently. This information supports the general hypothesis of the present study, that increasing the level of education of teachers results in greater staff

mobility.

It is felt that mobility is to some degree constructive to educational systems and to teachers. It is also felt that increased mobility is to some degree dysfunctional to educational systems and to teachers, leading to inefficiencies in the former and dissatisfactions to the latter. (see introductory chapter for discussion) This study was pursued out of concern for the dysfunctions.

A collateral purpose of this study was to obtain some feeling for the complexity of analysis necessary to obtain meaningful data on the relationships between teacher turnover and possible determinants of turnover, such as educational attainment. The results obtained indicate that a number of particular controls must be used if useful information is to be obtained about job-related teacher behavior. A minimum set of such factors would include sex, age, and type or level of teaching. Distinctions between public and private educational systems, and between urban and rural locations are also necessary. Microanalysis involving many factors, as well as automatic data processing, must be brought to bear on large samples of teachers, lest the researcher run the risk of missing aspects of teacher behavior that have important implications to educational administration.

While unrefined results would have generally supported the working hypothesis of this study, they would not have passed the "usefulness" test.

Career Decisions: A common "insight" of traditional studies of teacher turnover is that large proportions of young female teachers leave the labor market. In respect to this exodus, the present study suggests that graduate education has holding power over some young female teachers, or that those being held by other forces go into graduate studies. Minimally educated college graduates among female teachers tend to leave their teaching jobs for domestic roles, i.e. they never really wanted to teach or to teach for very long, in contrast to the more educated young female teachers. Equally important, however, is the knowledge that the master's degree lacks this holding power, and what is more, may even be associated with greater career change than lower levels of education. Apparently the change wrought on a teacher's psyche by one type of educational experience is quite different than that wrought by the other type of educational experience, or, the people are different.

The results of the present study attract attention to a second age group of female elementary teachers. This older age group warrants special attention because it embraces the second wave of new teachers, those en-

tering or re-entering the profession. Among this group of new, but not young, female teachers -- as well as previous-service female teachers -- large blocks of graduate credits are associated with larger proportions of dropouts from the labor force than is the case with teachers without graduate work.

The author sees two important types of relationships. Among the younger teachers, especially females, there is a tendency to leave teaching because experience on the job has shown the young teacher, or they already knew, that teaching lacks the appeal that domestic life or other job opportunities offer, or that teaching offers social traumas that other careers do not. Those among this group who entered the profession with graduate credits, or were quick to attain graduate credit on a part-time basis, had more invested economically in their profession, and perhaps had more psychological investment as well, and were inclined to resist the attractions of home life or other occupations. Support for this explanation may be offered by the figures on female part-time job holders, who were more numerous among the more educated than the less educated. (See Table 9.2) The more educated female teacher is prone to maintain house and family and to continue on the job. Those with less education would be con-

tent to leave teaching altogether. The first general type of relationship, then, is an inverse one between educational attainment and career change, reflecting what might be considered the holding power of education.

The second general type of relationship -- and the prime concern of this study -- is missed by traditional teacher turnover studies. It is inferred when increased education is found to directly relate to career change or job mobility. This trend becomes most evident after many of those who were not really committed to, or were frightened from, teaching have left the profession. Those remaining have had time to accumulate graduate education if so inclined, and many teachers are so inclined for various reasons, including unobtrusive and/or institutionalized social pressure. Advanced education, it is assumed, changes the job outlook of the inservice teacher. It is also assumed to change the characteristics of the job environment, particularly superior-subordinate relations. Lastly, it increases the attractiveness of the teacher to other employers both inside and outside education. It is this situation, influenced by the advanced education of the teacher, to which the second distinctive trend can be attributed -- a direct relation between educational attainment and teacher career or job mobility.

This relationship is explicit in the career changes of female teachers out of government employment and into the employment of private institutions, educational and otherwise. It is also evident in the movement of more educated male and female teachers out of their initial teaching profession and into other teaching professions and into nonteaching professions. It is implicit in the case of the increased proportion of male teachers desiring administrative positions once they have expanded their formal education. The hidden factors relevant here, especially in large school systems, are the diminutive proportions of administrative jobs available, the lack of mobility among administrators, and the relative unimportance of advanced education as a factor among other factors in selecting administrators. All of which factors may mean that the more educated teacher who has for years wanted to go "up" may in defeat switch his desires to "out."

Special consideration must be given to those teachers with no degrees, and to those teachers with master's degrees. Female secondary teachers without degrees are more prone to move out of their jobs than those with bachelor's degrees. Similarly, educated female elementary teachers, in contrast, are less prone to job mobility than their counterparts with bachelor's degrees. Could the reason for the greater turnover among secondary teachers be attributed to their displacement or threatened displacement by qualified teachers, or to an increasing discomfort as their associates attain higher levels of education and the accompanying rewards?

The female teacher with a master's degree is more prone to leave her teaching position than other female teachers with somewhat the same number of years of graduate education, but without the degree and what it represents. This relationship is typical among female teachers who leave the labor force, female elementary teachers changing from the government to the private sector, and among female elementary teachers changing to noneducational occupations.

The master's degree has the holding power for male teachers that it fails to possess for female teachers. In fact, while male high school teachers generally indicate the highest proportion of turnover, the relation between

educational attainment and turnover is, for them, inverse. Perhaps men teachers who stay in secondary teaching and take master's degrees do so because they want to teach and the attainment of a graduate degree means that they have mastered their subject. If such is the case one might further deduce in respect to female elementary teachers that subject mastery, and the master's degree, are less relevant to this level of teaching.

Decisions to Change Employers within Education:

Long-term job stability is considered the most meaningful indicator of intra-professional job stability among those considered. The relation between educational attainment and this type of stability, to which authorities in educational administration pay relatively little attention, is fairly consistent. All categories of teachers, except possibly male high school teachers, are more prone to change employers if they possess considerable graduate education than if they possess only their bachelor's degree. Teachers without degrees and teachers holding master's degrees continue to be seen as special cases because of their relatively high proneness to turnover. Teachers without degrees tend to move to other teaching jobs, more so than teachers with bachelor's degrees. Among the holders of master's degrees, male teachers rather than female teachers are more prone to change jobs than those without the ad-

vanced degree.

In short, it can be concluded that teachers with considerable graduate credits are generally more prone to job changes of any type than are teachers having acquired no credits beyond the bachelor's degree. When male master's degree holders, on the other hand, are compared with teachers who have attained perhaps an equivalent amount of graduate education but not the degree, a greater proportion of the master's group is found to change jobs. Teachers without degrees constitute a special group in this study. They are not involved in expanding the preliminary working hypothesis. They were included in the analysis, however, because they still represent a large proportion of the teacher population. Non-degree holders were, in a major government study, compared with bachelor's degree holders relative to the extent of the job commitment of beginning teachers. In this study, it was concluded that "from the bachelor's degree upward, the more education the beginning teacher has completed, the more committed he or she was. However, those with less than a bachelor's degree appeared to provide an exception to this pattern..."¹

The results of this study suggest that there is a difference between what is measured by expressed "job

¹W.S. Mason, The Beginning Teacher (Washington, D.C.: U.S. Government Printing Office, 1961), p. 116.

commitment" and what is measured by actual teacher turnover, whether it be the case for beginning teachers, or the case for teachers in general. The results obtained from the Postcensal data for long-term job stability, among teachers less than 24 years old, are directly opposite from the results obtained from the previous study of beginning teachers. Lest the results of the study of beginning teachers be generalized to include all teachers, it should be repeated that the overall results in this study support the existence of a pattern of increased teacher turnover with increased graduate education in sufficient proportions to call for new policies in respect to the professional development of teachers.

The results of the author's numerous different analyses of teacher career change have shown that teacher mobility is more complex than the commonly accepted picture of young female teachers with little experience leaving the labor force to marry and to raise a family. Sizable numbers of teachers at all levels of experience, many with considerable education, leave their jobs for various complicated reasons--as suggested by the nature of the career changes they make and by the various theoretical explanations for what some social scientists call avoidance behavior. The fact that young female teachers with higher levels of educational attainment leave their jobs in smaller proportions than those

with less education at the same level raises a question about the appropriateness of applying the adjective "unavoidable" to much of the teacher turnover. A consistently high proportion of turnover of various types suggests that male elementary teachers and female secondary teachers warrant special consideration in efforts to reduce teacher losses.

Advanced Education for Teachers

"More" educational attainment has not proved successful as a way of distributing financial rewards equally between elementary and secondary teachers, as a method for avoiding the injustices attributed to merit rating systems, as a way of raising the stature of the educational systems of particular states, and as a device for increasing the quality of education. High school teachers still tend to earn more compared to elementary teachers because they obtain more education and because numbers of highly educated elementary teachers change over to high schools. Arbitrary administrative decisions, such as those cited in criticisms of merit rating plans, continue to cause dissatisfaction with salary plans based in part on educational attainment. There is evidence that many more educated teachers are not given preference for promotion to higher-

paying positions. Among those states that have raised educational requirements for certification, the number of temporary certificates granted continues to remain large, year after year. In respect to the objective of increasing the quality of education by increasing the level of education of teachers, the quality of education remains virtually impossible to measure. Research on the relation between these two important factors continues to be conspicuously absent.

Some Recommendations on Methodology

Some recommendations for future studies of teacher turnover can be made at this point. In a sense some of these recommendations are shortcomings of the present study. The author believes it would be valuable to divide the female category into two categories. First would be single women, including those separated, divorced or widowed. The second new category would include married women with or without children.

Type of teacher should be categorized by level of teaching, i.e. elementary, junior high and senior high. Classroom teachers should be separated from assisting specialists.

An aspect of teacher turnover not commonly recognized as important is the time of dropout. Teachers leave their jobs throughout the teaching year, not just at the end of the school year. A questionnaire distributed in the spring misses earlier dropouts. A questionnaire distributed during the summer will find some teachers undecided whether or not they will return to the classroom in the fall.

Some Considerations for Further Study

In addition to educational attainment, there are other determinants to teacher career change that have failed to receive adequate attention. Some of these unexplored factors are the teacher's race, the teacher's scholastic achievement, the teacher's college specialization, the distance that the teacher lives from his job, and the size of the school system. Educational attainment itself warrants much more intensive study. This particular study, the first of its kind in respect to teachers, represents but a crude beginning. The author is well aware of the large amount of data, the great numbers of teachers, and the overburdening task of computation required to conduct teacher career change studies of sufficient complexity to produce usable results. Yet he is also aware that, with the availability

of computer technology, never before have studies been more possible to achieve.

In respect to the continued study of educational attainment, there is a need for empirical information on the psychological effects of advanced education on the individual. Does the teacher with 5½ years of graduate education harbor similar career expectations as the teacher with a master's degree? Consider the broader question -- Is the teacher with a graduate education motivated to strive for different needs on the job than the teacher without higher education? This relationship is often assumed, but lacks scientific support. The question as to how those who get advanced education differ socially and psychologically from those who don't warrant much greater exploration than was given in this study. It would also be good to distinguish those who obtain graduate degrees immediately after their bachelor's degree from those who return later on a full-time basis from those who advance their education part time. An even more pragmatic relationship, that between educational attainment and proficiency of performance, remains unexplored, at least in respect to teachers.

Not to be ignored in the list of considerations warranting further study is the validity of the response to questions pertaining to one's reasons for leaving his job.

There may be considerable repression, as well as ambiguity, in respect to reasons given for changing jobs. Questions of an emotionally neutral content, such as those pertaining to demographic characteristics and information about the new job might serve to elicit more useful information on turnover than questions asking why the teacher left his old job.

Chapter XI

POLICY IMPLICATIONS

The results of this study cannot be construed as proving that career change is detrimental nor can they be interpreted as implying that more education for teachers is a cause of increased career change. What the author has brought to light, he believes, is a provocative suggestion that educational attainment in some way influences the demonstrated propensity of teachers toward high rates of job and career mobility. One might say that this is too vague and tentative a finding to be useful to policy makers in the educational establishment. I feel that this criticism would be extremely well taken except for the existence of the completely unproven assumption that more educational preparation is synonymous with better functioning teachers -- an assumption that plays a major role in decisions within the educational establishment. The findings of this study, as well as other recent findings, raise certain suspicions about the validity of this far-reaching assumption.

Thus two separate modes of discussion would appear to be necessary in this concluding chapter, which deals with policy implications for educational administrators. The first

mode is limited strictly by the empirical results obtained. These results, modest though they may be, do suggest certain changes in respect to personnel policies regarding teachers. At the very least, the author believes, suggestions in this key will be welcomed by those administrators who believe (as many now do) that considerable innovation and inventiveness are necessary in the management of public school teachers.

The second mode of discussion is more outspoken (and vulnerable) in its approach to increasing the educational establishment's effectiveness in administering the teaching force. The results obtained from this exploratory and explanatory study are not conclusive enough to provoke major educational changes. However, I feel that the stakes are high enough to risk at least a first step toward a critical re-examination. While the data may not support comments of a sweepingly critical nature, what amounts to a torrent of criticism was uncovered by the author in an exhaustive examination of the relevant literature, in countless interviews with union officials, school principals, administrators of educational systems, parents of public school pupils, academic investigators of educational administration, and with scores of present and former school teachers. Granted, this type of data is impressionistic; but it is my opinion

that educational administration can profit from criticism that may not be fully substantiated by data. This second mode of discussion of policy implications is so labeled a few pages further on.

Policy Implications Suggested by the Empirical Data

1. More emphasis should be given to the placement of teachers rather than emphasizing simply their selection. This requires planning of promotional ladders, career counseling of teachers, coordination with other levels of education, as well as the establishment of a diversified system of rewards for those desiring to remain in their present jobs.

2. Establish orientation programs for beginning teachers and teachers being reassigned. This would serve the dual purpose of setting up a new type of higher-status job, the "teacher trainer," as well as helping novice teachers over the difficult breaking-in period when many young teachers flounder. The novice could well devote part of the summer to this purpose -- with pay.

3. Encourage continuing innovation and individuality by the local classroom teacher with the graduate degree. It is common practice to ignore such a teacher's potentiality for developing new approaches that suit local conditions.

4. If the teacher's increased educational attainments continue to be accorded high value for the educational administrator, then he should recognize that increased job mobility may be part of the price to be paid. Recognition of this relationship can lead to a more orderly compensatory schedule than would be the case where the costs are ignored. For one thing, recognition may lead to the career counseling of teachers which, if properly handled, would have a variety of positive consequences.

5. Investigate the job and career stability patterns of teachers with a view to determining what type of teacher is more stable in the type of school concerned. For example, the data suggests that the return of young married women to school teaching following child-caring could be hastened by such devices as in-school nursery schools, which would benefit teaching mothers as well as the community as a whole. The power of the teacher associations could help in this respect by lobbying for tax reforms for the working teacher, as well as for other professional mothers, who can't afford to pay for the domestic help that would make it possible for them to return earlier to their careers.

6. It has been suggested elsewhere that applicants to teacher colleges be screened more effectively: This is certainly a step in the right direction. However, the suggested remedy is too simple to be realistic. The influence of

undergraduate education on the future career aspirations of the student must be taken into consideration. Effective counseling in the first three years of college could be a more rewarding way of both encouraging potential teachers as well as discouraging the unsuited before they enter the classroom. A completely unexplored source is the liberal arts college, where teaching talent might be discovered and encouraged.

7. The recognition of the role of the school principal is also an aspect of this discussion. Voices have been heard within the educational establishment urging a de-emphasis of the academic role of the school administrator and an increased emphasis upon his role as a motivator and developer of the professional staff. These voices -- and whatever recommendations they may make -- should be given a hearing. Certainly increased sensitivity by administrators to problems of effective staff utilization cannot help but lead to increased awareness of the many ramifications of increased educational preparation upon teachers.

Policy Implications Suggested by Other Sources

Teacher career mobility can be viewed as a symptom

of long-needed changes in the administrative structure and practices of public school systems. Little significant improvement can be expected until far-sighted changes are made at all levels of public education. Educational systems have grown enormously large and the problems associated with public education have become too complex to be administered effectively by persons prepared and experienced only in education.

The management of large business organizations has been professionalized, the management of many government agencies has been professionalized, and the management of nonprofit organizations is currently under professionalization. Educational systems have yet to join this trend. The lack of an appealing, challenging environment for an invaluable human being, the public school classroom teacher, is but one example of the retarded evolution of educational administration.

Accordingly, these specific changes might be considered:

1. If their work year was of the same duration as managers in business and industry, administrators would have more time for planning, organizing, and counseling of teachers, once they were trained in these skills. Teachers, too, might reasonably develop greater attachment to their profession and employers if their work year were extended to an

eleven-month service period followed by a month's vacation period. The traditional ten-month work contract with a two-month intervening period in itself sets a climate for change. Time away from the teaching job encourages new job experiences as well as new contacts. If, indeed, teachers' salaries are still grossly inadequate, one way to raise them might be to grant an across-the-board 10% increase to compensate for the extension of the work year. This additional time could be used for purposes of training, retraining and orientation of new classroom teachers, reserving university education for the training of specialists. The close relationships with the administration and with fellow teachers so engendered -- relationships which are traditionally absent for teachers spending their entire working day with students -- could also make for greater local group cohesion and reduced turnover.

2. One might argue that increasing the teacher's work year to eleven months, if widely instituted, could put many summer schools for teachers out of business. This in itself could well be a favorable consequence. The little research that has been done on the economic returns of an investment in part-time graduate work for the teacher suggests that the average teacher does not profit from formal summer education.

Educators should encourage their state educational de-

partments to raise the educational requirements for certification only on the basis of a substantiated need, directly associated with job requirements. Studies of the ramifications of the various requirements for regular teachers' licenses are badly needed. Increasing the educational requirement serves, at least in the short run, to raise the proportion of nonregular teachers. Turnover is highest among this group, and the detrimental effect on the quality of education is more obvious with this group than with regularly licensed teachers.

3. The structure of educational systems is also in need of updating if teachers are to be thoroughly integrated into their organizations and motivated to develop professionally. This need has been recognized, at least superficially, in New York City. There is strong pressure to push some decision-making down to the local level, and even to permit the participation of parents in such local decisions as the selection of school principals. Unfortunately, what has not always been recognized is that the participants must be prepared for their new decision-making roles.

The need for other organizational changes is indicated by the case of the male elementary school teachers who, with increasing amounts of graduate education, increasingly aspire for administrative jobs, according to the results of the

present study. The same system that applauds the incentive to acquire higher levels of education frequently fails to reward those who heed these incentives. There is an apparent need for more administrative specialists at the local level, but with the condition that the candidates should first be intensively prepared for this new type of administrative role.

A final word must be inserted about the taxpayer. His children both enjoy the benefits of education and suffer from its deficiencies. The taxpayer pays the charges for both the benefits and the abuses.

Increasingly, the taxpayer is demanding a voice in the making of educational decisions. Thus, he needs information about the extent of the bill he pays for state-supported teacher education, about the commitment of teachers to their jobs, about the effectiveness of administration in selecting, placing and motivating teachers. Such information is particularly important to him since he has indicated a desire to have a stronger voice in the hiring of both teachers and administrators.

The taxpayer also needs to be educated about how his educational system affects all aspects of his community and how the community in turn influences the school system; for example, how the suitability of the community's living accommodations may influence teacher mobility.

The results of this study indicate that educational administrators must begin to recognize that teacher instability is a primary -- extremely complex -- factor affecting the quality of education. New and imaginative approaches are needed. The mere mechanical response of searching for replacements appears to be inadequate.

APPENDIX A

TABLES

Table A - 1. Percentage Of Classroom Teachers Desiring To Change Their Careers According To Their Level Of Educational Attainment, by Sex-Marital Status, by Teaching Assignment, and by Age (N = 929)

Teaching Assignment	Educational Attainment	Single-Male			Married-Male			Single-Female			Married-Female			
		to 29	30&M.	All	to 29	30&M.	All	to 29	30&M.	All	to 29	30&M.	All	
Elementary C.R.T.'s	Bachelors	71	100	78	71	60	65	84	23	107	72	13	92	164
	Masters	100	63	11	100	86	88	29	14	55	19	16	50	79
	All	80	70	75	83	77	80	113	23	173	91	13	152	243
Junior High C.R.T.'s	Bachelors	62	50	60	66	25	50	29	24	34	11	64	15	27
	Masters	100	67	80	70	54	56	7	43	14	29	20	10	25
	All	67	60	65	68	50	53	36	28	48	16	50	36	52
Senior High C.R.T.'s	Bachelors	83	0	55	50	54	53	15	20	22	18	0	0	0
	Masters	24	16	19	55	33	35	5	0	39	23	100	23	24
	All	50	14	28	52	36	38	20	15	61	21	16	26	32
All C.R.T.'s	Bachelors	69	43	63	63	48	55	124	25	163	87	17	111	198
	Masters	54	33	40	69	47	50	37	11	118	26	23	103	129
	All	64	35	50	66	47	51	161	22	281	113	19	214	327



Table A - 2, Educational Attainment Of Married-Male Teachers According To Three Different Social Background Factors, By Assignment-Level (in percent, tabulated two ways)

Teacher Educational Attainment	Father's Education			Either Parent Teacher		Offices in Ed. Association	
	El.&Jr.	Sr.Hi	College	Yes	No	None	One or more
Elementary Class Room Teacher							
Bachelor	11	17	0	0	13	24	0
Bachelor+	15	33	100	50	24	29	24
Master	37	17	0	50	26	14	43
Master+	37	33	0	0	37	33	33
All %	100	100	100	100	100	100	100
All Bach.	26	50	100	50	37	53	24
All Master	74	50	0	50	63	47	76
All %	100	100	100	100	100	100	100
n	27	12	2	2	38	21	21
Jr. High Class Room Teacher							
Bachelor	12	19	22	23	15	18	5
Bachelor+	9	10	55	15	8	9	5
Master	19	29	17	31	17	22	16
Master+	60	43	55	31	61	51	74
All %	100	100	100	100	100	100	100
All Bach.	21	29	28	38	23	28	10
All Master	79	71	72	62	77	72	90
All %	100	100	100	100	100	100	100
n	43	21	18	13	66	65	19
Sr. High Class Room Teacher							
Bachelor	5	6	0	0	4	5	0
Bachelor+	12	13	4	10	10	12	7
Master	34	38	17	0	35	29	37
Master+	49	44	79	90	50	53	57
All %	100	100	100	100	100	100	100
All Bach.	17	19	4	10	14	17	7
All Master	83	81	96	90	86	83	93
All %	100	100	100	100	100	100	100
n	65	32	24	10	98	92	30
All Levels of Teacher							
Bachelor	8	12	9	12	9	12	1
Bachelor+	12	15	9	16	12	13	11
Master	30	31	16	20	28	25	33
Master+	50	42	66	52	51	50	54
All %	100	100	100	100	100	100	100
All Bach.	20	28	18	28	21	25	13
All Master	80	72	82	72	79	75	87
All %	100	100	100	100	100	100	100
n	135	65	44	25	202	178	70

Table A - 3, Educational Attainment Of Single-Female Teachers According To Three Different Social Background Factors, By Assignment-Level (in percent, tabulated two ways)

Teacher Educat'l Attainm't	Father's Education			Either Parent Teacher		Offices in Ed. Association	
	El. & Jr.	Sr. Hi	College	Yes	No	None	One or M.
Elementary Class Room Teacher							
Bachelor	39	62	53	54	50	53	43
Bachelor+	11	8	15	12	10	12	9
Master	31	18	21	23	25	23	30
Master+	19	12	11	12	15	13	18
All %	100	100	100	100	100	100	100
All Bach.	50	70	73	65	60	65	52
All Master	50	30	27	35	40	35	48
All %	100	100	100	100	100	100	100
n	54	60	63	26	135	127	44
Jr. High Class Room Teacher							
Bachelor	43	43	67	87	43	56	11
Bachelor+	29	14	25	13	26	15	55
Master	7	33	8	0	20	15	33
Master+	21	10	0	0	11	13	0
All %	100	100	100	100	100	100	100
All Bach.	71	57	92	100	69	72	67
All Master	29	43	8	0	31	28	33
All %	100	100	100	100	100	100	100
n	14	21	12	8	35	39	9
Sr. High Class Room Teacher							
Bachelor	14	23	15	0	20	21	10
Bachelor+	7	23	20	27	16	21	10
Master	64	15	28	45	36	38	35
Master+	14	39	20	27	26	19	45
All %	100	100	100	100	100	100	100
All Bach.	21	46	35	27	37	43	20
All Master	79	54	65	73	63	57	80
All %	100	100	100	100	100	100	100
n	14	26	20	11	49	42	20
All Levels of Teacher							
Bachelor	35	49	41	47	42	47	30
Bachelor+	13	13	26	16	14	14	15
Master	33	21	22	24	27	25	31
Master+	18	18	11	13	17	14	23
All %	100	100	100	100	100	100	100
All Bach.	49	62	67	62	56	62	45
All Master	51	38	33	38	44	38	55
All %	100	100	100	100	100	100	100
n	82	107	95	45	219	208	73

Table A - 4. Educational Attainment Of Married-Female Teachers According To Three Different Social Background Factors, By Assignment-Level (in percent, tabulated two ways)

Teacher Educational Attainment	Father's Education			Either Parent Teacher		Offices In Ed. Association	
	El.&Jr.	Sr.Hi.	College	Yes	No	None	One or More
Elementary Class Room Teacher							
Bachelor	48	47	50	53	47	50	41
Bachelor+	20	21	16	18	20	19	24
Master	19	21	21	15	22	18	26
Master+	13	11	13	15	12	13	9
All %	100	100	100	100	100	100	100
All Bach.	68	68	66	71	66	69	65
All Master	32	32	34	29	34	31	35
All %	100	100	100	100	100	100	100
n	85	97	56	34	200	188	54
Jr. High Class Room Teacher							
Bachelor	38	31	18	27	26	31	0
Bachelor+	38	25	6	18	24	22	16
Master	13	37	59	46	37	33	67
Master+	13	6	18	9	13	13	16
All %	100	100	100	100	100	100	100
All Bach.	75	56	24	45	50	53	16
All Master	25	44	76	55	50	47	84
All %	100	100	100	100	100	100	100
n	16	16	17	11	98	45	6
Sr. High Class Room Teacher							
Bachelor	8	0	23	0	9	16	0
Bachelor+	15	29	8	14	14	12	25
Master	46	43	31	43	45	48	13
Master+	31	29	38	43	32	24	63
All %	100	100	100	100	100	100	100
All Bach.	23	29	31	14	23	28	25
All Master	77	71	69	86	77	72	75
All %	100	100	100	100	100	100	100
n	13	7	13	7	22	25	8
All Levels of Teacher							
Bachelor	42	43	40	40	40	43	32
Bachelor+	22	22	13	17	20	19	24
Master	21	24	30	25	26	24	28
Master+	15	12	17	17	14	14	16
All %	100	100	100	100	100	100	100
All Bach.	64	64	52	58	60	62	56
All Master	36	36	48	42	40	38	44
All %	100	100	100	100	100	100	100
n	114	120	86	52	260	258	68

APPENDIX B**INSTITUTE QUESTIONNAIRE**

Institute of Administrative Research

**A Study of
Staff Characteristics**

Your school district is cooperating with the Institute of Administrative Research and its affiliated schools throughout the country in a study of characteristics of professional staffs. The implications that the findings of such a study as this can have for recruitment, orientation and in-service training of school professionals are obvious. In addition to immediately useable findings which will accrue to you, the data will continue to be analyzed for broader application to education in general.

Your school's data will be analyzed as a unit; no reference will be made to individuals.

As a professional person interested in improving the quality of all schools, and yours in particular, we trust that you will want to become a part of this important enterprise by completing the questionnaire. It should take less than 20 minutes of your time.

**Copyright, 1962
Institute of Administrative Research
Teachers College, Columbia University**



Please tell us about yourself:

4. Age: 1 under 25 2 25-29 3 30-34 4 35-39
 5 40-44 6 45-49 7 50-54 8 55-59
 9 over 59
5. Sex: 1 male 2 female
6. Marital status: 1 single 2 married 3 widowed
 4 divorced 5 separated
7. Place of birth: _____
 (City and state)
8. If you have children of your own, write their ages on the lines below.
 (list from oldest to youngest.)
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____
9. How many children were in your parental family (including yourself)? _____
10. Please check the highest level of education completed by:
- (a) Your father: 1 elementary (K-6) 2 junior high (7-9)
 3 senior high (10-12) 4 college graduate
 5 graduate school
- (b) Your mother: 1 elementary (K-6) 2 junior high (7-9)
 3 senior high (10-12) 4 college graduate
 5 graduate school
11. Was either of your parents a teacher? 1 Yes 2 No



Please describe your training:

12. As to degrees earned:

Name the Institution	Located in What State or Foreign Country?	Degree	Major Field	Year Began	Year Completed

please go on >

13. (a) How many years of training (college or university, undergraduate and graduate) have you completed beyond high school? (Consider 30 semester hours or equivalent equal to 1 year.)

- 1 less than 4 2 4 3 4½ 4 5 5 5¼
6 6 7 6½ 8 7 or more

(b) When did you last take a course for college credit? (Indicate the year; if currently enrolled, write "now.") _____

(c) When did you last take a course for in-service credit? (Indicate the year; if currently enrolled, write "now.") _____

(d) If the credits indicated above are in preparation for a degree or diploma, what is it? _____ In what major field? _____

14. Where did you live while attending:

(a) Undergraduate school?

- 1 at home 2 at school 3 other

(b) Graduate school?

- 1 at home 2 at school 3 other

15. How did you finance your undergraduate education? (Check all that apply)

- 1 family 2 self-supported (what percent?) _____
3 scholarship or fellowship 4 government (e.g. G.I. Bill)
5 other _____

(Kindly specify)

16. Kindly check each subject below in which you had at least one undergraduate course

- | | | |
|---|--|---|
| 1 <input type="checkbox"/> Accounting | 11 <input type="checkbox"/> Economics | 21 <input type="checkbox"/> Languages (Classical) |
| 2 <input type="checkbox"/> Agriculture | 12 <input type="checkbox"/> Education | 22 <input type="checkbox"/> Law |
| 3 <input type="checkbox"/> Anthropology | 13 <input type="checkbox"/> Engineering | 23 <input type="checkbox"/> Mathematics |
| 4 <input type="checkbox"/> Architecture | 14 <input type="checkbox"/> English | 24 <input type="checkbox"/> Music |
| 5 <input type="checkbox"/> Art (Fine) | 15 <input type="checkbox"/> Geography | 25 <input type="checkbox"/> Philosophy |
| 6 <input type="checkbox"/> Art (Industrial) | 16 <input type="checkbox"/> Geology | 26 <input type="checkbox"/> Physical Education |
| 7 <input type="checkbox"/> Astronomy | 17 <input type="checkbox"/> Government | 27 <input type="checkbox"/> Physics |
| 8 <input type="checkbox"/> Biology | 18 <input type="checkbox"/> History | 28 <input type="checkbox"/> Political Science |
| 9 <input type="checkbox"/> Business | 19 <input type="checkbox"/> Journalism | 29 <input type="checkbox"/> Psychology |
| 10 <input type="checkbox"/> Chemistry | 20 <input type="checkbox"/> Languages (Modern) | 30 <input type="checkbox"/> Religion |
| | | 31 <input type="checkbox"/> Sociology |

please turn over



Please describe your career:

17. List your work experiences in education and outside education in chronological order beginning with your present position ("Grade Level" and "School System" do not apply to non-teaching jobs).

Descriptive Title	Grade Level	School System	State	Year Began	No. of Years

18. Immediately before you were employed in your present position did you live

- In this school district?
 Outside the school district, but in the state?
 Outside the state?

19. (a) To how many national, state, or local education organizations or societies have you belonged in the past three years? _____

- (b) How many offices (such as president, chairman, secretary, etc.) have you held in the organizations referred to in (a)? _____

please go on >

20. (a) To how many national, state, or local non-education organizations or societies have you belonged in the past three years? _____

(b) In how many of the organizations referred to in (a) have you held office? _____

21. On how many committees in your own building or school system have you served in the past three years? _____

22. How far from the building in which you work is your home?

(In miles) _____

23. Have you written any books which have been published? (If yes, please list; if no, write "none.")

24. How many articles have you written on any subject which have been published outside your own school system? _____

25. (a) Do you feel you will remain in your present type of position throughout the remainder of your career? Yes No

(b) If you have answered "no," into which field do you contemplate a change?

supervision

pupil personnel services

administration

college teaching

out of the profession other _____

(Kindly specify)

please go on >

APPENDIX C

POSTCENSAL QUESTIONNAIRE

This inquiry is authorized by Act of Congress (13 U. S. C.). The report you submit to the Census Bureau is confidential and may be seen only by sworn Census employees. It may not be used for purposes of taxation, investigation, or regulation.

Control No. (60)

FORM 1-60
(8-1-62)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

POSTCENSAL STUDY OF PROFESSIONAL AND TECHNICAL MANPOWER

Section I - CURRENT EMPLOYMENT

In this section we are interested in finding out about your work, the people you work with, and your attitudes toward work.

A. YOUR WORK STATUS

1. What were you doing last week? (Check one)

1 <input type="checkbox"/> Working full time	}	(Skip to Question 2)	4 <input type="checkbox"/> Not employed, but looking for work	}	(Go to Question 2)
2 <input type="checkbox"/> Working part time			5 <input type="checkbox"/> Not in labor force		
3 <input type="checkbox"/> With a job but not at work (on vacation, sick leave, etc.)			(retired, housewife, student, etc.)		

2. If you were not working last week, when did you last work?
(Answer and go to Section II beginning on Page 4)

Month	Year
-------	------

OR Never worked (Skip to Page 6, Section III)

ANSWER QUESTIONS 3-7 IN TERMS OF YOUR MAJOR CURRENT EMPLOYMENT ONLY

3. YOUR JOB OR BUSINESS

a. For whom did you work last week? (Name of company, business, organization or other employer.)	DO NOT WRITE HERE
--	--------------------------

b. In what kind of business, industry, or organization were you working? (For example: city hospital, state university, road construction firm, county junior high school.)

c. Were you working - - (Check one)

1 <input type="checkbox"/> For a PRIVATE employer for wages, salary, commission or tips?	}	(Skip to Question 6)	3 <input type="checkbox"/> In OWN business or profession or farm for profit or loss?
2 <input type="checkbox"/> For GOVERNMENT? (Federal, State, local, public school system, etc.)			4 <input type="checkbox"/> WITHOUT PAY on family farm or business?

(If 1 or 2 checked in Question c):

d. What is your current yearly salary rate? (Omit cents) \$.00

e. What kind of work were you doing? (For example: civil engineer, nuclear physicist, professor of economics, 9th grade social studies teacher.)

f. In what field of specialization was this? (Fill in the code number from the enclosed list which best describes your field.)

Code

g. If you were working in a subspecialty within this field, what was it called?

h. Describe what you did in your job. (For example: "Designer of electronic mechanisms in the industrial instrument industry; supervise six other engineers whom I have hired for my unit; prepare reports on the work of my unit.")

i. What was the formal title of your job?

4. How many hours a week do you work in this job or business?

Hours per week

5. How many years have you been working in this company, business or organization?

No. of years

OR Less than one year

(Section I continued)

6. How many weeks did you work in 1961 of all jobs, either full-time or part-time?
(Count paid vacation, paid sick leave, and military service as weeks worked.) (Check one)

1 13 weeks or less 3 27 to 39 5 48 to 49
 2 14 to 26 4 40 to 47 6 50 to 52 OR 0 Did not work in 1961

7. YOUR EARNINGS IN 1961:

a. How much did you earn in 1961 in salary and commissions from your major position (before taxes and other deductions)? If you did not work the entire year at this job, give what would have been your yearly salary.

OR - - IF YOU ARE SELF-EMPLOYED:
How much did you earn in 1961 in profits or fees from working in your own business, professional practice or partnership (net income after business expenses)?

Amount \$ _____ .00
(Estimate to the nearest hundred dollars) (Omit cents)
OR 0 None

b. In addition to your major position, did you receive any earnings in 1961 from any of the following sources?
(Check as many as apply)

1 Consulting 3 Lectures 5 Other secondary job
 2 Publications 4 Other professional activities

Estimate to the nearest hundred dollars the amount you received from all of these sources in 1961 (before taxes and other deductions but after deducting any business expenses).

Amount \$ _____ .00
(Omit cents)
OR 0 None

B. YOUR ACTIVITIES

8. Here is a list of activities which may be part of your work in your major current position.
(Please check all activities which you perform in this position.)

Code No.	Code No.
01 <input type="checkbox"/> Teach courses	16 <input type="checkbox"/> Travel
02 <input type="checkbox"/> Recruit, train people in the organization	17 <input type="checkbox"/> Constructing equipment, apparatus, prosthetic devices
03 <input type="checkbox"/> Engage in basic research	18 <input type="checkbox"/> Treating patients
04 <input type="checkbox"/> Engage in applied research, or product development	19 <input type="checkbox"/> Counseling clients, students
05 <input type="checkbox"/> Administering or supervising research or development	20 <input type="checkbox"/> Supervising production or construction
06 <input type="checkbox"/> Consult or advise clients or customers on technical matters	21 <input type="checkbox"/> Writing technical and general reports on projects
07 <input type="checkbox"/> Make drawings, blueprints, models	22 <input type="checkbox"/> Coordinating activities of professionals at my level in the organization
08 <input type="checkbox"/> Make forecasts, estimate markets	23 <input type="checkbox"/> Keep records
09 <input type="checkbox"/> Exploration; or field work	24 <input type="checkbox"/> Statistical analysis
10 <input type="checkbox"/> Design or modify equipment, machinery, processes of production	25 <input type="checkbox"/> Technical sales
11 <input type="checkbox"/> Supervise the work of assistants or subordinates	26 <input type="checkbox"/> Negotiating contracts or raising funds
12 <input type="checkbox"/> Quality control; set precision standards	27 <input type="checkbox"/> Briefing superiors on my work
13 <input type="checkbox"/> Public relations, publicity work, speeches	28 <input type="checkbox"/> Plan future operations
14 <input type="checkbox"/> Budgeting, costing, controlling, allocating expenditures	29 <input type="checkbox"/> Compile and annotate bibliography; search and select literature
15 <input type="checkbox"/> Test new or experimental equipment	30 <input type="checkbox"/> Other, What? _____

9. Of all those you checked above, which TWO do you spend the most time doing?
(Fill in their code numbers and write in the approximate percent of total time spent in each of these activities.)

Activity	Code number	Percent of time
FIRST		%
SECOND		%



C. PEOPLE YOU WORK WITH

10. About how many people work in the smallest organizational unit to which you belong in the business, industry, or organization in which you work?

- Elementary and secondary teachers: check the number of teachers in your school. (Check one)
1 [] Less than 10
2 [] 10 to 24
3 [] 25 to 49
4 [] 50 to 99
5 [] 100 to 249
6 [] 250 to 499
7 [] 500 or more

11. How many employees are DIRECTLY responsible to you? (Include both professional and nonprofessional.)

Number of people

OR 0 [] None

12. Are you -- (Check one)

- 1 [] An administrator (concerned mainly with policy making, planning, overall supervision)
2 [] A supervisor (concerned mainly with technical matters)
3 [] A coordinator (concerned mainly with liaison)
4 [] Other (not mentioned)

13a. Do you -- (Check as many as apply)

- Code No.
1 [] Work with other specialists in your field
2 [] Work individually, with little or no consultation with others
3 [] Work as an individual consultant to others
Code No.
4 [] Work as a member of a team made up of specialists from your field and other fields
5 [] Work as a member of a team made up of specialists in other fields
6 [] Other. What? _____

b. Of all those you checked above, which ONE do you spend the most time doing? (Write in the box the code number from 13a.)

Code

14. This question is about your immediate supervisor.

If you have no immediate supervisor check here [] 0 and skip to Question 15

DO NOT WRITE HERE

a. What kind of work does he do? (For example: civil engineer, nuclear physicist, professor of economics, junior high school principal.)

b. In what field of specialization does he work? (Fill in the code number from the enclosed list.)

Code

D. ATTITUDES TOWARD WORK

15. Listed below are some characteristics which occupations may have.

- a. Please indicate by checking the appropriate box how important each one is to you.
b. Also check the appropriate box to indicate how well your current major employment satisfies you with respect to each characteristic.

Table with columns: Occupational Characteristics, a. Importance to you (Very, Somewhat, Little or none), b. Degree of satisfaction (Very, Somewhat, Little or none). Rows include characteristics like 'Opportunity to be original and creative' through 'Opportunity to work with ideas'.

E. CURRENT ADDITIONAL JOB OR BUSINESS
(Defined as a job not with your primary employer)

16. Did you have a second regular job or business last week? (Exclude any work with your major current employer.)		DO NOT WRITE HERE
1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No (Skip to Section II)	
17. In your second regular job or business:		
a. What kind of business, industry, or organization were you working in? (For example: city hospital, state university, road construction firm, retail drug store.)		
b. Were you working - - (Check one)		
1 <input type="checkbox"/> For a PRIVATE employer for wages, salary, commission or tips?	3 <input type="checkbox"/> In OWN business or profession or farm for profit or fees?	
2 <input type="checkbox"/> For GOVERNMENT? (Federal, State, local, public school system, etc.)	4 <input type="checkbox"/> WITHOUT PAY on family farm or business?	
c. What kind of work were you doing? (For example: medical technician, research assistant in chemistry, civil engineer, sales clerk.)		
d. In what field of specialization did you work? (Fill in the code number which best describes your field from the enclosed list.)		Code
18a. Does your additional job involve - - (Check one)		
1 <input type="checkbox"/> Year-round employment	2 <input type="checkbox"/> Seasonal employment only	
b. How many hours a week do you usually work in this job or business?		Hours per week

Section II - PAST EMPLOYMENT

In this section we are interested in your past work history, especially your work situation in April 1960 (when the Decennial Census was taken) and your first full-time job after reaching age 24.

A. APRIL 1960

1. What were you doing in April 1960? (Check one)		} (Answer next Questions)	DO NOT WRITE HERE
1 <input type="checkbox"/> Working (include part-time work)	5 <input type="checkbox"/> Keeping house		
2 <input type="checkbox"/> With a job but not at work (on vacation, sick leave, etc.)	6 <input type="checkbox"/> Student		
3 <input type="checkbox"/> Looking for work	7 <input type="checkbox"/> Unable to work -		
4 <input type="checkbox"/> Retired (i.e., on pension, annuity, etc.)	8 <input type="checkbox"/> Other (Specify)		
2. When did you last work full time before April 1960 in your most recent field of specialization?		Month	Year
3. YOUR JOB OR BUSINESS:			
a. In April 1960, or on date you indicated in Question 2, for whom did you work? (Name of company, business, organization or other employer.)			
b. What kind of business or industry were you working in? (For example: city hospital, state university, road construction firm, county junior high school.)			
c. Were you working - - (Check one)			
1 <input type="checkbox"/> For a PRIVATE employer for wages, salary, commission or tips?	3 <input type="checkbox"/> In OWN business or profession or farm for profit or fees?		
2 <input type="checkbox"/> For GOVERNMENT? (Federal, State, local, public school system, etc.)	4 <input type="checkbox"/> WITHOUT PAY on family farm or business?		
d. What kind of work were you doing? (For example: civil engineer, nuclear physicist, professor of economics, 9th grade social studies teacher.)			
e. In what field of specialization did you work? (Fill in the code number which best describes your field from the enclosed list.)			Code

3. f. Describe what you did in your job. (For example: "Designer of electronic mechanisms in the industrial instrument industry; supervise six other engineers whom I have hired for my unit; prepare reports on the work of my unit.")		DO NOT WRITE HERE
g. How many years did you work in this company, business, or organization?		No. of years

B. WAS YOUR FULL-TIME CIVILIAN JOB HELD UPON REACHING AGE 24 OR IF NOT WORKING, THEN THE FIRST ONE HELD THEREAFTER THE SAME AS YOU DESCRIBED IN QUESTION 3?

- Check here if you are now under age 24 and skip to Part C, General Employment
 Yes (Skip to Part C, General Employment)
 No (Go to Question 4)

4. In what year did you enter this job (the job held upon reaching age 24 or the first one held thereafter)?	Year	DO NOT WRITE HERE
--	------	-------------------

5. a. What kind of business, industry, or organization were you working in? (For example: city hospital, state university, road construction firm, county junior high school.)	Kind of business	
--	------------------	--

- b. Were you working at that time -- (Check one)
- | | |
|---|--|
| 1 <input type="checkbox"/> For a PRIVATE employer for wages, salary, commission or tips? | 3 <input type="checkbox"/> In OWN business or profession or farm for profit or fees? |
| 2 <input type="checkbox"/> For GOVERNMENT? (Federal, State, local public school system, etc.) | 4 <input type="checkbox"/> WITHOUT PAY on family farm or business? |

c. What kind of work were you doing? (For example: civil engineer, nuclear physicist, professor of economics, 9th grade social studies teacher.)	Kind of work	
--	--------------	--

d. In what field of specialization was this? (Fill in the code number which best describes your field from the enclosed list.)	Code	
--	------	--

e. Describe what you did in your full-time job at that time:	
--	--

6. How many years did you work in this company, business, or organization?	No. of years	
--	--------------	--

C. GENERAL EMPLOYMENT
 (If you are presently working (either full-time or part-time) please answer Questions 7 to 10.)
 (If you are not now working please answer only Questions 9 and 10.)

7. How many years have you ever worked either full-time or part-time in your present field of specialization?	No. of years	
---	--------------	--

8. How many different employers have you ever had in your present field of specialization?	No. of employers	
--	------------------	--

9. Are there any other fields of specialization in which you worked for at least one year besides those you have already listed? (Fill in their code numbers from the enclosed list.)	Field	Code
	FIRST	
	SECOND	

10. Did you ever work full-time for at least six months in any of the following? (Check as many as apply)	
01 <input type="checkbox"/> Federal Government (includes all civilian employees of Federal Government agencies; also Federal hospitals. Does not include military service.)	08 <input type="checkbox"/> Hospital, clinic, welfare organization (except government)
02 <input type="checkbox"/> State or local government (includes state or municipal hospitals, but excludes public schools or universities)	09 <input type="checkbox"/> Professional partnership
03 <input type="checkbox"/> Public college or university	10 <input type="checkbox"/> Other private business or industry
04 <input type="checkbox"/> Private college or university	11 <input type="checkbox"/> Independent consulting work
05 <input type="checkbox"/> Public elementary or secondary school	12 <input type="checkbox"/> Other self-employment
06 <input type="checkbox"/> Private elementary or secondary school	13 <input type="checkbox"/> Foreign government or international agency
07 <input type="checkbox"/> Research organization or institute (except government or university)	14 <input type="checkbox"/> Career in Armed Forces
	15 <input type="checkbox"/> Other (not mentioned) (Specify)

8. Which of the following items listed below contributed most significantly to your becoming qualified for your present job? (Check as many as apply)

- V Check here if you are not currently employed
- 1 Experience in present or related field of employment
- 2 Course work at a college or university without a degree
- 3 Acquired a B.A., B.Sc., etc.
- 4 Acquired a graduate or professional degree
- 5 Course work at a technical institute
- 6 Course work at Junior or Community College
- 7 Post-high school courses at a vocational or technical high school
- 8 Correspondence courses
- 9 Special training or courses given by employer
- 0 Other (Please specify) _____

9. Do the qualifications for your present job require a license or a certificate?

- 1 Yes **7**
- 2 No (Skip to Question 11)

10a. Do you presently have such a license or certificate?

- 1 Yes **7**
- 2 No (Skip to Question 11)

b. Is this a standard license or certificate representing full qualifications?

- 1 Yes
- 2 No

11. Have you ever received or are you currently receiving any of the following types of training?

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Skip to Question 12) | <p>Code No.</p> <ul style="list-style-type: none"> 01 Apprenticeships 02 Company training programs (other than apprenticeships) 03 Military training applicable to civilian occupations 04 On-the-job training 05 High school extension courses | <p>Code No.</p> <ul style="list-style-type: none"> 06 Home study correspondence courses 07 Agricultural training courses 08 United States Armed Forces Institute courses 09 Work-Study Programs 10 Workshops, Seminars, etc. |
|---|--|---|

(If "Yes," give the name of the organization or institution providing this training received and enter the other information as requested. Do not repeat the training listed in Question 6, Page 6.)

Name of sponsoring institution or organization	Type of training (Code No. from above list)	Subject of training	Weeks of training	Year ended	Did you complete this course?		With G.I. Bill or Voc. Rehab. aid from VA	
					Yes	No	Yes	No
				19__				
				19__				
				19__				
				19__				
				19__				
				19__				

12. This question is for United States Veterans of World War II or the Korean Conflict.

Not a veteran of either (Check here and go to Section IV)

a. Did you receive any formal vocational counseling, including aptitude testing, from - (Check one)

- 1 Veterans Administration or VA Guidance Center
 - 2 A source other than VA
 - 3 Both VA and other source
 - 4 Never had any such vocational counseling (Please skip to Section IV)
- (Please answer "12")

b. Was this counseling significantly useful to your career?

- 1 Yes
- 2 No

Section IV - BACKGROUND INFORMATION

In order to aid us in interpreting the information elsewhere in the questionnaire, we need now to know something about your background and personal characteristics.

1. Age (at last birthday) Years 2. Sex 1 Male 2 Female

3. Citizenship: (Check one) 2 Not a citizen of the United States but have taken out first citizenship papers 3 Not a citizen of the United States and have not taken out papers for citizenship
 1 Citizen of the United States

4. Where is your residence? State County

5. Where did you grow up? (Where did you live most of the time before age 16?)
 1 In a large city (100,000 population or more) 3 In a small or middle-sized city or town (under 100,000 population) but not in a suburb of a large city 5 On a farm
 2 In a suburb near a large city 4 Open country (not on a farm)

DO NOT WRITE HERE

6. What kind of work did your father do when you were about 16 years old?
 (For example: 8th grade English teacher, paint sprayer, farm hand, civil engineer.)

7. How many people (including your spouse, children or other relatives, as applicable) are now financially dependent upon you? Number of people

8a. What is your present marital status?
 1 Never married (Skip to Question 9) 3 Separated or divorced
 2 Married 4 Widowed

b. How many children do you have?
 (Enter the number in the appropriate spaces.)

	If none, check here 0 <input type="checkbox"/>	
	Children	Boys Girls
1. Under 5 years		
2. 5 through 10 years		
3. 11 through 18 years		
4. Over 18 years		

9. Are you currently a member of any professional society or association?
 (For example: American Physiological Society, Michigan Engineering Society, New Orleans Academy of Sciences.)
 1 Yes 2 No (Go to Question 10)
 Please list the names of all these organizations.

10. Have you published any professional articles or books OR have you delivered any papers at professional meetings?
 1 Yes 2 No

Please use this space to further explain any of the preceding answers.

FOR CENSUS USE ONLY	A.	B.	C.



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