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ABSTRACT

A survey was conducted of 2933 University of Michigan graduates who had obtained teaching certificates from 1946 to 1976. Information was sought on teacher career patterns and what teachers see as important criteria for professional success. An attempt was made also to ascertain how many graduates have persisted as teachers and, if they have not, what careers they have pursued. A second purpose of the study was to compare certified teachers who had continued to pursue teaching careers with those who, either initially or after a few years of teaching, had chosen some other occupation. In this summary report of results, the respondents are described in some detail, and information is provided for the entire group when it is pertinent. Comparisons are given of the responses of "career teachers" and other fully employed individuals. Respondents were asked for information on: (1) initial employment; (2) future career prospects; (3) appropriateness of their education; (4) satisfaction with life and progress; (5) satisfaction with their education; and (6) factors which should be used in evaluating teachers. Thirty-seven tables present comparisons of responses between career teachers and non-educators in specific areas and responses to other items on the survey. This report is limited by response frequencies and some preliminary statistical tests to identify possible differences in mean responses between the groups on particular items. In a number of forthcoming articles, the data will be examined in more detail. (JD)

Teacher Certificate Recipients at the University of Michigan 1946 through 1976: A 1980 Follow-up Study

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Teacher Certificate Recipients at the University of Michigan 1946 through 1976: A 1980 Follow-up Study

During spring 1980, several researchers at the University of Michigan School of Education conducted a survey of graduates who had obtained teaching certificates from 1946 to 1976. The primary purposes of the study were 1) to learn more about teacher career patterns; 2) to gain some notion about what teachers perceive as important criteria of professional success and the extent to which they have achieved these goals; 3) to ascertain how many graduates have persisted as teachers and, if they have not, what careers they have pursued; 4) to assess the types of skills and abilities graduates use on the job, whatever their job may be; and 5) to test the accuracy of some common beliefs that surround teaching, particularly those that receive attention from the media. Included in this last category are questions such as: Do individuals trained as teachers and not employed as teachers end up in low level positions where their training is neither required nor used? Are most teachers dissatisfied with their jobs? Do teachers feel they are "locked in" with few career options? Do teachers resist all or most performance measures that might be used to evaluate their work? What do teachers view as the most important use of their time? Do they really put the picket-line before the needs of children? As can be seen this study differed from most alumni surveys since input for curricular change was only one of its purposes.

In asking many of these questions we judged it important to compare the responses of graduates who had persisted in a teaching career with responses of those who had entered other fields of endeavor. One problem of previous studies of teacher perceptions has been that they gathered opinions only from teachers thus precluding comparisons with other groups. A second deficiency in earlier studies has occurred when opinions of groups of teachers in a school system or state at a given point in time have been at-

tributed to career teaching professionals. It is well-known (Mark and Anderson, 1978) that many respondents in such studies are not career teachers but transients who will leave the profession before completing five years. Thus, in all of our comparisons teachers are defined as those who have persisted for at least five years. In attempting to gather data to overcome these two deficiencies, we sacrificed some representativeness by using a population from one university. We recognized that University of Michigan graduates are not representative of all teachers, nor are graduates who did not continue to teach representative of individuals in other occupations in the United States. Yet, a common educational background and, to some extent, a common initial professional choice makes these two groups who eventually chose different career paths worthy of comparison if teaching careers are to be placed in perspective.

Note also that our study is not a study of graduates of the School of Education but rather of individuals who received initial teaching certificates granted on the basis of study at the University of Michigan. In this complex and diverse university, teacher certificate recipients may take courses to meet requirements in a variety of schools and colleges, and, in recent years, on either of two branch campuses some thirty to sixty miles distant. The faculties of the schools of art and music teach many of their own education courses. Graduates of the literary college preparing to teach an academic subject in secondary school take a small number of education courses but many never actually enroll in the School of Education. Lastly, we should note that although the vast majority of our respondents received a bachelor's degree and their first teaching certificate concurrently, some individuals returned many years after their original college days to qualify for teaching. As a result, a few of our survey respondents had already retired from active professional life by 1980.

In this summary report of results, we have described the sample in some detail and have reported information for the entire group where it is meaningful to do so. We have also provided comparisons of the responses of "career teachers" and other fully

employed individuals. In a second report we will describe in more detail information about individuals who reported not pursuing on a full time basis either a teaching career or another occupation.

We limit ourselves in this report to response frequencies and some preliminary statistical tests to identify possible differences in mean responses between groups on particular items. In a number of forthcoming articles the data will be examined in more detail using multivariate analysis to control for certain variables and to isolate apparent predictors of certain patterns of response.

The Survey Sample

During May 1980, we contacted 5764 graduates of the University of Michigan and asked them to complete a "Survey of Graduates with Teaching Certificates." The sample consisted of 400 randomly selected teaching certificate recipients per year for every second year beginning with 1946 and ending with 1976. In years when fewer than 400 persons had received certificates, all recipients were surveyed. A total of 2933 useable returns were received, a response rate of 51 percent. The average number of respondents from each year sampled was 181. For the years from 1960 to 1976 the number of respondents comprised about 15% to 20% of the total number of those who received teaching certificates. Prior to 1960, when the University was smaller, as many as 45% to 50% of the recipients for a given year were surveyed. Consequently, on a percentage basis, the sample is weighted in favor of graduates of earlier years.

The vast majority of the respondents (95%) had received a bachelor's degree from the University of Michigan. The remainder incorporated study pertinent to a teaching certificate in a master's degree or in non-degree study. Overall, the respondents had pursued extensive education beyond the bachelor's degree since receiving the teaching certificate; 62% (N = 1812) had obtained at least one advanced degree. The University of Michigan had granted 37% of the advanced degrees held; at the University of Michigan, 912 respondents had received a master's degree, 20 an educational specialist degree,

127 an Ed.D. or Ph.D., while 21 mentioned other doctorates such as M.D., D.D.S. or J.D. Respondents also had pursued advanced work at nearly 300 other universities. At least one additional degree from another university was cited by 899 respondents; 136 cited two additional degrees and 12 mentioned three advanced degrees.

Both the population of graduates over the period of time the survey covered and the sample of graduates were 25% male and 75% female, a percentage ratio similar to that reported nationally for teacher certificate recipients by the National Education Association (1979). In classifying themselves, 97% reported that they were non-Hispanic whites. Non-Hispanic blacks comprised 2% of the sample and an additional 1% indicated they were among other minority groups. While we have no way to test the precise ethnic representativeness of these proportions, it appears generally to be like the population that received certificates during the period covered. Those responding to the survey ranged in age from 24 to 79 years with a mean age of 42 years.

Respondents had received provisional teaching certificates in a wide variety of fields valid at the several levels of education shown in Table 1. We have not yet completed analysis of the teaching subjects or fields represented.

Table 1

Level of Teaching Certificate Received

	K - 12	K - 8	7 - 12	4 - 12 (dual)[a]	Unknown
Number	637	926	1271	61	38
Percent	22%	32%	43%	2%	1%

[a]This certificate was offered for a relatively brief period between 1946 and 1976.

We attempted to use the standard state terminology to elicit from our respondents the types of additional teaching credentials they had received. Their lack of familiarity with the terminology used for Michigan certificates caused varied answers to questions concerning additional certificates for various levels of teaching, certificate endorse-

ments for special purposes and continuing certificates (which extend the provisional certificate more permanently). In addition, many of our respondents are employed in other states using a different certificate structure. Consequently data obtained about additional professional certificates following the first lack accuracy and we have not attempted to summarize them.

As shown in Table 2, the respondents generally characterized themselves as having been B or B+ students in the academic and professional study that qualified them for the provisional teaching certificate. It should be noted, however, that grade point averages are not always recalled accurately many years after leaving college.

Table 2

Reported Grade Point Average in Certificate Program

Grade	A+	A	B+	B	C+	C
Percent	.5%	17%	39%	33%	9%	1%

Initial Employment

In their recollection, graduates varied in their degree of commitment to teaching careers at the time they received their teaching certificates. They also had differing expectations about whether they would find employment as a teacher. One might expect differences in expectations of employment at different periods during the last thirty years; such differences among the early and more recent graduates will be examined in a later paper. Table 3 reports the commitment to teaching recalled by the respondents and Table 4 reports their employment expectations. It appears that some respondents who were already teaching or who planned to teach at the time they received certificates were only minimally committed.

Table 3

Commitment to Teaching Career at the Time Certificate Received

Extremely committed	31%
Very committed	34%
Somewhat committed	26.5%
Not at all committed	8.5%

Table 4

Expectation of Teaching Employment at the Time Certificate Received

Expected to find employment	75%
Was already teaching	10%
Did not plan to teach	7%
Was undecided	8%

Although not all respondents could be characterized as teachers in the usual classroom sense, of the total sample, 81% reported that their first employment after receiving the teaching certificate was in some aspect of education. A summary of the various occupations reported as first positions is given in Table 5.

Table 5

Reported First Employment After Receipt of Teaching Certificate

	Number	Percent
Teacher	2217	76%
School Administrator or Counselor	19	.6%
Other Educational Roles		
College Teaching Assistant	12	.4%
Educational Consultant	13	.4%
Special Teacher/Day Care Teacher	13	.4%
Substitute Teacher	13	.4%
School Psychologist	5	.2%
Teacher Aide	5	.2%
Position Outside Education	538	18%
No Response	98[a]	1%
	2933	99.6%

[a]19 of these were unemployed

Those whose first position was not in education were asked about the reasons they had chosen some other occupation. A summary of reasons given by the 538 respondents is shown in Table 6. The most frequent reason given was attraction to other employment. It should be recalled that the period covered by the survey ended just after jobs for teachers became most difficult to obtain and that the survey is weighted toward early graduates. Thus these results should not be construed as representing the current job market.

Table 6

Reasons for Accepting a Position Outside Education

	Number of responses	Percent of those giving reasons	Percent of total sample (2933)
Personal reasons (marriage, family)	76	14%	2.5%
No position available	86	16%	2.9%
No position available in desired geographical region	115	21%	3.9%
Was attracted to other employment	160	30%	5.5%
Other reasons	101	19%	3.4%
	538	100%	18.2%

The 538 persons who entered fields outside of education as initial employment mentioned nearly 100 different occupations. Substantial clusters of respondents entered the following occupations: Business/finance (13); computer programmer or similar scientific or technical role (11); librarian (32); military service (42); music director (16); research assistant (14); social worker (12); speech therapist (38); sales (16); sales clerk (13); secretary (67). In some cases, the position taken can be construed as one which may be pursued either in or out of education and for which the student had prepared (e.g. librarian, speech therapist or music director). Thus, (referring to Table 5) a greater portion than the 81% who entered educational positions can be said to have entered related occupations for which they were prepared initially.

Graduates were asked to share their feelings about their first work experience. About two-thirds recalled it as a generally positive experience.

Table 7

Feelings About First Position

Extremely positive experience	29%
Very positive experience	39%
Somewhat positive experience	25%
Not at all positive	7%

Current Employment and Career Patterns

Respondents reported their current employment status as indicated in Table 8.

Table 8

Current Employment

	Number	Percent
Unemployed outside the home (includes retirees)	501	17%
Employed outside education	822	28%
Employed in education		
As a teacher	1065	36%
As a school administrator	114	4%
As a school counselor	61	2%
In another education role	289	10%
No response	81	3%
	2933	100%

Of those 1529 persons currently employed in educational positions, 1479 reported the level of education at which they worked. Presumably 50 persons did not find a category that was appropriate for response. From other responses we know that many of these were pre-school or child care teachers.

Table 9

Educational Level of Employment

	Number	Percent
Elementary	484	33%
Middle school or junior high	199	13.5%
Secondary	355	24%
District wide position	146	10%
Postsecondary	271	18%
Other positions	24	2%
	1479	100%

Of the graduates who initially prepared for elementary and secondary teaching, 18% are now teaching or administering at the postsecondary level. In later analyses that focus on elementary and secondary teachers we have eliminated this group of college and university teachers. Similarly we have eliminated persons reporting district wide positions in education from some analyses because of uncertainty concerning whether these are specialized teachers working throughout a district or possibly central office administrators.

In describing their employment location, 87% of our teacher respondents indicated they are employed in public educational institutions and 13% in private institutions. Settings with 1500 or fewer students were most common (70%) while 30% reported more than 1500 students. The educational institutions in which respondents were employed were judged by them to be in urban areas (32%), in suburban areas (53%) and in rural areas (15%).

We asked those not now employed in education whether they intended to return to teaching or other educational work. Of the 840 persons responding, 16.5% said they planned to resume teaching while 83.5% did not plan to teach again. We also asked

respondents who had left teaching to report the number of years they had taught. This question was confusing to retired persons and to those who had never taught. In addition, although the possible choices ranged to nine or more years, individuals who had received teaching certificates in 1976 could only have taught four years. Thus, although our information parallels that found in other studies, with high attrition in the first three years of teaching and tapering off thereafter, we cannot present an accurate picture from these data alone.

Although a variety of questions were included in the survey which might have been used to classify the respondents according to their career patterns, it appeared that the greatest amount of meaningful information was obtained when the respondents were grouped according to their choices among several suggested career descriptions, shown in Table 10. The choice gives a clue about the respondent's perceptions of his or her career. For example, one individual who had taught for five years and is currently working as an insurance agent may have made a choice to leave teaching permanently, while a second such individual might view himself as a teacher pursuing other work temporarily for reasons of flexibility or family obligations. We assume, and have confirmed by examining answers to several related questions, that the first individual, who had left teaching permanently, tended to select a career pattern response such as "taught for five years and have moved to other employment" while the second individual, viewing departure from teaching as temporary, chose "have been teaching periodically interspersed with other types of employment."

On the basis of such responses to the ten career pattern statements (see Table 10), the respondents were divided into three primary groups: Career Educators, Intermittent Teachers, and Non-educators. Those classed as career educators had been teaching for ten years or more and did not indicate any intent to change careers. Some of those labeled as intermittent teachers were teaching at the time of the survey and some were in interim work, others were unemployed and may never actually return to teaching. But individuals

in this group expressed an intent to return to teaching and seemed to think of themselves as teachers even though they may have been currently engaged in other employment. Those classified as non-educators never actually taught or may have pursued a teaching career briefly; they gave no indication that they would return to teaching.

If education is construed broadly, the actual percentage of the respondents who might be classified as Career Educators is probably somewhat greater and the percentage of respondents in other occupations somewhat smaller than is reported in Table 10. Undoubtedly some individuals who would broadly be viewed as "teachers" listed other occupational titles with which their identification is stronger. Examples include speech pathologists, librarians, music directors and recreation supervisors. Since we did not ask for the employment setting, we have made the conservative assumption that individuals who specifically listed such occupations, rather than indicating they are teaching, do work in other types of institutions.

Table 10

Reported Career Patterns

	Number	Percent
Career educators		
Have been teaching regularly in no more than two school districts	691	24%
Have been teaching regularly but have changed school districts more than twice	201	7%
Began teaching but moved to administration or counseling	189	6%
	1081	37%
Intermittent teachers		
Have been teaching periodically but with periods of unemployment for personal reasons (e.g., child rearing, illness, etc.)	568	19%
Have been teaching periodically, interspersed with other types of employment	101	3%
Began teaching, moved to other types of employment, then resumed teaching	64	2%
Have been teaching but currently laid off	26	1%
	759	26%
Non-educators		
Began teaching, moved to other types of employment within 5 years, am not teaching now	353	12%
Began teaching, moved to other types of employment within 10 years, am not teaching now	196	7%
Have been engaged primarily in non-teaching employment	414	14%
	963	33%
No response	130	4%
Total	2933	100%

Figure 1 presents the data from Table 10 in a different format with respondents divided into two cohorts, those who received teacher certificates from 1946 through 1969 (N = 2149) and those who received teaching certificates from 1970 through 1976 (N = 784). Members of the earlier cohort have had the opportunity to be employed in teaching or some other occupation for at least ten full years prior to the survey and can be assumed to have established career patterns. The later cohort may still be in the process of establishing careers and, additionally, received their certificates at a time when the production of new teachers began to exceed the job market demand. To overcome the deficiency in some previous studies we viewed the earlier cohort as best indicating the career patterns of individuals who receive teacher certification. It can be noted from Figure 1 that, if the same pattern of attrition holds, some of those now labeled career educators from among the recent graduates will not make a career of teaching. One can presume that the size of the career educator group among this cohort will diminish while the ranks of both the non-educators and the intermittent teachers swell over the next several years.

Figure 1 also illustrates in more detail the self-reported patterns we found among earlier graduates who have left teaching, while Figure 2 shows this attrition rate graphically. Although a ten year limit is artificial because our item response gave "9 or more years" as the maximum teaching time, most teachers who move to another occupation or to full time homemaking appear to do so within ten years. Those who leave education throughout the first ten years are disproportionately female; thus the number of males persisting as teachers increases relative to those who began.[1]

Figure 3 presents a diagram to illustrate probable teacher employment over a 15 year period based on the original number of certificate recipients at this single university. The proportion of graduates regularly teaching is expanded as members of the Intermittent teacher group (who drop out temporarily for personal and family reasons) return to teaching. In our sample at a given point in time this intermittent group adds

Figure 1

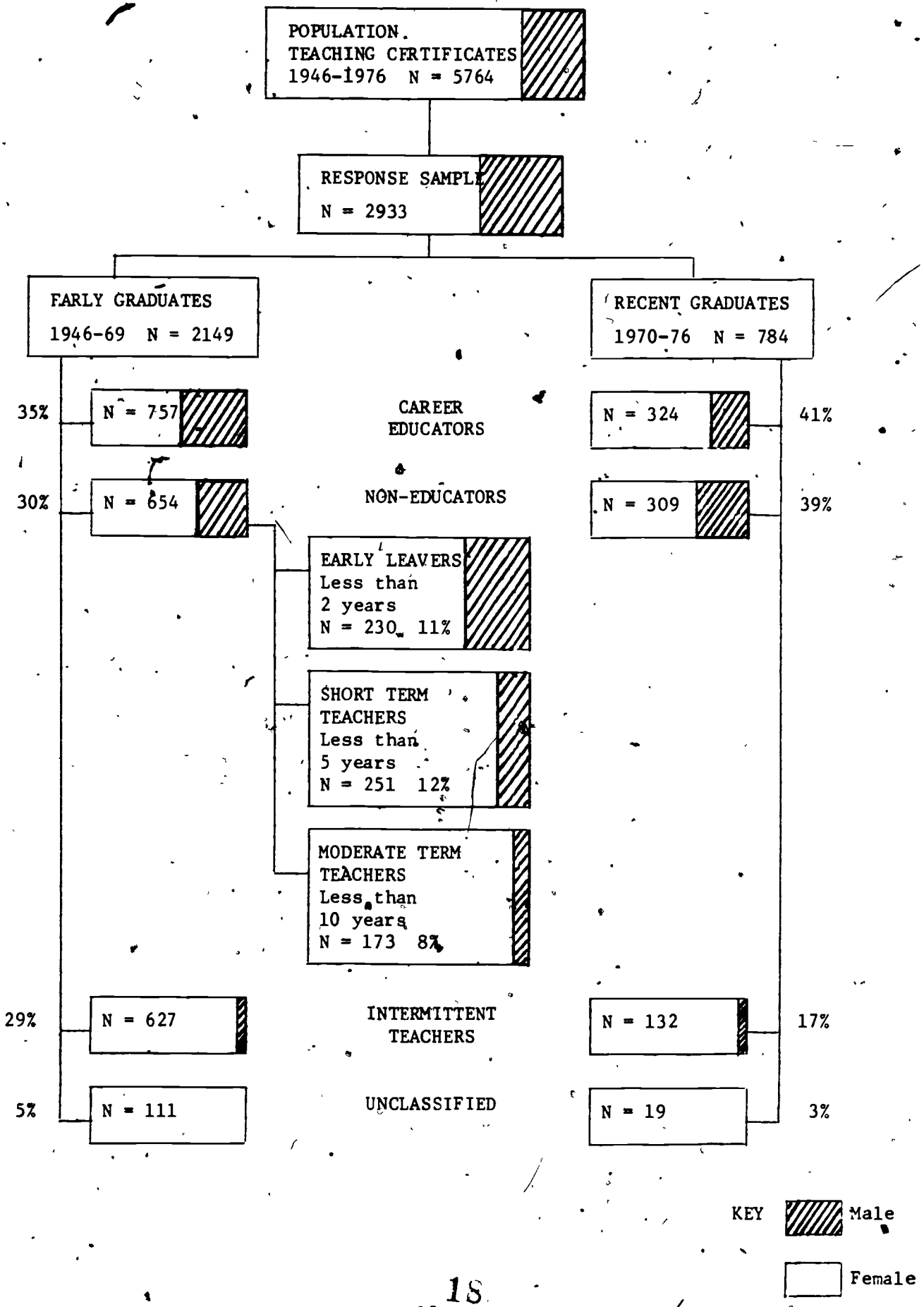

POPULATION.
TEACHING CERTIFICATES
1946-1976 N = 5764
RESPONSE SAMPLE
N = 2933
EARLY GRADUATES
1946-69 N = 2149
RECENT GRADUATES
1970-76 N = 784
35%
N = 757
CAREER EDUCATORS
N = 324
41%
30%
N = 654
NON-EDUCATORS
N = 309
39%
EARLY LEAVERS
Less than
2 years
N = 230 11%
SHORT TERM
TEACHERS
Less than
5 years
N = 251 12%
MODERATE TERM
TEACHERS
Less than
10 years
N = 173 8%
29%
N = 627
INTERMITTENT TEACHERS
N = 132
17%
5%
N = 111
UNCLASSIFIED
N = 19
3%
KEY
Male
Female

Figure 2

PERSISTENCE IN TEACHING OF EVENTUAL NON-EDUCATORS

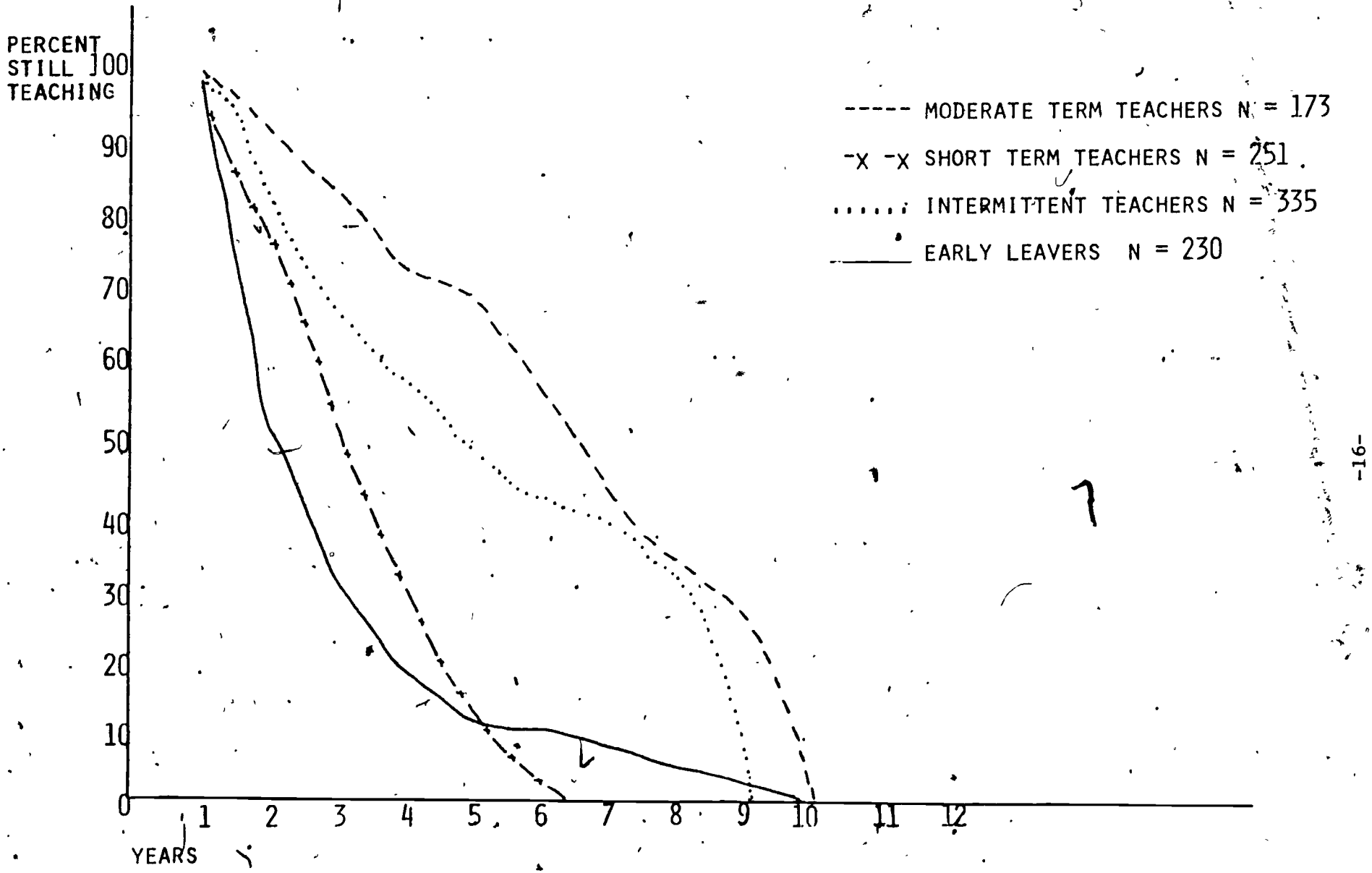
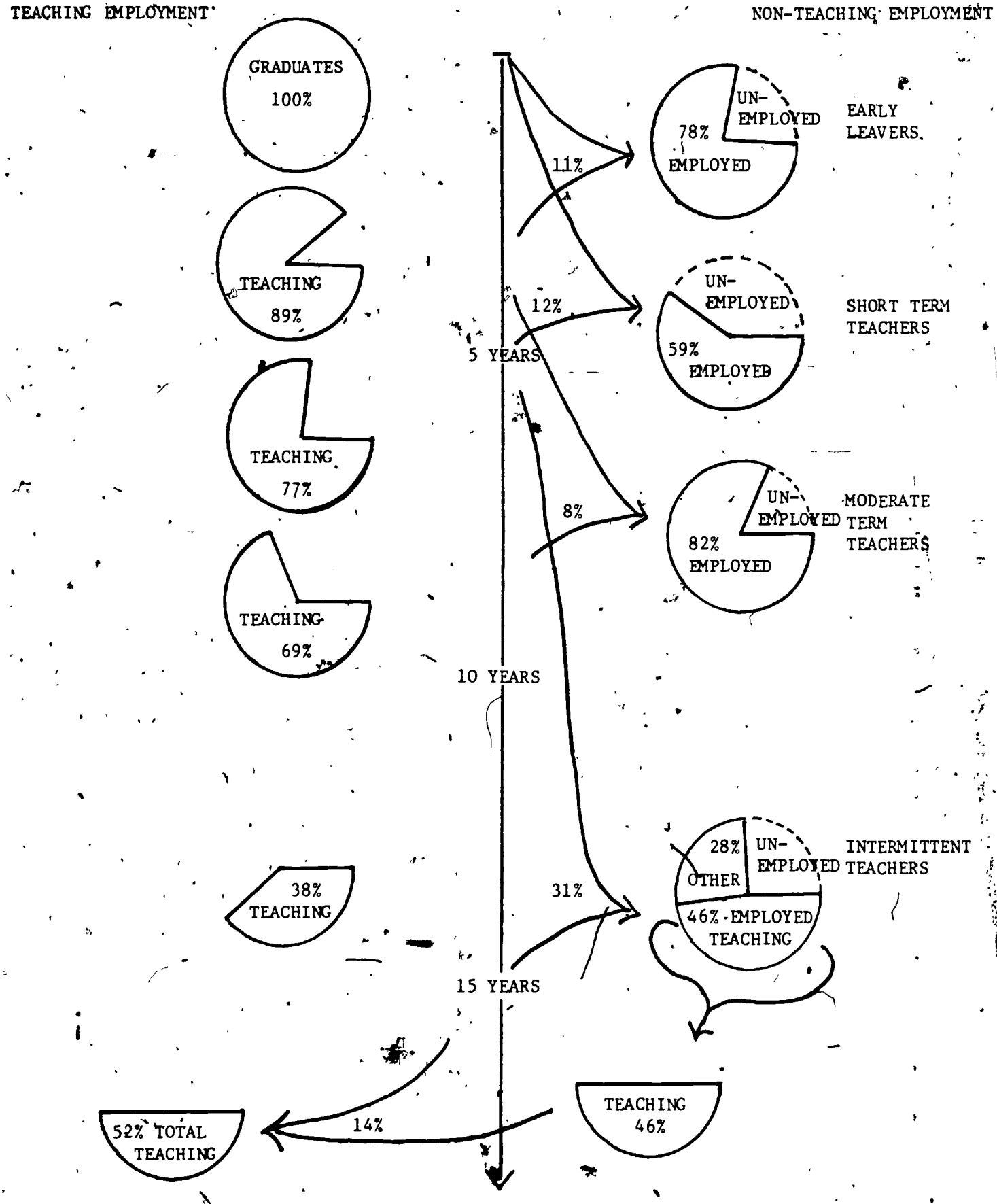


Figure 3

RETENTION OF TEACHERS GRADUATED 1946-1969



an additional 14% of the original group of graduates to the teaching force. Assuming that our snapshot is not atypical, 51% of our certificate recipients are employed as teachers at any given time from 10 to 34 years after graduation. This figure is comparable to that reported by Lortie (1975) but will probably be smaller in future years due to recent difficulty in reentering the teaching field after a period of non-teaching.

Location of Graduates

Regardless of the type of employment they now pursue, those who received provisional teaching certificates through study at the University of Michigan were widely dispersed throughout the United States following graduation. On the basis of current zip codes reported it is clear that not all of the graduates remain in Michigan. Unfortunately we do not have data about their place of origin. The distribution of graduates in the sample is shown in Figure 4.

Comparison of Career Teachers and Graduates in Other Careers

A major purpose of the study was to compare recipients of teaching certificates who had continued to pursue teaching careers with those who, either initially or after a few years of teaching, had chosen some other occupation. These individuals were classified on the basis of the career patterns reported in Table 10 into two basic groups:

Career Teachers - Those who have been teaching regularly.

Non-educators - Those who began teaching but who a) moved to other types of employment within 5 or 10 years and are not teaching now (the "early leavers", the "short term teachers" and the "moderate term" teachers) or b) who have been engaged primarily in non-teaching employment.

Both of these groups were further refined. Certain individuals initially included in one of the two groups decribed above on the basis of their choice of career patterns were eliminated to insure that "career teachers" were regular K - 12 teachers and that all Non-educators were currently employed. All college teachers (N = 271), all teachers currently acting as substitute teachers (N = 87), and all currently unemployed or retired individuals (N = 501) were eliminated. Individuals in additional classifications were set

aside for later analysis: administrators (those who began teaching but moved to administration or counseling, N = 133); and "Intermittent Teachers" (those individuals who had moved in and out of teaching and might or might not be teaching currently).

Those refinements resulted in samples of 673 Career Teachers and 646 Non-educators. Members of the Non-educator group were employed in a wide variety of occupations as summarized in Table 11. Some of the occupational titles (e.g. music director, speech therapist, librarian, occupational therapist, etc.) occur in both the Career Teacher and Non-educator groups, depending upon whether the individual indicated employment in a school setting.

Figure 4

Geographic Distribution of Respondents Who Received Provisional Teaching Certification Through Study at The University of Michigan

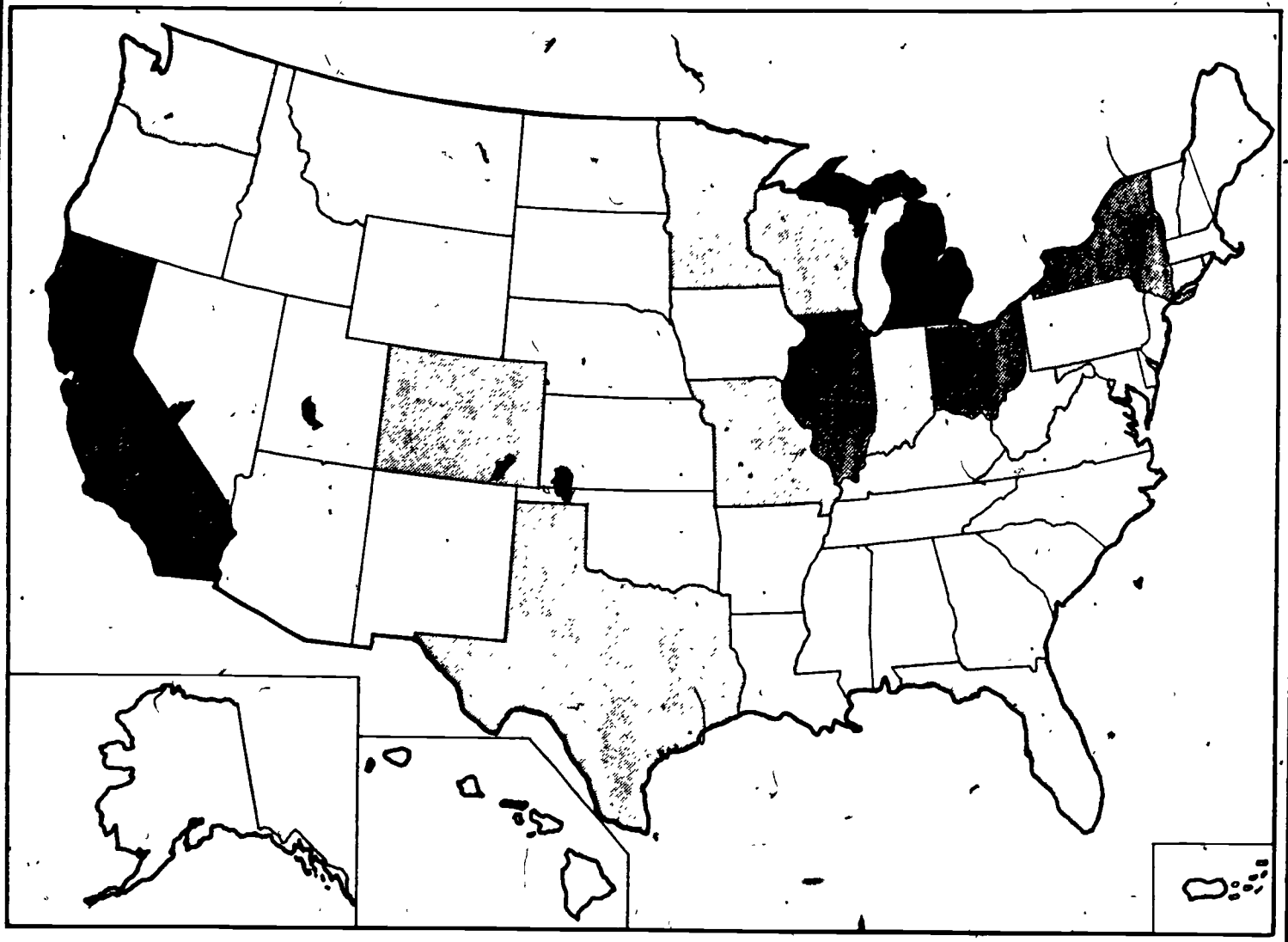


Table 11

Most Frequent Occupations of Non-Educators

	Frequency	Percent
business administrator	61	9.4%
lawyer/judge	38	5.9%
secretary	33	5.1%
librarian/historian/museum curator	31	4.8%
sales representative	31	4.8%
computer programmer/scientist/engineering analyst	21	3.3%
business owner	20	3.1%
administrator - government	19	2.9%
real estate agent	18	2.8%
hospital administrator	17	2.6%
accountant/treasurer	14	2.2%
educational consultant	13	2.0%
editor/publisher	14	2.2%
non-teaching psychologist	14	2.2%
insurance agent	14	2.2%
social worker	13	2.0%
legal aide/legal stenographer	11	1.7%
music director/musician	11	1.7%
social welfare/recreation supervisor	11	1.7%
bookkeeper	11	1.7%
clergy	11	1.7%
other	220	34.0%
	646	100%

Approximately equal proportions of the Career Teachers and Non-educators received teaching certificates in the years studied. (χ^2 (15) = 22.2, p = .10). There was no significant difference in the proportion of Career Teachers and Non-educators among three cohort groups graduating in 1946 through 1960, 1961 through 1970, and 1971 through 1976. (χ^2 (2) = 1.51, p = .47). Career Teachers and Non-educators did not differ significantly in sex and age. Career Teachers classified themselves as 32% male and 68% female, compared to 34% male and 66% female for Non-educators. (χ^2 (1) = .81). The proportion of males in both groups considered for this analysis is somewhat greater, however, than that of all certificate recipients who responded to the study. Not surprisingly, a higher proportion of female graduates were included in the groups of "intermittent teachers" and unemployed individuals not analyzed at this time. The mean age of Career Teachers was 40 years and that of Non-educators was 39.2 years. (χ^2 (42) = 36.0.) A slightly higher proportion of the Career Teachers (5%) belonged to minority groups than did the Non-educators (1.6%).

Among the group of respondents, recipients of several types of certificates were represented as shown in Table 12.

Table 12

Level of Teaching Certificate Received

	K - 12	K - 8	7 - 12	4 - 12 (dual)[a]
Career Teachers	26%	32%	41%	1.5%
Non-educators	17%	26%	55%	2.8%

χ^2 (3) = 32.79, p < .0

[a]This certificate was awarded for a short time period.

The Non-educator group contained more graduates who received secondary teaching certificates while more K - 12 and K - 8 certificate recipients were in the Career Teacher group. This difference may reflect greater opportunities outside education for secondary

education graduates with academic majors in fields such as mathematics, science, psychology and a lack of such opportunity for those who received elementary or K - 12 certificates, the latter being typically awarded in art, music, special education, and physical education. More than half of the Career Teachers were employed below the secondary level as shown in Table 13.

Table 13

Educational Level of Employment

	Career teachers	
	Number	Percent
Elementary	268	42
Middle school or junior high	122	19
Secondary	213	33
District wide position	37	6
Other position (typically pre-school)	5	.8
	645[a]	100.8%

[a]Level of employment was unclear for 28 respondents.

In describing their employment location, 92% of the Career Teachers indicated they were employed in public institutions and 8% in private schools. Eighty percent of the teachers worked in settings with 1500 or fewer students while 20% reported more than 1500 students. Twenty-eight percent of the teachers judged their schools to be in urban areas; 58% in suburban areas and 15% in rural areas.

Both groups of respondents characterized themselves as being B or B+ students in the academic and professional study that qualified them for the provisional teaching certificate. As previously noted, grade point averages are not always recalled accurately many years after leaving college.

Table 14

Reported Grade Point Average in Certificate Program

	A+	A	B+	B	C+	C
Percent of Career Teachers	.6	18	40	31	9	1.6
Percent of Non-educators	.8	18	37	34	10	.9

Compared to Non-educators, more of the Career Teachers had pursued advanced education since receiving the teaching certificate. Seventy-one percent of the Career Teachers and 44% of the Non-educators reported they had received a master's degree. More Non-educators (15%) than Career Teachers (4.6%), however, had received degrees beyond the master's. Of the Career Teachers, 52% had received one or more advanced degrees from the University of Michigan while 48% of the Non-educators also had taken advanced degrees at U of M. A wide variety of other institutions were mentioned as graduate study institutions by both groups.

Initial Employment

According to their recollection, the two groups of graduates varied in their degree of commitment to teaching careers at the time they received their teaching certificates. Members of the Non-educator group initially were less committed than members of the Career Teacher group. They also had different views about whether they could expect to find teaching employment. Fewer of the Non-educators expected to find employment in teaching. In fact, 28% either did not plan to teach or were undecided. In contrast, only 11% of the Career Teacher group did not expect to teach or were undecided at the time they received their certificates.

Table 15

Commitment to Teaching Career

	Career teachers		Non-educators	
	Number	Percent	Number	Percent
Extremely committed	324	49%	106	17%
Very committed	218	33%	204	32%
Somewhat committed	98	15%	229	36%
Not at all committed	28	4%	102	16%
	668	101%	641	101%
No response	5		5	

χ^2 (3) = 205.12, p < .00

Table 16

Expectation of Teaching Employment

	Career teachers		Non-educators	
	Number	Percent	Number	Percent
Expected to find teaching employment	548	82%	429	67%
Was already teaching	72	11%	38	6%
Did not plan to teach	21	3%	80	12%
Was undecided	31	5%	95	15%
	672	101%	642	100%
No response	1		4	

χ^2 (3) = 91.5, p < .00

Of the Career Teachers, 90% reported that their first employment after receiving the teaching certificate was in some aspect of education while (as shown in Table 17) only 63% of the Non-educator group actually began a career in education.

Table 17

Reported First Employment After Receipt of Teaching Certificate

	Career teachers		Non-educators	
	Number	Percent	Number	Percent
Teacher	575		364	
School administrator or counselor	6		6	
Other educational roles				
College teaching assistant	0		1	
Educational consultant	1		0	
Special teacher, day care teacher	4		2	
Substitute teacher	16		31	
School psychologist	0		4	
Teacher aide	2		1	
Total educational positions	604	90%	409	63%
Positions outside education	67	10%	233	36%
No response	3		4	

Those whose first position was not in education were asked why they had chosen some other occupation. Among the Non-educators the most common reason was attraction to another occupation, followed closely by inability to find a position, at least in the desired geographic area. In contrast, for the Career Teachers the most common reason was inability to find a position. A summary of reasons given by those who did not teach is given in Table 18.

Table 18

Reasons for Accepting a Position Outside Education

	Career teachers			Non-educators		
	N	Percent	Percent of total group N=674	N	Percent	Percent of total group N=646
Personal reasons (marriage, family)	7	12	1.0	28	11	4.3
No position available	20	34	2.9	33	13	5.1
No position available in desires geographic region	14	24	2.0	47	19	7.2
Was attracted to other employment	11	19	1.6	92	37	14.2
Other reasons	7	12	1.0	48	19	7.4

χ^2 (4) = 18.60, $p < .00$

The 233 individuals who entered non-educational fields as their initial employment mentioned nearly 70 different occupations. Substantial clusters of respondents entered the following occupations: secretary/general office work (23); military service (17); sales representative (12); museum curator (9); lawyer/judge (7); speech pathologist (6). In some cases, particularly librarian and speech pathologist, the position taken was undoubtedly parallel to an educational one for which the student had received preparation in his/her certificate program, since students in these fields commonly obtain positions out of education.

Graduates were asked to share their feelings about their first work experience whether in education or not. More than 72% of the Career Teachers but only 60% of the Non-educators recalled it as a generally positive experience. More of the Non-educators (40% as compared to 29% of Career Teachers) were not too positive about their first job. This discontented Non-educator group is composed of both those who began teaching and did not enjoy it and those who took a non-teaching job they did not enjoy.

Table 19

Feelings About First Position

	Career teachers		Non-educators	
	N	Percent	N	Percent
Extremely positive	224	34	132	21
Very positive experience	267	38	250	39
Somewhat positive experience	157	24	180	28
Not at all positive	30	4.5	73	12
	668	100.5	635	100
No response	5		11	

χ^2 (4) = 43.14, $p < .00$

The Non-educators were asked whether they intended to return to teaching. Only 11 percent of the 646 individuals employed out of education, said they planned to return to teaching at some time in the future. Non-educators also reported the number of years they taught before leaving teaching for whatever reason. Quite clearly substantial attrition from teaching took place during the first three years of employment.

Table 20

Years Taught by Non-educators Before Leaving Teaching

Number of years	N	Percent
0	229	35
1	113	18
2	85	13
3	64	10
4	34	5
5	36	6
6	24	4
7	11	2
8	14	2
9 or more	36	6
	646	101

Of the group of Non-educators, 35% never taught and a slightly higher percentage (41%) left teaching before beginning a fourth year. Attrition seems to be relatively complete at an early stage among those who discard education for another career. This analysis has excluded, of course, "intermittent teachers" who move in and out of teaching alternating with homemaking, substitute teaching or other occupations.

Career Teachers and Non-educators were asked about the satisfaction they obtained from the position they now held. There were no significant differences between the Career Teachers and Non-educators groups on a single-item satisfaction question. Very few expressed great dissatisfaction with their job.

Table 21

Degree of Satisfaction with Current Employment

	Career teachers		Non-educators	
	N	Percent	N	Percent
Extremely satisfied	186	28	225	35
Very satisfied	292	44	262	41
Somewhat satisfied	166	25	134	21
Not at all satisfied	26	4	22	3.5
	670	101	643	100.5
No response	3		3	

χ^2 (3) = 8.529, $p < .02$

The comparison in Table 22 clarifies that, on the average, Non-educators earn slightly higher salaries than Career Teachers and have higher total family incomes. A larger proportion of Non-educators, however, report personal incomes less than $3,000. Unfortunately, we provided insufficient response categories on the high income end of the salary distribution to gain an accurate estimate of the mean family income of either group. It is clear, however, that some Non-educators earn salaries far higher than any Career Teacher. Of the Non-educators, 11.7% earned $40,000 or more. Among Career Teachers less than 1% had personal income as high as $40,000. The 1979-80 modal income for Career Teachers was $20,000 to $23,000 and the influence of salary schedules in limiting the income range is rather obvious. No obvious modal income can be discerned for the Non-educators; rather the distribution appears tri-modal with some very low, some moderate and some very high incomes. It is apparent from comparing the distributions of personal and family incomes in Table 22 that most families in our sample have two wage earners. On the basis on non-response to the family income question, only about 27% of the Career Teachers and 29% of the Non-educators appear to be sole family supporters. More Career Teachers (18%) than Non-educators (8%) said their spouse was also a teacher.

Table 22

	Gross annual personal income of certificate recipients			Gross annual family income		
	Total sample	Career teachers	Non-educators	Total sample	Career teachers	Non-educators
Less than $3,000	11.5%	1.2%	5.5%	.1%	.2%	.0%
$3,000 to $5,999	7.4%	.9%	8.0%	.5%	.2%	.9%
$6,000 to $8,999	5.3%	2.6%	6.9%	.8%	.2%	1.7%
$9,000 to $11,999	6.4%	5.9%	8.0%	1.3%	1.4%	1.7%
$12,000 to $14,999	9.8%	12.1%	11.3%	2.2%	3.1%	2.8%
$15,000 to $17,999	10.7%	14.5%	11.7%	3.6%	5.7%	3.4%
$18,000 to $20,999	12.3%	19.5%	8.8%	3.8%	2.7%	6.4%
$21,000 to $23,999	11.8%	21.1%	9.3%	5.6%	9.0%	5.1%
$24,000 to $26,999	8.3%	13.6%	5.5%	6.8%	9.7%	5.5%
$30,000 to $39,999	6.8%	1.8%	8.5%	23.0%	24.6%	18.3%
$40,000 to $49,999	2.2%	.3%	4.7%	17.7%	20.1%	15.6%
$50,000 to $58,999	.9%	.2%	2.1%	11.1%	9.2%	10.2%
$60,000 and over	1.5%	.2%	4.9%	17.1%	7.0%	22.0%
No response	5.1%	6.1%	4.8%	6.4%	6.9%	6.4%

Future Career Prospects

Graduates responded to several questions asking their perceptions of career future and career mobility. (See Table 23) Non-educators don't perceive their education to be as well utilized as do Career Teachers but they see significantly greater prospects for advancement in their current occupations than do Career Teachers, and are more likely to indicate that their current occupation provides them with adequate status and prestige. Despite their view that propects for advancement are poor, Career Teachers are nearly as likely as Non-educators to express intent to remain in their current occupa-

tion for the foreseeable future. The reason may be lack of opportunity to change jobs. More Career Teachers than Non-educators believe that there is a shortage of positions in their geographic area for those with their experience, training and skills and yet no shortage of people to fill the positions. (See Table 24)

Table 23

Prospects for Career Advancement

	Career teachers		Non-educators		
	N	Percent	N	Percent	
My current employment offers future prospects for advancement	152	23	420	65	$\chi^2(1)=241.61$*
I would like to remain in my current occupation for the foreseeable future	468	69	473	73	$\chi^2(1)=2.18$
My current occupation provides me with sufficient status and prestige	390	58	444	69	$\chi^2(1)=16.48$*
My skills are well-utilized in my employment	445	66	440	68	$\chi^2(1)=.59$
My educational experiences are well-utilized in my employment	419	62	321	50	$\chi^2(1)=21.14$*

*$p < .01$

Table 24

Shortage of Positions and People to Fill Positions

	Teachers		Non-teachers		
	N	Percent	N	Percent	
There is a shortage of positions like mine	468	70	344	53	$\chi^2(1)=36.96$*
There is a shortage of people with my skills	118	18	155	25	$\chi^2(1)=8.38$*

*$p < .01$

In general, neither Career Teachers nor Non-educators expressed much insecurity about their present positions (Table 25) but they differed significantly in their views

of how easy it would be to find another job with comparable income and benefits. Seventy-five percent of the Career Teachers, as compared with 35% of the Non-educators, believed it would be difficult to find a comparable position (Table 26). Of the Career Teachers, 81% said they expected to remain in teaching over the next five years.

Table 25

Likelihood of Having to Find Another Job in the Next Couple of Years

	Career teachers		Non-educators	
	N	Percent	N	Percent
Very likely	47	7	51	8
Somewhat likely	95	14	81	13
Not too likely	213	32	224	35
Not at all likely	316	47	283	44
	671	100	639	100
No response	2		7	

χ^2 (3) = 2.53, n.s.

Table 26

Ease of Finding a Comparable Job

	Career teachers		Non-educators	
	N	Percent	N	Percent
Not easy at all	498	75	221	35
Somewhat easy	133	20	246	38
Very easy	35	5	160	26
	666	100	627	99
No response	7		19	

χ^2 (2) = 219.56, p < .00

Expect to remain in teaching over next five years 513 81

Appropriateness of Education

We asked respondents to answer questions about the appropriateness of their education at the University of Michigan. Since only a small part of the academic program of those who receive a provisional teaching certificate is taken in professional education courses, the responses relate to students' work in other colleges of the University and to general university services as well as to professional education studies.

The two groups did not differ statistically in response to a single item asking for their overall satisfaction with their education nor in their relatively high satisfaction with quality of instruction and the level of scholarly rigor. In retrospect, however, Career Teachers rated most educational experiences slightly more positively than did Non-educators. (Table 27) In general, graduates considered their educational experience "very satisfactory" but dissatisfaction with some student service areas was expressed by as many as 39% of the Non-educators. Since these items include relevance of education to career goals, inspiration and encouragement provided, academic advising and career planning and placement, lower ratings by non-educators are undoubtedly related to their eventual decision to choose a non-teaching career. One could hypothesize that the greater commitment of the Career Teachers to the profession they initially chose either caused or resulted from the closer relationships they reported with faculty, the greater career relevance of instruction and their greater satisfaction with academic advising as well as career planning and placement.

Table 27

Satisfaction with Experience at University of Michigan[a]

	Career teachers			Non-educators			
	N	Mean	SD	N	Mean	SD	t
Level of rigor and scholarship	663	2.00	.82	639	2.03	.80	-.56
Quality of instruction	667	2.09	.78	636	2.07	.75	.42
Interaction with other students	661	2.12	.81	632	2.02	.78	2.28*
Relevance to career goals	660	2.31	.77	618	2.46	.83	-3.41*
Inspiration and encouragement	656	2.55	.93	628	2.78	.90	-4.45*
Interaction with faculty	660	2.62	.86	636	2.76	.88	-2.89*
Career planning and placement	604	2.61	.97	589	3.06	.91	-8.30*
Flexibility/adaptability to student needs	655	2.66	.81	617	2.72	.82	-1.28
Overall satisfaction with education	662	2.10	.70	636	2.08	.69	.42

* $p < .05$

[a] A low mean score indicates satisfaction with the given component of education (1 = extremely satisfactory; 4 = not at all satisfactory).

Table 28

Ratings of Specific Components of Educational Program

	Career teachers			Non-educators			
	N	Mean	SD	N	Mean	SD	t
General on-the-job training	551	1.99	.95	375	2.19	.95	-3.13*
Courses in major field	660	2.07	.87	525	2.11	.90	-.84
Supervised work experience/student teaching at U-M	665	2.12	1.00	529	2.07	.98	.84
Courses in minor fields	655	2.37	.84	526	2.40	.87	-.77
Formal training program at current job	389**	2.51	.99	220	2.53	1.02	-.21
Extracurricular activity at U-M	480**	2.68	1.03	432	2.72	.98	-.62
Overall training at U-M in preparing to teach[a]	665	2.12	.80	617	2.25	.80	-3.10*

*$p < .05$

**Relatively small numbers of respondents answered these items.

[a](For this general question 1 = excellent; 4 = poor)

We asked graduates to rate their overall training for teaching at the U-M on a four-point scale from "poor" to "excellent" and, in a separate set of questions, we asked about the helpfulness of a number of other activities typically included in teacher training only some of which would have occurred at the University of Michigan. Respondents were asked to indicate how helpful the educational experience was in preparing them to teach (1 = extremely helpful; 4 = not at all helpful). Career teachers indicated that

their overall training for teaching at the U-M was "good" and were somewhat more positive regarding this training than Non-educators. According to our data, (see Table 28) Career Teachers believe, however, that experience they have gained on the job was most helpful in preparing to teach, followed by courses in their major field and supervised teaching practice. Not surprisingly, many Non-educators did not respond to our inquiry concerning on the job training as preparation for teaching. Judging from the small number of respondents who described the helpfulness of formal training programs on their current job, one may speculate that such programs are relatively infrequent and only "somewhat helpful" both in and out of education.

Career teachers and Non-educators contributed 1) their perceptions of the extent to which they use sixteen different skills and abilities in their current jobs (Table 29); 2) the extent to which they believe they possess these skills and abilities (Table 30); and 3) the extent to which they believed the skills had been enhanced through study at the University of Michigan (Table 31). In each case the response scale ranged from 1 = to a large extent to 4 = not at all.

The data in Table 29 indicate that both Career Teachers and Non-educators use a range of skills extensively in their jobs. For both groups the least used skills include working on long term projects, using library and research facilities, interpreting numerical data and using computers and analyzing computer outputs. Teachers view speaking effectively and supervising and leading as skills used more frequently than do Non-educators while Non-educators are more likely to use numerical data, computers, and effective writing skills.

Career teachers and Non-educators seem confident that they possess most skills needed on the job whether in education or out. (Table 30) The skills they are least likely to possess, by their own report, include interpreting numerical data and using computers. In several areas, Non-educators indicate more self-confidence about possession of skills than teachers. They are more likely to indicate, for instance, skills in communicating with others, analyzing and evaluating ideas, dealing with the public, interpreting numerical

data and using computers. Only in the area of effective speaking do Career teachers indicate that they are more likely than Non-educators to possess the skills or ability.

Neither Career Teachers nor Non-educators felt that most skills were greatly enhanced by study at the U-M. Non-educators were more likely than were Career Teachers to give their formal education credit for learning to use library and research facilities, writing effectively, speaking effectively and dealing with the public.

Table 29

Extent to Which Skills and Abilities are Used on Job

Skill or ability	Career teachers N = 673			Non-educators N = 646			
	N	Mean[a]	SD	N	Mean	SD	t*
Communicating with others	636	1.33	.56	600	1.28	.53	1.82
Organizing time effectively	636	1.39	.61	601	1.40	.64	-.45
Speaking effectively	637	1.50	.68	604	1.70	.88	-4.43*
Dealing with the public	636	1.58	.71	602	1.60	.88	-.47
Planning and organizing job-related activities	634	1.63	.76	595	1.67	.87	.99
Developing new approaches to problems	632	1.70	.74	602	1.72	.78	-.46
Analyzing and evaluating ideas	630	1.73	.74	509	1.69	.86	.79
Cooperating with a work team	637	1.75	.81	600	1.70	.84	1.07
Supervising and leading	636	1.76	.82	603	2.03	.99	-5.19*
Persuading others to accept your ideas	633	1.90	.73	600	1.81	.83	1.88
Resolving conflicts in work setting	635	1.98	.85	598	2.09	.92	-2.14
Writing effectively	636	2.09	.85	602	1.96	1.02	2.43*
Working on long term projects	632	2.12	.87	593	2.09	.98	.55
Using library and research facilities	637	2.46	.91	603	2.69	1.12	-3.95
Interpreting numerical data	635	2.71	.89	595	2.36	1.07	6.29*
Using computers and analyzing computer outputs	635	3.37	.84	594	2.91	1.15	8.09*

*$p < .05$

[a]Scores may range from 1 to 4. (1 indicates "to a large extent"; 4 indicates "not at all.")

Table 30

Extent to Which Individuals Believe They Possess Skill or Ability

Skill or ability	Career teachers N = 673 N	Mean[a]	SD	Non-educators N = 646 N	Mean	SD	t*
Communicating with others	644	1.47	.59	603	1.39	.57	2.46*
Cooperating with a work team	645	1.54	.68	602	1.53	.67	.29
Analyzing and evaluating ideas	641	1.60	.60	601	1.51	.60	2.46*
Organizing time effectively	644	1.61	.70	6.03	1.63	.70	-.46
Dealing with the public	645	1.62	.69	605	1.54	.73	2.22*
Writing effectively	646	1.62	.65	605	1.57	.68	1.47
Planning and organizing work related projects	642	1.64	.70	596	1.63	.73	.11
Speaking effectively	648	1.67	.68	608	1.75	.73	-1.93*
Developing new approaches to problems	643	1.68	.63	605	1.69	.64	-.41
Supervising and leading	643	1.69	.75	603	1.75	.77	-1.30
Using library and research facilities	646	1.76	.75	604	1.80	.78	-.77
Persuading others to accept your ideas	640	1.83	.67	604	1.76	.69	1.65
Working on long term projects	638	1.87	.72	595	1.81	.70	1.28
Resolving conflicts in the work setting	643	1.91	.77	598	1.94	.78	-.75
Interpreting numerical data	642	2.45	.92	594	2.21	.96	4.59*
Using computers and analyzing computer outputs	639	3.37	.83	593	2.98	1.08	7.11*

*$p < .05$

[a]Scores may range from 1 to 4. (1 indicates "to a large extent"; 4 indicates "not at all.")

Table 31

Extent to Which Ability or Skill was Enhanced By Study at This Institution

Skill or ability	Career teachers N = 673			Non-educators N = 646			
	N	Mean[a]	SD	N	Mean	SD	t*
Using library and research facilities	641	1.83	.82	600	1.23	.79	2.25*
Analyzing and evaluating ideas	634	2.00	.77	597	1.84	.75	3.53
Writing effectively	637	2.07	.84	603	1.89	.81	3.73*
Communicating with others	635	2.12	.83	600	2.05	.81	1.39
Working on long term projects	633	2.20	.87	593	2.20	.87	-.03
Organizing time effectively	638	2.20	.97	600	2.12	.91	1.41
Developing new approaches to problems	636	2.28	.83	601	2.24	.81	.89
Speaking effectively	639	2.33	.92	605	2.21	.93	2.05*
Cooperating with a work team	639	2.39	.94	601	2.39	.90	-.15
Planning and organizing time effectively	634	2.42	.94	594	2.37	.93	.89
Supervising and leading	639	2.52	.90	601	2.56	.91	-.73
Persuading others to accept your ideas	635	2.55	.86	600	2.52	.84	.48
Dealing with the public	637	2.72	.96	600	2.61	.98	2.04*
Interpreting numerical data	635	2.76	.97	594	2.74	1.01	.35
Resolving conflicts in the work setting	633	3.00	.90	598	3.00	.89	-.13
Using computers and analyzing computer outputs	636	3.67	.71	591	3.65	.76	.33

*$p < .05$

[a]Scores may range from 1 to 4. (1 indicates "to a large extent"; 4 indicates "not at all.")

Satisfaction with Life and Professional Progress

Whether respondents currently were employed in teaching or in another occupation, they were asked to judge factors that might be important to them in determining success in their chosen profession and to indicate the extent to which they felt they had achieved success as measured by these criteria. In responding to eleven possible criteria, graduates used a four-point scale (1 = extremely important; 4 = not at all important). Similarly they reported career achievement (1 = extensive success; 4 = no success). The results are given in Tables 32 and 33.

Although both groups rated this criterion as most important, Career Teachers believed they depend somewhat more heavily than did Non-educators on "an inner sense of knowing you are doing your work well" in judging success in their profession. Neither group judged publications, conference presentations or salary as particularly important in judging their professional success but Non-educators valued salary, increased job responsibility and/or autonomy and the chance to contribute to important decisions somewhat more highly than did Career Teachers.

In reporting their achievement of the criteria for professional success, Career Teachers more often felt that they had been successful in receiving approval from family, close friends, and peers[2] and in performing leadership activities in their field. They indicated less success in terms of increased job responsibility and the chance to contribute to important decisions than did Non-educators. Teachers also were less likely to feel that they had achieved the desired "inner sense of knowing that you are doing your work well."

Table 32

Factors Important in Judging Professional Success

	Career teachers			Non-educators			
	N	Mean[a]	SD	N	Mean	SD	t
An inner sense of knowing you are doing your work well	662	1.24	.46	594	1.32	.57	-2.85*
Opportunity to learn	658	1.67	.71	587	1.63	.73	1.02
Increased job responsibility and/or autonomy	638	1.93	.80	586	1.63	.70	6.99*
Recognition by peers	662	2.00	.74	583	2.04	.76	-.98
Recognition by supervisors/administrators	662	2.01	.76	569	2.02	.80	-.16
Chance to contribute to important decisions	660	2.05	.79	596	1.86	.76	4.29*
Approval from family/close friends	772	2.13	.85	593	2.22	.87	-1.84
Leadership activities in your field	647	2.19	.85	590	2.15	.89	.86
Salary	663	2.52	.79	604	2.41	.78	2.57*
Publications in journals/presentations at professional meetings	651	3.29	.82	543	3.20	.89	1.71
Recognition by students	659	1.93	.78	*	*	*	*

*$p < .05$

[a] 1 = extremely important; 4 = not at all important.

Table 33

Extent to Which Criteria for Success Have Been Achieved

	Career teachers			Non-educators			
	N	Mean[a]	SD	N	Mean	SD	t
Approval from family/ close friends	653	1.80	.68	579	1.93	.75	-3.36*
Opportunityto learn	638	1.88	.71	579	1.88	.76	.24
Recognition by peers	652	1.91	.60	570	2.07	.71	-4.09*
Recognition by supervisors/administrators	648	1.97	.71	554	2.05	.77	-1.89
An inner sense of knowing that you are doing your work well	622	2.09	.76	575	1.89	.79	4.48*
Increased job responsibility and autonomy	622	2.09	.76	575	1.89	.79	4.48*
Salary	642	2.26	.67	586	2.32	.72	-1.57
Leadership activities in field	635	2.28	.77	581	2.40	.87	-2.60*
Chance to contribute to important decisions	646	2.34	.75	584	2.19	.80	3.41*
Publication in journals/ presentations at conferences	635	3.29	.77	524	3.30	.87	-.07

*$p < .05$

[a](1 = extensive success; 4 = no success)

We were also interested in knowing, in general, how satisfied our respondents were with their professional careers and with their lives. Career Teachers indicated slightly more career satisfaction than did Non-educators. While Non-educators were slightly more satisfied with life in general and a greater percentage of them said they were "generally happy these days." Differences between the groups were small as shown in Table 34.

Evaluating Teacher Performance

Apparently teachers value student and parent opinion of their work but would prefer that such opinion be obtained informally. Few would use formal feedback or ratings from students or parents in their performance evaluation nor would they rely extensively on such formal input in judgements of their own success. Substantial opposition was expressed to the use of standarized tests. Of the Career Teachers, 68% would not rely on such tests in judging their own performance and 78% did not believe they should be used in teacher evaluation. Locally administered tests were viewed only a bit more favorably.

Table 34

Satisfaction with Life and Professional Career

	Career teachers N = 673		Non-educators N = 646	
Satisfaction with professional career				
Extremely satsfied	158	24%	128	20%
Very satisfied	343	51%	280	45%
Somewhat satisfied	151	23%	171	27%
Not at all satsfied	13	2%	47	8%
	665		626	
	$\bar{x}$=2.03	SD=.74	$\bar{x}$=2.20	SD=.86
		t=-4.26*		
Satisfaction with life in general				
Completely satisfied	156	24%	185	29%
Pretty satisfied	452	69%	415	65%
Not very satisfied	52	8%	40	6%
	660		640	
	$\bar{x}$=1.84	SD=.54	$\bar{x}$=1.77	SD=.55
		t=2.33*		
Happiness you experience these days				
Very happy	209	32%	279	44%
Pretty happy	382	58%	328	51%
Not too happy	66	10%	32	5%
	657		639	
	$\bar{x}$-1.78	SD=.61	$\bar{x}$=1.61	SD=.58
		t=5.09*		

*p < .05

Table 35

Factors Which Should be Used in Evaluating Teachers

	N	Mean[a]	SD	Percent agreement			
				SA	A	D	SD
The teacher's self assessment	623	1.83	.64	29	61	8	2
Class observation by administrators/supervisors	612	2.06	.63	13	71	12	4
Evaluations by other teachers familiar with the teacher's work and students	610	2.09	.80	22	53	19	6
Accomplishment of objectives stated or neggotiated in advance	606	2.16	.74	16	59	21	5
Professional growth of teachers as perceived by administrators/ supervisors	611	2.17	.69	12	64	20	5
Student gains on locally developed achievement tests	604	2.67	.86	6	41	33	20
Student ratings of the teacher	600	2.81	.83	4	33	41	22
Parents evaluation of the teacher	602	2.99	.76	3	21	50	26
Students' achievement gains on standardized tests	604	3.07	.78	2	21	45	33
Number of students who desire to enroll in that teacher's class	601	3.12	.81	3	18	43	36

[a]Scores range from 1 (strongly agree) to 4 (strongly disagree).

Table 36

Extent to Which Good Teachers Rely on the Following as Indicators of Success

	N	Mean[a]	SD	Percent relying on the factor			
				Extensively	A great deal	Somewhat	Not at all
Teacher's own sense of how things are going	632	1.38	.54	65	32	3	0
Teacher's general observation of student progress	627	1.53	.60	52	43	5	0
Reactions of other teachers familiar with teacher's work and that of students	632	2.04	.72	23	52	24	1
Opinions expressed by students	629	2.30	.68	22	50	34	2
Reactions of students' parents	626	2.63	.65	4	34	57	5
Assessments made by the principal	625	2.67	.66	4	33	57	7
Results of locally constructed tests	620	2.68	.74	6	30	54	10
Performance of students on state administered tests	621	2.72	.71	5	27	58	10
Assessments made by a subject matter or curriculum specialist	617	2.77	.71	4	28	56	12
Formal student evaluation of teaching	609	2.85	.71	4	22	59	15

[a]Scores may range from 1 (extensively) to 4 (not at all).

Teacher Job Priorities

To obtain information about priorities among teachers, Career Teachers were asked "If you were to receive a gift of an extra ten hours a week with the provision that it

be spent on work, which of the following activities would you choose to spend that time on first?" Respondents were asked to choose only one activity from among nine suggested. The activities chosen, in order of selection by 673 Career Teachers, are given in Table 37. Teachers clearly prefer to spend their time in teaching activities or in preparation for teaching. Relatively small numbers would choose to spend their time on improving school administrative operations or working with a professional organization to change conditions of employment. Similarly, teachers were not inclined to work with parents or to enter into community activities that would enhance the schools' position.

Table 37

Ways Career Teachers Prefer to Use Ten Additional Work Hours

	Number	Percent
Teaching students either in groups or in individual conferences	165	26%
Preparing lessons, reading and studying	144	23%
Counseling individual students on problems they consider important	102	16%
Reviewing student work or diagnosing student needs	72	12%
Serve on a school curriculum committee	38	6%
Improve school operations by work on scheduling, student government or similar matters	33	5%
Discuss student work and problems with theirparents	32	5%
Enhancethe community's assessment of the school by working on exhibits, parent meetings, etc.	20	3%
Working with a professional organization to change conditions of employment	19	3%
	625	
No response	48	

FOOTNOTES

1. In a separate paper we have reported some differing characteristics of those individuals who were classified according to the various career patterns shown in Table 10 and Figures 1 and 2.

2. Teachers felt they had also received student recognition but this item was irrelevant for Non-educators.

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