

DOCUMENT RESUME

ED 201 618

SP 018 008

AUTHOR deVoss, Gary; Hawk, Donald
 TITLE Follow-Up of 1978/79 Graduates at The Ohio State University's College of Education Teacher Certification Program. Technical Report #5.
 INSTITUTION Ohio State Univ., Columbus. Coll. of Education.
 SPONS AGENCY Ohio State Dept. of Education, Columbus.
 PUB DATE 80
 NOTE 132p.; For related document, see SP 018 004. Questionnaires may be marginally legible.

EDRS PRICE MF01/PC06 Plus Postage.
 DESCRIPTORS Attitude Change; Beginning Teachers; Career Change; *Educational Assessment; Education Work Relationship; Employment Patterns; *Graduate Surveys; Health Education; *Job Satisfaction; Mathematics Teachers; Preservice Teacher Education; Science Teachers; Student Teacher Relationship; *Teacher Attitudes; *Teacher Characteristics; *Teaching (Occupation); Trend Analysis
 IDENTIFIERS Ohio State University

ABSTRACT This report presents an analysis of data gathered in a followup study of the 1978/79 graduates from the College of Education at Ohio State University. The survey included graduates who chose a profession other than teaching as well as currently practicing teachers. Data was gathered in some depth from health education and math/science graduates. A Demographic/Professional Perspective questionnaire was sent to all graduates. Teachers also received a Concerns/Problems questionnaire. A summary of the responses on each item in the questionnaires is given in tabular form accompanied by a narrative analysis. An overview is presented of the characteristics of the teachers responding to the survey. The appendix includes percentage tables on each of the 56 items in the teacher concerns questionnaire. (JD)



ED201618

FOLLOW-UP PROJECT
TECHNICAL REPORT #5 (1980)

DR. GARY deVOSS,
DIRECTOR

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

✓ This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Gary de Voss

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

800 SP 018008

Technical Report #5: Follow-Up of 1978/79 Graduates at The
Ohio State University's College of
Education Teacher Certification Program

1980

Prepared by:

Dr. Gary DeVoss
Dr. Donald Hawk

Produced for the OSU College of Education as part of a total effort to redesign teacher education. This project is funded entirely from State of Ohio, Department of Education Project 419 monies.



Table of Contents

	<u>Page</u>
<u>Part I:</u>	
Introduction	1
History of the OSU Follow-Up Project.	1
How This Year's Study Was Done.	3
 <u>Part II:</u>	
Summary of Demographic Information.	23
The Typical Graduate: A Composite Portrait.	23
Current Employment.	25
Age, Sex, and Race.	26
Years Teaching Experience	28
Program Area.	29
Educational Placement Services.	30
Future Professional Study	32
Employment Related to Degree, But Not Teaching.	32
Seeking a Teaching Position	33
Reasons For Not Teaching.	33
Regret For Not Teaching	34
Current Employment of Non-Teaching Graduates.	34
Happy in Current Position	35
Usefulness of Education Degree.	36
Current Educational Employment.	36
Aid in Securing Employment.	37
How Did You Obtain Your First Teaching Position?	38
Location of School in Which You Teach	39
Typical Student Motivation	39
Classroom Discipline.	40
Parent Participation.	40
Typical Socio-Economic Status of Students' Families	41
Racial Mix of Pupils.	41
Pupil-Teaching Ratio	42
School Size	42
School Type	43
Type of Classroom	43
Grade Level Taught.	44
Attitude Toward Teaching in General	44
Attitude Toward Present Teaching Position	45
Perceptions of Professional Preparation.	46
Upgrading Teaching Effectiveness.	47
Most Valuable Library-Media Center Service.	48
Guidance Staff Availability	48
Assistance with Discipline Problems	49
Supervision of Extracurricular Activities	50

Table of Contents (cont'd)

	<u>Page</u>
Evaluation of Teaching By School Administrators	51
Formal Evaluation of Teaching	51
Means of Evaluating Teaching	52
Most Help to Professional Development	53
Key Person Who Provided Support	54
Teacher Warmth and Closeness Versus Getting Work Done. . .	54
Major Attraction of Teaching	55
General Comments	55
Summary of Demographic/Professional Perspectives from 1975-79	
Math/Science Graduates	57
A Composite Portrait.	57
Current Employment	58
Age, Sex, Race	59
Years Teaching Experience	60
Students Who Transferred to Ohio State.	61
Program Area.	61
Educational Placement Service	62
Future Professional Study	64
Employment Related to Teaching, But Not Teaching.	65
Seeking a Teaching Position	65
Reasons for Not Teaching	66
Regret for Not Teaching	66
Current Employment of Non-Teaching Graduates.	67
Happy in Current Position	67
Usefulness of Education Degree.	68
Current Educational Employment.	69
Aid in Securing Employment.	69
How Did You Obtain Your First Teaching Position	70
Location of School in Which you Teach	71
Typical Student Motivation.	71
Classroom Discipline.	72
Parent Participation	72
Typical Socio-Economic Status of Students' Families	73
Racial Mix of Pupils	73
Pupil-Teacher Ratio	74
School Size	74
School Type	75
Type of Classroom	75
Grade Level Taught	75
Attitude Toward Teaching in General	76
Attitude Toward Present Teaching Position	77
Perceptions of Professional Preparation	77
Upgrading Teaching Effectiveness.	78
Most Valuable Library-Media Center Service	80
Guidance Staff Availability	80
Assistance With Discipline Problems	81
Supervision of Extracurricular Activities	82
Evaluation of Teaching By School Administrators	82
Formal Evaluation of Teaching	83

Table of Contents (cont'd)

	<u>Page</u>
Means of Evaluating Teaching	84
Most Help to Professional Development	84
Key Person Who Provided Support.	85
Teacher Warmth and Closeness Versus Getting Work Done	85
Major Attractions of Teaching.	86
General Comments	87
Summary of Health Education Findings.	88
Summary of Teacher Concern Questionnaire.	91
Degree of Concern	91
Degree of Preparation.	92
Source of Preparation.	92
Summary of Teacher Concerns Questionnaire for Math/Science Graduates, 1975-79.	94
Degree of Concern.	94
Degree of Preparation.	94
Source of Preparation.	95
Summary of Interview/Observation Results	97
A Brief Summary of Findings.	97
Instrumentation	97
Interview Findings	98
Summary.	104

Appendices

- Appendix A: Assessing the Generalizeability of the Demographic Findings
- Appendix B: Means for All Teacher Concerns Items, 1978/79 Graduates
- Appendix C: Means for all Teacher Concerns Items, 1975-79 Math/Science Graduates
- Appendix D: (Under Separate Cover) Findings by Program Area

Introduction

During the past year, the Follow-Up Project of the College of Education at OSU has been busy collecting and analyzing information from 943 four-year graduates -- the entire graduating class of the 1978/79 academic year. This report presents the findings of the data analysis. This report has been set up to facilitate its reading for those persons who may be interested in only the most interesting findings. For this reason, the report only summarizes the results. Specific items of information have been forwarded to heads of program areas and all findings are available in the Follow-up Office.

This report presents results of the follow-up of 943 1978-79 graduates of the 30 program areas in the College of Education. Since three kinds of information were gathered, the findings are split in three ways. Each set of information reflects the findings of one of the instruments used: demographic/professional perspectives, the teacher concerns instrument, or the site visit packet of instruments. Likewise, just as the instrumentation has guided the presentation of the data, information on the graduates is presented for all graduates as a group, and then for the graduates of Math/Science Education and Health Education. For those persons interested in either the general or some specific aspect, the table of Contents should provide a handy guide to the use of this report.

History of the OSU Follow-Up Project

The Follow-Up Project was begun in 1977 in response to both State of Ohio and NCATE requirements for the "continuous study, development, and improvement of teacher education shall be evidenced and supported by

a well-defined plan of evaluation which shall provide for the follow-up of graduates." (State of Ohio Standards for Colleges or Universities Preparing Teachers, 1975, p. 9).

In 1978, the first report was completed, which examined the graduates of the 1977/78 graduating class. At the time of that report, a general strategy for the OSU follow-up Project was to study one-year out, then three-year out, then five-year out graduates in successive years, in a continuing cycle. In 1979, this strategy was continued, the result being a report entitled "Findings from a Random Sample of 120 1975/76 Graduates of the OSU College of Education." In addition to this report of the three-year out graduates in 1979, two other pilot projects were undertaken to determine how feasible it would be to use more qualitative techniques, or other approaches to follow-up instead of the more traditional mail questionnaire. Another report was completed as a result of this exploratory attempt, which documented the day-by-day experience of two undergraduates who were in the student teaching phase of their training. Finally, in 1979, a third project, which also looked at the student teaching phenomenon, was conducted. This study's findings are reported in the Journal of Teacher Education, to be published in June, 1980. (The report is also available from the author, through the Follow-Up Project Office.)

From the explorations and studies done in 1979, the present project was designed. Several decisions about scope were made. It was decided not to follow-up teachers who were five years out, since the findings from the three-year study showed clearly that after three years, teachers remember little about specific aspects of their training, and attribute their success or failure to their work environment. It was also decided that because of the high cost it was not feasible to add a large ethnographic

(anthropologically descriptive) component to the follow-up project, at least until such time as a basic system which met State of Ohio and NCATE standards was in place.

The 1980 project focused, then, on settling on one basic system for the systematic gathering of data on graduates, and then tuning the system so that if cost-effectiveness could be maintained, other smaller projects could in the future be added from year to year. This year, 1980, the project has concentrated on gathering high-quality data about 1978/79 graduates generally, and about Health Education and Math/Science graduates in somewhat more depth.

In following years, a major objective of the follow-up project is to begin to a) make strides toward adding a system of teacher competence assessment to the project, as mandated by NCATE standards, and b) better documenting the undergraduates experience, especially the undergraduate field experiences.

Methodology

How This Study Was Done

For 1979/80, the Follow-Up Project gathered information from four groups. The first group was composed of the entire graduating class of the College of Education (four-year baccalaureate degrees) for fall, winter, spring, and summer 1978/79 groups. A total of 943 graduates comprised this group. The second group consisted of 143 Math/Science majors who graduated from 1975-1979. The third group consisted of 15 randomly selected teachers in the Columbus area from the 1979/80 graduating class. These 15 teachers were visited at their schools. The fourth group consisted of 135 Health Education graduates from the graduating classes of

1970-1979.

For the first group, Demographic/Professional Perspectives were mailed to each graduate. The questionnaire is reproduced following this page.

The Demographic/Professional Perspectives questionnaire asked much more than simple demographic kinds of questions. One of the most important characteristics of the questionnaire is that it permitted information to be gathered for both teacher and non-teaching graduates. It also permits results to be analyzed by separate program areas.

These Demographic/Professional Perspective questionnaires were sent in two rounds. The first round of questionnaires was mailed in late December, 1979; the second round was mailed to those persons who did not respond to the first mailing and was sent three weeks after the first round of mailings.

From the 943 graduates, a total of 493 completed questionnaires were received. Results will be completely reported in the next chapter, but it will suffice to report here that of the 493 returns, 298 (60.4%) were from graduates who were currently teaching while the remaining 39.6% of the returns were from non-teaching graduates. To insure that the person responses who did return the demographic questionnaire were representative of all 943 graduates, a procedure was carried out which supports the hypothesis that the 493 questionnaires reflect the characteristics of the population.

First, twenty graduates from the 1978-1979 College of Education population were randomly selected. Each was then contacted personally and requested via a telephone conversation to respond to the Demographic/Professional questionnaire. Then, their responses were compared to

PLACEMENT
TEACHERS/SCHOOL CLERKS - RECENT GRADUATES

Directions: Circle the appropriate response(s) to each item below. Some items may have more than one appropriate response. Some questions ask you to specify or fill in an answer. If you run out of room use additional paper.

- 1. Much of the following describes your current employer?
 - a. classroom teaching (include art, music, PE, etc.)
 - b. other school employment (counseling, administration, curriculum design, media, etc.)
 - c. employed in post secondary education
 - d. other educational-related (specify) _____
 - e. unemployed
 - f. employed outside of education (specify) _____

- 2. Age
 - a. 18-25
 - b. 16-20
 - c. 21-25
 - d. 26-30
 - e. over 30

- 3. Sex
 - a. male
 - b. female

- 4. Racial-ethnic background
 - a. Black, non-Hispanic
 - b. Hispanic
 - c. Asian-American
 - d. Native American (American Indian)
 - e. White
 - f. Other (specify) _____

- 5. Years of full-time teaching experience including this year.
 - a. none
 - b. one
 - c. two
 - d. three
 - e. four or more

- 6. Have you a transfer student?
 - a. no, I completed my entire undergraduate career at OSU.
 - b. yes, I entered OSU as a sophomore.
 - c. yes, I entered OSU as a junior.
 - d. yes, I entered OSU as a senior.
 - e. other (specify) _____

- 7. Place an X next to your program area:
 - (1) _____ Applied Law Education
 - (2) _____ Art Education
 - (3) _____ Biological Science Education
 - (4) _____ Business Administration Education
 - (5) _____ Business Education
 - (6) _____ Career Education
 - (7) _____ Dental Hygiene Education
 - (8) _____ Distributive Education (Retail)
 - (9) _____ Early Childhood Education
 - (10) _____ Elementary Education
 - (11) _____ Elementary-Special Education
 - (12) _____ English Education
 - (13) _____ English Communication Education
 - (14) _____ Exceptional Children Education
 - (15) _____ Foreign Language Education
 - (16) _____ Health Education
 - (17) _____ Home Economics Education
 - (18) _____ Industrial Technology Education
 - (19) _____ International Studies Education
 - (20) _____ Journalism Education
 - (21) _____ Mathematics Education
 - (22) _____ Media Education
 - (23) _____ Music Education
 - (24) _____ Physical Education
 - (25) _____ Physical Sciences Education
 - (26) _____ Recreation Education
 - (27) _____ Science Education
 - (28) _____ Social Studies Education
 - (29) _____ Speech/Debate Education
 - (30) _____ Trade & Vocational Education

- 8. What service provided by the Education Personnel Placement Office was most helpful to you?
 - a. Advertising credentials and having these available to hiring officials.
 - b. Providing me with information regarding vacancies.
 - c. Responding or recommending me for specific positions that were open.
 - d. Helping me prepare my own sheet of resumes.
 - e. None of the above.
 - f. The most useful service was (specify) _____

- 9. How would you rate the Educational Personnel Placement Office services?
 - a. excellent
 - b. good
 - c. fair
 - d. unsatisfactory
 - e. did not use services
- 10. If you are considering further professional study, please check the appropriate description below.
 - a. Professional study in education - Master's degree
 - b. Professional study in education - Postmaster degree
 - c. Professional study in education - Specialist degree
 - d. Professional study in field other than education (specify) _____
 - e. Not considering further professional study

IF YOUR JOB IS CURRENTLY RELATED TO YOUR DEGREE AND YOU ARE NOT TEACHING, CHECK HERE _____ LIST ANY SCHOOL OR OTHER EMPLOYERS OF THE YEAR. ALSO, PLEASE CHECK THE ADDRESS OF YOUR ADDRESS FOR EMPLOYERS.

PLEASE PRINT YOUR NAME AND THE UNIVERSITY ADDRESS OF THE EMPLOYER FOR THE YEAR.

- 11. Have you ever sought a teaching position?
 - a. yes
 - b. no
 How hard did you try? (Describe briefly) _____

- 12. Why are you not teaching at the present time?
 - a. Chose to change professions
 - b. No jobs available
 - c. Salaries are too low
 - d. Other (specify) _____

- 13. Do you regret the fact that you are not teaching now?
 - a. yes
 - b. no

- 14. What job are you currently holding? _____

- 15. Are you happy in this position?
 - a. yes
 - b. no

- 16. Has your education degree been useful at all? (circle more than one if necessary)
 - a. yes, what I learned would be in my job.
 - b. yes, I needed the BA to get this job, but I didn't apply what I learned to my job.
 - c. no, I could have returned in anything to get this job.
 - d. other (specify) _____

THE FILLING OF THE QUESTIONNAIRE IS TO BE REPORTED ONLY IF YOU ARE CURRENTLY TEACHING. PLEASE PRINT YOUR NAME, THE ADDRESS OF YOUR ADDRESS FOR EMPLOYERS, AND THE UNIVERSITY ADDRESS OF THE EMPLOYER OF THIS YEAR. ALSO, PLEASE CHECK THE ADDRESS OF YOUR ADDRESS FOR EMPLOYERS.

- 17. Check the line that describes your current position in terms of your educational background.
 - a. Employed in my major field.
 - b. Employed in my minor field.
 - c. Employed in an educational field other than those I prepared for at OSU. (specify) _____

- 1. Not applicable (circle)

- 18. Please indicate which one of the following was most helpful to you in securing employment.
 - a. Office of education faculty member.
 - b. Department or program chairperson.
 - c. Educational Personnel Placement Office.
 - d. Preparation in area other than the teaching area.
 - e. Other (specify) _____

- 19. How did you obtain your first teaching position?
 - a. Found a job in the district in which I student taught.
 - b. Served as substitute and was later hired as regular teacher.
 - c. Personal contacts (friends, relatives).
 - d. Placement office or other college assistance.
 - e. Other (specify) _____

20. On each line below circle the category that best describes YOUR TEACHING SITUATION:

location:	urban	suburban	rural
typical student motivation:	high	average	low
my classroom discipline:	no problems	occasional problems	very problems
parent participation:	high	moderate	low
typical SES of families:	upper	middle	lower
racial mix:	few minority students (Black, white, hispanic, etc.)	some minority students	predominantly minority
average school student-teacher ratio:	1-10 per teacher	11-20 per teacher	21-over per teacher
school size:	under 500	500-1000	over 1000
school type:	public	private	other: _____
type of class:	self-contained	open	other: _____

21. What are grade level do you currently spend the major part of your time teaching?

- pre-kindergarten or kindergarten
- grades 1-4
- grades 5-12
- special education classes
- adult or non-credentialed
- other (specify) _____

22. Which one of the following best describes your present attitude toward teaching in general?

- very satisfied
- somewhat satisfied
- neutral
- somewhat dissatisfied
- very dissatisfied

23. Which one of the following best describes your attitude toward your present position?

- very satisfied
- somewhat satisfied
- neutral
- somewhat dissatisfied
- very dissatisfied

24. From the list below, circle those letters that are generally true about your college education.

- the core courses of Ed. did secure knowledge into the College of Ed. were useful.
- the core courses were a waste of time.
- the project courses of Ed. were useful.
- the project courses were not useful.
- my student teaching was useful.
- my student teaching was useless.
- my interaction with other students was useful.
- overall, the College of Ed. did a good job preparing me to teach.
- overall, the College of Ed. did not do a good job preparing me to teach.

25. What one factor would do most to help you increase your effectiveness as a teacher in your school?

- fewer or smaller classes
- better professional preparation
- more support from other school personnel
- more lesson preparation time
- other (specify) _____

26. Which of these library-media centers do you use? Check 1 for the one you use most and 2 for the one used least.

- district-wide center
- school-wide center
- department center
- curriculum/educational materials center
- no center available

27. Which of the following services offered by the professional staff of the library-media center is most valuable to you?

- development and production of individual materials for classroom instruction
- regular assistance to students in developing class projects
- development of bibliography of current materials relevant to your own and students' needs in your classes
- very few are of value -- services are inadequate
- no services offered
- other (specify) _____

28. To what extent is a professional member of the school's guidance staff available should the need arise?

- available to work with parents
- available to students full-time
- available to students part-time
- in services offered
- other (specify) _____

29. Describe the assistance you receive with discipline problems.

- assistance available and effective
- assistance available only in extreme circumstances
- no assistance available
- assistance available but admission of need viewed negatively
- other (specify) _____

30. Supervision of extracurricular activities is:

- completely voluntary on my part
- suggested by the school administration
- required by the school administration
- a condition of my employment with the district

31. How many times this year has a school administrator observed and evaluated your teaching?

- 0 times
- 1 time
- 2-3 times
- 4-6 times
- more than 6 times

32. Your teaching is also formally evaluated by (circle all that apply).

- teaching colleagues
- department head
- students
- curriculum specialist
- other (specify) _____

33. What means do you use to evaluate your teaching effectiveness? (describe)

34. Which of these people have been most helpful to your professional development?

- administrators
- teaching colleagues
- department head or curriculum specialist
- counselor
- other (specify) _____

35. During your first year of teaching, was there a key person who provided support and encouragement? If so, please identify.

- administrator or instructional coordinator
- colleague
- former teacher
- a relative or friend
- other (specify) _____

36. Some teachers seem to appreciate the importance of writing and classroom management while others seem to stress the importance of the teacher's personal qualities in work effectiveness. Which of the two is more important to you consider your classroom?

- writing and classroom
- personal work done

37. What were the major extracurricular and educational/teaching goals for you when you decided to enter school? (explain)

Comments: Do you have any general comments about your years in the CSU College of Education?

This section will be destroyed before we analyze your responses. Do not attach your label only to avoid sending you another questionnaire. If our address has changed please direct.

What is your phone number? _____

those of the 493 responders to determine if any response biases existed among the responding group. As can be seen in Appendix A no significant differences in responses were found between the two groups.

A second instrument, called the Concerns/Problems Instrument, was mailed in March of 1980 to all those graduates who were teaching only. This instrument has been reproduced on the next few pages.

As could be expected, not all the teaching graduates returned the questionnaire. Of the 298 that were mailed, 112 were received, for a response rate of 37.6%.

FOLLOW-UP PROJECT
The Ohio State University
College of Education
060A Ramseyer Hall
29 West Woodruff Ave.
Columbus, Ohio 43210

TEACHER CONCERNS CHECKLIST
adapted from Francis F. Fuller

Directions:

This checklist is designed to explore what you, as a teacher, are concerned with at this point in your career. It is also designed to find out whether you have had any preparation in resolving concerns, and what the source of that preparation was.

Each statement has two parts. The "A" (top) part lists a concern. The "B" (bottom) part lists a competency associated with that concern. For each set of statements, respond as follows:

Concern - For each of the "A" statements, ask yourself, WHEN I THINK ABOUT MY TEACHING, HOW MUCH AM CONCERNED ABOUT THIS?

- If you are not concerned about that now, circle "1."
- If you are a little concerned, circle "2."
- If you are moderately concerned, circle "3."
- If you are very concerned, circle "4."
- And if you are extremely concerned, circle "5."

Preparation - For each of the "B" statements, circle the response under "Preparation" that corresponds to your degree of preparation for this competency.

Source - Again, for each of the "B" statements, if you feel you were somehow or somewhere prepared to deal with the concern, respond by circling the response under "Source" that corresponds to where you learned the competency.

CONCERN

not concerned

a little concerned

moderately concerned

very concerned

extremely concerned

1 2 3 4 5

SOURCE
(if prepared at all)
coursework at OSU
teaching itself

inservice training
independent study
don't know

PREPARATION
extensively prepared
more than adequate
adequately prepared
some preparation
but not enough
unprepared

1 2 3 4 5 1 2 3 4 5

1 2 3 4 5

1. A. Lack of respect of some of my students.

B. My students respect me because of something I do.

1 2 3 4 5 1 2 3 4 5

1 2 3 4 5

2. A. Standards and regulations set for teachers.

B. I can deal with all the rules and still be an effective teacher.

1 2 3 4 5 1 2 3 4 5

1 2 3 4 5

3. A. Selecting and teaching content well in my class.

B. I can select appropriate materials in my class.

1 2 3 4 5 1 2 3 4 5

1 2 3 4 5

4. A. The mandated curriculum is not appropriate for all students.

B. I am able to modify the curriculum for different kinds of students.

1 2 3 4 5 1 2 3 4 5

1 2 3 4 5

5. A. Whether students are learning what they should.

B. I am able to know when my students are learning.

1 2 3 4 5 1 2 3 4 5

1 2 3 4 5

6. A. Whether my students really like me or not.

B. N/A

1 2 3 4 5 1 2 3 4 5

1 2 3 4 5

7. A. Increasing students' feelings of accomplishment.

B. I have learned to increase my students' feelings of accomplishment.

1 2 3 4 5 1 2 3 4 5

CONCERN

not concerned
 |
 | a little concerned
 |
 | moderately concerned
 |
 | very concerned
 |
 | extremely concerned
 |
 1 2 3 4 5

PREPARATION

extensively prepared
 more than adequate
 adequately prepared
 some preparation
 but not enough
 unprepared
 |
 |
 |
 |
 |
 1 2 3 4 5

SOURCE
 (if prepared at all)
 coursework at OSU
 teaching itself
 inservice training
 independent study
 don't know
 |
 |
 |
 |
 |
 1 2 3 4 5

1 2 3 4 5	8. A. The nature and quality of my instructional materials.								
	B. I can recognize good materials when I see them.	1	2	3	4	5	1	2	3 4 5
1 2 3 4 5	9. A. Where I stand as a teacher.								
	B. I have a personal philosophy that guides me when teaching.	1	2	3	4	5	1	2	3 4 5
1 2 3 4 5	10. A. Motivating my students to study.								
	B. I can apply motivating techniques when I teach.	1	2	3	4	5	1	2	3 4 5
1 2 3 4 5	11. A. Working productively with other teachers.								
	B. I can work productively with other teachers.	1	2	3	4	5	1	2	3 4 5
1 2 3 4 5	12. A. Lack of instructional materials in my class or school.								
	B. N/A								
1 2 3 4 5	13. A. Rapid rate of curriculum and instructional change in my school.								
	B. N/A								
1 2 3 4 5	14. A. Feeling under pressure too much of the time.								
	B. I generally can keep up with what I have to do.	1	2	3	4	5	1	2	3 4 5
1 2 3 4 5	15. A. The routine and inflexibility of the situation.								
	B. I have adjusted fairly well to this situation.	1	2	3	4	5	1	2	3 4 5

CONCERN

not concerned

a little concerned

moderately concerned

very concerned

extremely concerned

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

SOURCE
(if prepared at all)
coursework at OSU
teaching itself

inservice training
independent study
don't know

PREPARATION
extensively prepared
more than adequate
adequately prepared
some preparation
but not enough
unprepared

1 2 3 4 5 1 2 3 4 5

16. A. Becoming too personally involved with students.
B. I have learned to keep the right amount of distance between me and my students (whatever that is for you).

1 2 3 4 5 1 2 3 4 5

17. A. Maintaining the appropriate degree of class control.
B. I generally can control my class.

1 2 3 4 5 1 2 3 4 5

18. A. Acceptance as a friend by my students.
B. N/A

19. A. Understanding the principal's policies.
B. N/A

20. A. The wide range of student achievement in my class.
B. I can modify the curriculum to fit individual's needs.

1 2 3 4 5 1 2 3 4 5

21. A. Doing well when a supervisor is present.
B. I have enough confidence not to get too nervous.

1 2 3 4 5 1 2 3 4 5

22. A. Meeting the needs of different kinds of students in my class.
B. I know how to provide different kinds of instruction for different students.

1 2 3 4 5 1 2 3 4 5

23. A. Being fair and impartial toward students.
B. I still find being fair a big problem in my class.

1 2 3 4 5 1 2 3 4 5



CONCERN

not concerned

a little concerned

moderately concerned

very concerned

extremely concerned

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

SOURCE
(if prepared at all)
coursework at OSU
teaching itself

in-service training
independent study
don't know

PREPARATION

extensively prepared

more than adequate

adequately prepared

some preparation

but not enough

unprepared

1 2 3 4 5 1 2 3 4 5

24. A. Diagnosing student learning problems.
B. I know how to diagnose student learning problems. 1 2 3 4 5 1 2 3 4 5

25. A. Getting a favorable evaluation of my teaching.
B. N/A

26. A. Being asked personal questions by my students.
B. I can handle difficult questions from students about my personal life. 1 2 3 4 5 1 2 3 4 5

27. A. Too many noninstructional duties at my school.
B. N/A

28. A. Insuring that my students grasp subject matter fundamentals.
B. I can "deliver" my subject matter to facilitate learning. 1 2 3 4 5 1 2 3 4 5

29. A. Working with too many students each day.
B. I can control my time so I don't get overwhelmed with too many students at once. 1 2 3 4 5 1 2 3 4 5

30. A. Challenging unmotivated students I have contact with.
B. I have learned ways to challenge unmotivated students. 1 2 3 4 5 1 2 3 4 5

31. A. The values and attitudes of the current generation.
B. I am prepared to deal with differing attitudes and values from my own. 1 2 3 4 5 1 2 3 4 5

SOURCE
(if prepared at all)
coursework at OSU
teaching itself

CONCERN

not concerned

a little concerned

moderately concerned

very concerned

extremely concerned

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

PREPARATION
extensively prepared
more than adequate
adequately prepared
some preparation
but not enough
unprepared

1 2 3 4 5

inservice training
independent study
don't know

1 2 3 4 5

32. A. Adapting myself to the needs of different students.
B. I can plan and carry out instruction that meets the needs of different kinds of students.

1 2 3 4 5

1 2 3 4 5

33. A. Whether my students can apply what they learn.
B. I put application kinds of learning into lessons I teach.

1 2 3 4 5

1 2 3 4 5

34. A. Understanding the philosophy of the school.
B. I know the school philosophy here.

1 2 3 4 5

1 2 3 4 5

35. A. Students who disrupt my classes.
B. I can deal with students who disrupt classes.

1 2 3 4 5

1 2 3 4 5

36. A. Instilling worthwhile concepts and values in my students.
B. I know ways to teach attitudes and values to my students.

1 2 3 4 5

1 2 3 4 5

37. A. How my students feel about me.
B. N/A

25

38. A. Student health and nutrition problems that affect learning.
B. I can recognize and deal with health problems of my students.

1 2 3 4 5

1 2 3 4 5

39. A. The psychological climate of the school
B. Whether the psychological climate of the school

CONCERN

not concerned

a little concerned

moderately concerned

very concerned

extremely concerned

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

PREPARATION

extensively prepared

more than adequate

adequately prepared

some preparation

but not enough

unprepared

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

SOURCE

(if prepared at all)

coursework at OSU

teaching itself

in-service training

independent study

don't know

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

40. A. Clarifying the limits of my authority and responsibility.

B. I can communicate my wishes to my students on managerial matters.

41. A. Assessing and reporting my students progress.

B. I know how to keep and record grades efficiently and fairly.

42. A. Chronic absence and dropping out of students.

B. I am prepared to deal with chronic absenteeism,

43. A. Lack of academic freedom.

B. I can teach whether or not academic freedom is an issue.

44. A. Teaching required content to students of varied background.

B. I can deal with students from very different background in terms of instruction.

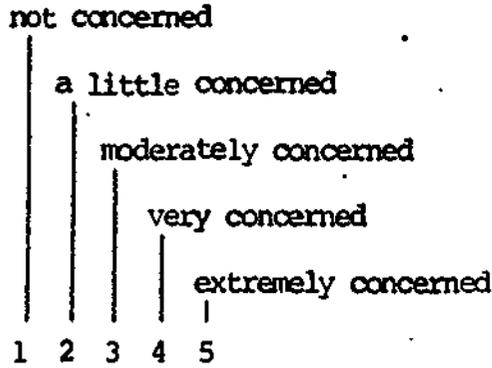
45. A. Student use of drugs.

B. I can deal with students in my classroom who are "high."

46. A. Feeling more adequate as a teacher.

B. I can handle the ups and downs of teaching emotionally.

CONCERN



1 2 3 4 5

47. A. Guiding my students toward intellectual and emotional growth.
B. I have some long-term ideas of how I want my students to grow intellectually.

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

48. A. Being accepted and respected by professional persons.
B. I have learned to gain the respect of my peers.

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

49. A. Adequately presenting all of the required material to my class.
B. I can keep to the teaching schedule in spite of interruptions.

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

50. A. Slow progress of certain students in my class.
B. I can teach students who learn at different speeds.

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

51. A. My ability to present ideas to my class.
B. I think I can communicate my ideas to the class.

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

52. A. Helping my students to value learning.
B. I can get my student to see the value of learning.

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

53. A. Whether each student is getting what he or she needs.
B. I am able to diagnose the instructional needs of my students.

1 2 3 4 5

1 2 3 4 5

SOURCE
(if prepared at all)
coursework at OSU
teaching itself
inservice training
independent study
don't know

PREPARATION
extensively prepared
more than adequate
adequately prepared
some preparation but not enough
unprepared

1 2 3 4 5 1 2 3 4 5

CONCERN

not concerned

a little concerned

moderately concerned

very concerned

extremely concerned

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

- 54. A. Increasing my proficiency in content.
- B. I know enough about the "what" of teaching to feel competent.

- 55. A. Recognizing the social and emotional needs of students.
- B. I can recognize the social/emotional needs of my students.

- 56. A. The wide diversity of student ethnic and socio-economic backgrounds.
- B. I am flexible enough to deal with different kinds of students.

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

SOURCE
(if prepared at all)
coursework at OSU
teaching itself
in-service training
independent study
don't know

PREPARATION
extensively prepared
more than adequate
adequately prepared
some preparation
but not enough
unprepared

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5



The second group, the 1975-1979 Math/Science graduates, received the same Demographic/Professional Perspectives and Concerns/Problems instruments. Their return rates for these two instruments were 57.9% and 26.6%, respectively.

For the third group, those graduates who were first-year teachers in the Columbus area, a third procedure was followed. The Follow-Up staff, between February and April of 1980, visited each of these teachers at their school. While there, the observer recorded, using the Goodlad (1970) System, a segment of the teachers' in-class instruction, and conducted an interview. The Goodlad (1970) system is an open-ended "snapshot-like" system. The interview form is reproduced on the next few pages.

For the fourth group (135 1970-79 Health Education graduates) another procedure was followed. Briefly it went like this:

A procedural model was developed and implemented to follow-up the 1970-1979 Health Education Bachelor's Degree level graduates. This model incorporated the desired outcomes for a school health educator and was designed to obtain graduates' feedback concerning their professional preparation and what they viewed as important qualities of the school health educator.

The study was divided into five procedural phases. These phases were:

- Phase I: Identification of the desired outcomes of the undergraduate school health education program at The Ohio State University
- Phase II: Development of a Survey Instrument to obtain feedback from the 1970-1979 bachelor's degree level health education graduates.
- Phase III: Collection of the Data
- Phase IV: Presentation, Analysis and Interpretation of the Data

Follow-Up Teacher Interview
Revised 1/80

1. Think back to when you first decided to choose teaching as a profession.
 - a. Why did you decide to become a teacher?
 - b. What program areas did you consider?
 - c. Why did you choose that program area?
 - d. How did you get this job?

INTERVIEWER'S COMMENTS:

The next few questions will be about your perception of the teacher program that you went through.

2. Overall, based on your teaching experience, how satisfied are you now with the program you had then?

INTERVIEWER'S COMMENTS:

3.
 - a. On a scale from 1 to 10, to what extent did the general courses in your program help you in your day-to-day teaching? (scales: 1 - not at all; 10 - to a great extent).
 - b. On a scale from 1 to 10 to what extent did the courses specific to your major help you in your day-to-day teaching?

INTERVIEWER'S COMMENTS:

4. a. On a scale from 1 to 10, to what extent did the general philosophy and theory courses in your program help you in your teaching? (1 - not at all 10 - to a great extent).
- b. On a scale from 1 to 10, to what extent did your specific program's philosophy and theory courses help you in your teaching?

INTERVIEWER'S COMMENTS:

5. Looking back, would you want the program to be more practical or more theoretical?

INTERVIEWER'S COMMENTS:

6. a. Can you think of areas that were neglected or overemphasized in your program?
- b. How would you change the program to be more helpful to teachers?

INTERVIEWER'S COMMENTS:

7. On a scale from 1 to 10, rate the field experience you had. (1 - terrible; 10 - outstanding).

INTERVIEWER'S COMMENTS:

8. Was there anything unusual about your student teaching and/or field experiences?

INTERVIEWER'S COMMENTS:

9. No preparation for any job is ever perfect. Was there any part of teaching that caught you completely by surprise after you began your employment?

INTERVIEWER'S COMMENTS:

10. Would you finish each sentence I am about to read?

- a) Since last year I. . . .
- b) My biggest concern when I teach is. . . .
- c) Teaching is. . . .
- d) My fellow teachers. . . .
- e) The university should help teachers in the field by. . . .
- f) The most difficult student to teach is one who. . . .

11. What kind of teacher did you want to be when you started teaching?

Have you changed your mind since then (or recently)?

DO NOT HURRY. DO NOT CLARIFY. SAY ONLY, "THIS IS A DIFFICULT QUESTION. TAKE AS MUCH TIME AS YOU NEED TO ANSWER".

INTERVIEWER'S COMMENTS:

12. a. In general, how satisfied are you with teaching now?
b. How satisfied are you with your own teaching?

INTERVIEWER'S COMMENTS:

13. How has teaching affected your family and/or personal life?

INTERVIEWER'S COMMENTS:

14. Who has been the most helpful person to you this year? In what ways?

INTERVIEWER'S COMMENTS:

15. How many years do you plan to teach?

What then?

INTERVIEWER'S COMMENTS:

16. a. Describe the characteristics of the worst university professor in preparing you to teach? (without mentioning names).

b. Describe the characteristics of the best university professor in preparing you to teach?

INTERVIEWER'S COMMENTS:

This concludes our interview. PARAPHRASE THIS SENTENCE: "ARE THERE ANY OTHER COMMENTS YOU WOULD CARE TO MAKE?"

(continued from page 17)

Phase V: Appraisal of the Procedural Model Process: Implications for its adaptation of other teacher education program areas.

The survey instrument used in this study was composed of the knowledge, skill, and attitude/value items which were validated by the tenured Health Education faculty at OSU. Since there was a large number of items, these items were divided equally to develop two similar forms of the survey instrument. Each item was responded to by the 1970-1979 graduates according to two scales. One scale requested the graduates to rate the "Importance" of each knowledge, skill, or attitude/value statement on a "1" (totally unimportant) to "6" (most important) scale. The other scale requested the graduates to rate the "Adequacy of Your Preparation" to achieve each stated knowledge, skill, or attitude/value on a "1" (poor preparation) to "6" (excellent preparation) scale. An additional point of "0" (no preparation) was placed on this scale to stress the differentiation between the quality of one's professional preparation and the possible lack of a specific facet of preparation.

One form of the survey instrument was mailed to one stratified random sample of 66 graduates while the other form was mailed to a similar sample of 66 graduates. Three of the graduates could not be contacted. Eighty-nine usable survey instruments (67.4%) were returned and used in the analysis of the data.

Analysis of the study data was conducted using descriptive (percentages, means, ranges, and standard deviations), correlational (Pearson product-moment correlation coefficient), and inferential (analysis of variance) statistics.

A graphic representation of how the overall 1979/80 Follow-up study was carried out presented on page 23 (figure 1).

SUMMARY OF THE STUDY'S RESULTS

This portion of the report will summarize the data collected via the demographic and teacher concern questionnaires. The data for the College of Education graduates (N=493) will be summarized first. A similar summary of the math/science graduates for the academic years, 1975-1979 (N=143) will follow this initial summary. Third, a summary of the results of Health Education study (N=89) will be presented. Finally, a summary of the site-visit data will be presented.

Summary of Demographic/Professional Perspectives

Questionnaire Results

The Typical Graduate: A Composite Portrait

From all the confusing statistics, this composite of the typical 1978/79 graduate emerges:

- white female, age 20-25
- no previous teaching experience
- completed entire undergraduate degree at OSU
- rated the Placement Service as good . . .
- plans to get an MA in education in the next few years
- obtained her position through a personal contact
- taught in a suburban setting
- has occasional discipline problems
- teaches classes which ranged in size from 21 to 30 pupils
- teaches in schools with enrollments of under 1000
- has effective assistance available when discipline problems occur

	Demographic Mail Questionnaire	Teacher Concerns/ Problems Mail Questionnaire	Observations, Interviews	Special Health Ed Questionnaire
All 1978/79 Grads	X			
1978/79 Grads who were teaching	X	X		
1970-79 Health Ed Grads				X
Selected Columbus-area Grads	X	X	X	
1975-79 Math/Science Grads	X			
1975-79 Math/Science Grads who were teaching	X	X		

SUMMARY OF PROCEDURES,
1979/80 PROJECT

Figure 1

- is not required to lead extracurricular activities
- teaches in a public school, in a self-contained classroom in a middle-class school with few minority students
- is "very satisfied" with teaching in general
- is "very satisfied" or "somewhat satisfied" with their present position
- teaches in schools where students had access to full-time or part-time guidance personnel
- feels her OSU education was generally adequate
- uses student test scores as a means for evaluating her teaching
- is helped the most in promoting her professional development by teaching colleagues
- is supported by her teaching colleagues
- thought that "warmth and closeness" was more important than "getting work done"
- was attracted to teaching because of wanting to work with children

These specific data will amplify the above composite.

Current Employment

Approximately one-half (52.7%) of the 488 graduates who responded to the first item on the demographic/professional perspectives reported that they were employed as classroom teachers. An additional 40 graduates (8.2%) were employed as substitute teachers. Slightly over one-fourth (26.6%) of the respondents were employed outside of education while just 28 (5.7%) of the graduates were currently unemployed.

Table 1

Current Employment	Frequency	Percentage
Classroom Teaching	257	52.7
Other School Employment	10	2.0
Post Secondary Schools	4	.8
Subbing	40	8.2
Unemployed	28	5.7
Coaching	3	.6
Graduate Student	11	2.3
Military	5	1.0
Other	130	26.6

Age, Sex, and Race

As could be expected, the overwhelming majority (81.9%) of the respondents reported that they were between the ages of 20-25. Seventy-eight of the remaining 89 (15.9%) of the graduates stated that they were between the ages of 26-35.

Approximately seven out of every ten respondents (70.2%) were female while all but 13 of the respondents were white (97.3%).

Table 2

<u>Age</u>	<u>Frequency</u>	<u>Percentage</u>
20-25	402	81.9
26-30	52	10.6
30-35	26	5.3
36-40	5	1.0
Over 40	6	1.2
Total	491	100.0

Table 3

<u>Sex</u>	<u>Frequency</u>	<u>Percentage</u>
Male	145	29.8
Female	341	70.2
Total	486	100.0

Table 4

<u>Race</u>	<u>Frequency</u>	<u>Percentage</u>
Black	10	2.1
Hispanic	1	.2
Asian-American	1	.2
Native American	1	.2
White	474	97.3
Total	487	100.0

Years Teaching Experience

Over half of the graduates(54.6%) stated that they had no fulltime teaching experience. All but 16 of the 221 remaining respondents (42.1%) reported that they had one year of full-time teaching experiences. It is assumed that the 16 respondents who reported two or more years of teaching experience had obtained a teaching degree prior to the one earned during the 1978-1979 academic year.

Table 5

<u>Years Teaching</u>	<u>Frequency</u>	<u>Percentage</u>
None	266	54.6
1	205	42.1
2	7	1.4
3	3	.6
4 or more	6	1.2
Total	487	100.0

Students Who Transferred to Ohio State

Almost three-fourths (74.9%) of the respondents completed their entire undergraduate career at The Ohio State University. Of the 109 graduates who did transfer to Ohio, 69 (63.3%) did so during their sophomore year.

Table 6

<u>Transfer Students</u>	<u>Frequency</u>	<u>Percentage</u>
no transfer	368	74.9
Yes Sophomore	69	14.1
Yes Junior	38	7.7

Table 6 (cont'd)

<u>Transfer Students</u>	<u>Frequency</u>	<u>Percentage</u>
Yes Senior	2	.4
Other	14	2.9
Total	491	100.0

Program Area

Approximately one-third (32.7%) of the responding graduates majored in Elementary Education. Social Studies majors accounted for 8.8% of the respondents while Physical Education, Music Education, and English Education majors accounted for 6.9%, 6.7% and 5.7%, respectively. The remaining 39.2% of the respondents were distributed among the other program areas.

Table 7

<u>Program Area</u>	<u>Frequency</u>	<u>Percentage</u>
Art Education	20	4.1
Biological Science	12	2.4
Broadcasting Communications	1	.2
Business Education	8	1.6
Dental Hygiene	17	3.4
Distributive Education	4	.8
Earth Science	2	.4
Elementary Education	160	32.7
Elementary Special Education	10	2.0
English Education	28	5.7
English Communication Education	4	.8

Table 7 (cont'd)

<u>Program Area</u>	<u>Frequency</u>	<u>Percentage</u>
Exception Children Education	12	2.4
Foreign Language Education	9	1.8
Health Education	20	4.1
Industrial Technology Education	21	4.3
Journalism Education	1	.2
Math Education	15	3.0
Music Education	33	6.7
Physical Education	34	6.9
Physical Science	1	.2
Recreation Education	25	5.1
Science Education	4	.8
Social Studies Education	43	8.8
Speech & Theatre Education	2	.4
Trade Industrial Education	2	.4
Total	490	100.0

Educational Placement Services

Approximately one-half (4.3%) of the graduates who responded to the demographic/Professional perspectives reported that "assembling credentials" was the "most helpful service" provided by the Educational Personnel Placement Office. Forty-seven (9.9%) respondents stated that "helping me prepare my resume" was the most helpful service provided. Over one-fourth (29.9%) of the graduates responded, "none of the above" to the question concerning the "most helpful service" provided by the Personnel Placement Office.

Table 8

Placement Service	Frequency	Percentage
Assemble Credentials	234	49.3
Provide Information	33	6.9
Recommend for Position	12	2.5
Resume Help	47	9.4
None	142	29.9
Other	7	1.5
Total	475	100.0

One hundred and eighty-eight (38.9%) of the respondents rated the services offered by Educational Personnel Placement Office as "good" while 17.8% of the respondents rated the services as "fair" and 12.6% rated them as "excellent". Of the remaining 30.7% of the respondents, 22.6% reported that they "did not use the services" offered and 8.1% rated the services as "unsatisfactory".

Table 9

Ed Placement Rated	Frequency	Percentage
Excellent	61	12.6
Good	188	38.9
Fair	86	17.8
Unsatisfactory	39	8.1
Did not use	109	22.6
Total	483	100.0

Future Professional Study

Over one-half of the respondents (57.3%) were considering pursuing a Masters Degree in Education. Seventy-two respondents (15.2%) expressed no interest in furthering their education.

Over one-fifth of the respondents (22.5%) considered employment in fields outside of education. Areas outside of education mentioned frequently were: biology, natural resources, nutrition, accounting, law, and medically related fields.

Table 10

<u>Future Professional Study</u>	<u>Frequency</u>	<u>Percentage</u>
Masters of Education	272	57.3
Ph.D. of Education	5	1.1
Specialist Degree	19	4.0
Engineering	61	12.8
No Study	72	15.2
Biology, Natural Res., Nutrition	2	.4
Accounting, Business, Law	21	4.4
Other	17	3.6
Medical Field	6	1.3
Total	475	100.0

Employment Related to Degree, But Not Teaching

Some of the College of Education graduates gain employment in non-teaching positions which are nevertheless directly related to the undergraduate degree. Dental Hygiene and Recreation Education are examples of program areas which prepared graduates who enter non-teaching positions. Sixty (12.3%) of the 486 respondents were employed in such positions.

Table 11

<u>Employment Related to Degree</u>	<u>Frequency</u>	<u>Percentage</u>
Related but Not Teaching	60	12.3
Does not apply	426	87.7
Total	486	100.0

Seeking a Teaching Position

C.e hundred and ninety-nine of the 493 graduates (40.0%) were not currently employed as teachers. Approximately 40% of these non-teaching graduates reported that they had sought a teaching position. The remaining 58.8% stated that they had never sought a teaching position.

Table 12

<u>Sought Teaching Position</u>	<u>Frequency</u>	<u>Percentage</u>
Yes	82	41.2
No	117	58.8
Total	493	100.0

Reasons For Not Teaching

One hundred and seventy-one non-teaching graduates responded to the questionnaire concerning why they were not teaching. Slightly over one-third of these graduates reported that the unavailability of jobs was the reason for their not entering the teaching profession. A similar percentage of these respondents list a wide variety of reasons for their not teaching. These reasons were categorized under "other". Approximately one-fifth (21.6%) of the non-teaching graduates rported that they had chosen to change

professions and thus were not involved in teaching at the present time. Finally, 15 respondents (8.8%) stated that the low salaries offered to teachers was the reason for their not becoming teachers.

Table 13

<u>Reasons For Not Teaching</u>	<u>Frequency</u>	<u>Percentage</u>
Changed Professions	37	21.6
No Jobs Available	61	35.7
Low Salary	15	8.8
Other	58	33.9
Total	171	100.0

Regret For Not Teaching

Over two-thirds (68.4%) of the non-teaching graduates stated that they did not regret the fact that they were not teaching.

Table 14

<u>Regret For Not Teaching</u>	<u>Frequency</u>	<u>Percentage</u>
Yes	59	31.6
No	128	68.4
Total	187	100.0

Current Employment of Non-Teaching Graduates

Sixty-four of the 133 non-teaching graduates (48.1%) who responded to the position concerning their present employment stated that they were employed in business, sales, or legal related fields. Nineteen of the non-teaching graduates (14.3%) were employed in administrative positions.

Seventeen of these graduates (12.8%) were employed in fields related to medicine while 13 respondents (9.8%) went on to further professional study. The remaining non-teaching graduates were employed as substitute teachers (8.3%), members of the military (3.8%) and housewives (3.0%)

Table 15

<u>Current Employment-Nonteachers</u>	<u>Frequency</u>	<u>Percentage</u>
Graduate Study	13	9.8
Substitute teaching	11	8.3
Housewife	4	3.0
Administration	19	14.3
Business, Sales, Law	64	48.1
Military	5	3.8
Medically Related Fields	17	12.8
Total	133	100.0

Happy in Current Position

Over three-fourths (77.9%) of the 172 non-teaching graduates reported that they were happy in their current position.

Table 16

<u>Happy in Position</u>	<u>Frequency</u>	<u>Percentage</u>
Yes	134	77.9
No	38	22.1
Total	172	100.0

Usefulness of Education Degree

One-hundred and eighty-four graduates responded to the questionnaire item which asked them to reflect upon the usefulness of their educational degrees. Graduates could respond to this item by circling one or more items. The total of 212 responses were recorded. One hundred and six graduates (57.6%) reported that what they learned helped them in their employment. Slightly over one-fourth (26.6%) of the respondents stated that the education degree they obtained was not useful and that they could have majored in anything and still secured their present job. Approximately one-fifth (19.5%) of the graduates responded, "other" while 11.4% of the graduates reported that they needed their degrees to obtain their current jobs but that they did not apply what they learned to their jobs.

Table 17

<u>Usefulness of Degree</u>	<u>Frequency</u>	<u>Percentage</u>
Job applies to degree	106	57.6
Job does not apply to degree	21	11.4
Could have majored in anything for present job	49	26.6
Other	36	19.6
Total	212	100.0

Current Educational Employment

Two hundred and forty-six of the 292 graduates (84.2%) responded that they were employed in their major field while 6 (2.1%) stated they were employed in their minor field. Approximately one-tenth (9.9%) of the graduates were employed in an educational field other than those they

were prepared for at The Ohio State University. The remaining 11 respondents (3.8%) stated that this questionnaire item was "not applicable".

Table 18

Current Educational Employment	Frequency	Percentage
Employed in Major Field	246	84.2
Employed in Minor Field	6	2.1
Employed in Other Field	29	9.9
Does Not Apply	11	3.8
Total	292	100.0

Aid in Securing Employment

One hundred and ten of the 269 graduates who responded to the questionnaire item concerning aid in securing employment stated that assuming coaching duties was the most helpful means in securing their present jobs. Slightly over one-fifth of the respondents (21.2%) reported that the Education Personnel Placement Office was the most helpful means in securing their employment. "Preparation in more than one teaching area" was listed by 41 respondents as the most helpful means in obtaining their current positions while just over one-tenth (11.9%) of the respondents stated that College of Education faculty members were the most helpful means in securing employment. The remaining 29 respondents (10.8%) reported that "program chairpersons", "themselves", "faculty members outside their own departments", "personal contacts", and "subbing", as means which were helpful in securing their current employment.

Table 19

<u>Aid in Securing Employment</u>	<u>Frequency</u>	<u>Percentage</u>
Faculty member	32	11.9
Department Chairperson	11	4.1
Placement Office	57	21.2
Dual Major	41	15.2
Coaching	110	40.9
Self	8	3.0
Outside faculty members	4	1.5
Personal Contacts	2	.7
Subbing	4	1.5
Total	269	100.0

How Did You Obtain Your First Teaching Position?

Fifty-six percent (276) of the 493 graduates who were employed in teaching (full-time, part-time, subbing) responded to the question concerning how they obtained their first teaching position. Approximately one-fourth (26.4%) of these graduates reported that they obtained their teaching positions through personal contacts. Another fourth of these "teaching" graduates obtained their positions via various means which were categorized under the heading, "other". The remaining 133 graduates who were teaching obtained their positions by: a) starting as a substitute and moving into a full-time position (17.0%), b) finding a position in the same district where they student taught (15.6%), and c) using the Education Personnel Placement Office or other College assistance (15.6%).

Table 20

<u>How Job Obtained</u>	<u>Frequency</u>	<u>Percentage</u>
Where student taught	43	15.6
Regular via subbing	47	17.0
Personal Contacts	73	26.4
Placement Office	43	15.6
Other	70	25.4
Total	276	100.0

Location of School in Which You Teach

One hundred and twenty-one of the "teaching" graduates (41.7%) reported that they taught in suburban schools while just over one-third of these respondents (35.5%) indicated that they taught in rural school setting. The remaining 66 respondents (22.8%) taught in urban settings.

Table 21

<u>Location of School</u>	<u>Frequency</u>	<u>Percentage</u>
Urban	66	22.8
Suburban	121	41.7
Rural	103	35.5
Total	290	100.0

Typical Student Motivation

Approximately two-thirds of the graduates (65.0%) who were currently teaching rated the motivation of their students as "average". Almost one-fourth of the "teaching" graduates rated their students' motivation as "high" while 36 respondents (12.2%) indicated that their students' motivation was "low".

Table 22

Student Motivation	Frequency	Percentage
High	67	22.8
Average	191	65.9
Low	36	12.2
Total	294	100.0

Classroom Discipline

Two hundred and ninety-seven teaching graduates responded to the question regarding classroom discipline. One hundred and eighty-six of these respondents (62.6%) reported that they had "occasional problems" while 20 (6.7%) teaching graduates stated that they had "many problems." Ninety-one graduates (30.7%) reported "no problems".

Table 23

Classroom Discipline	Frequency	Percentage
No problems	91	30.7
Occasional Problems	186	62.6
Many problems	20	6.7
Total	297	100.0

Parent Participation

One question on the demographic questionnaire asked the graduates to rate the degree of parent participation in their teaching situations. Almost one-half (45.6%) of the teaching graduates rated the participation of their pupils' parents as "moderate" while 22.4% rated such participation

as "high" and 32.0% rated the parents' participation as "low".

Table 24

<u>Parent Participation</u>	<u>Frequency</u>	<u>Percentage</u>
High	63	22.4
Moderate	128	45.6
Low	90	32.0
Total	281	100.0

Typical Socio-Economic Status of Students' Families

Graduates who were employed as teachers (N=289) were asked to rate the typical socio-economic status of the pupils' families. Approximately two-thirds of these graduates (67.8%) rated their pupils' families SES as "middle". Twenty-five (8.7%) of the first year teachers rated the SES of their pupils' families as "upper" while the remaining 68 (23.5%) rated the SES of their pupils' families as "lower".

Table 25

<u>Typical SES</u>	<u>Frequency</u>	<u>Percentage</u>
Upper	25	8.7
Middle	196	67.8
Lower	68	23.5
Total	289	100.0

Racial Mix of Pupils

Approximately three-fourths (73.2%) of the teaching graduates reported that the racial mix of the pupils in their classrooms was "few minority students". Almost one-fourth (22.7%) of these graduates reported that some

of their pupils represented minorities while 4.1% of the first year teachers taught classes composed primarily of minority pupils.

Table 26

<u>Racial Mix</u>	<u>Frequency</u>	<u>Percentage</u>
Few Minority	213	73.2
Some Minority	66	22.7
Predominantly Minority	12	4.1
Total	291	100.0

Pupil-Teacher Ratio

Almost two-thirds (62.4%) of the respondents who were teaching reported that they taught classes consisting of between 21 and 30 pupils. Approximately, one-fourth of the teaching graduates taught classes consisting of 1-20 pupils while less than one-tenth (7.3%) taught classes which consisted of 30 or more pupils.

Table 27

<u>Pupil-Teacher Ratio</u>	<u>Frequency</u>	<u>Percentage</u>
1-20	73	25.2
21-30	181	62.4
Over 30	36	7.3
Total	290	100.0

School Size

One hundred and twenty-four of the teaching graduates (43.4%) taught in schools with enrollments of under 500 pupils while 112 of the teaching graduates (39.2%) taught in schools with 500-1000 pupils. Fifty teaching graduates (17.4%) taught in schools with enrollments of over 1000 pupils.

Table 28

School Size	Frequency	Percentage
Under 500	124	43.4
500-1000	112	39.2
Over 1000	50	17.4
Total	286	100.0

School Type

As expected, the overwhelming majority (88.8%) of the "teaching" graduates taught in the public schools. All but five of the remaining respondents reported that they taught in private schools.

Table 29

School Type	Frequency	Percentage
Public	261	88.8
Private	28	9.5
Other	5	1.7
Total	294	100.0

Type of Classroom

Ninety-one percent (252) of teaching graduates taught in "self-contained" classrooms while four percent of these graduates (20) taught in "open" classrooms. The remaining 5 (1.0%) graduates who were teaching reported that they taught in "other" classrooms. Further data will need to be collected in order to define the nature of the graduates' teaching environment.

Table 30

Type of Classroom	Frequency	Percentage
Self Contained	252	91.0
Open	20	4.6
Other	5	1.0
Total	277	100.0

Grade Level Taught

An almost equal percentage of the 295 graduates who were currently teaching taught at the 1-6 grade level (46.4%) as did those who taught at the 7-12 grade level (42.0%). Fifteen of the "teaching" graduates taught special education classes while 10 of the first year teachers taught at the pre-kindergarten and/or kindergarten level.

Table 31

Grade Level Taught	Frequency	Percentage
Pre Kindergarten/Kindergarten	10	3.4
1-6	137	46.4
7-12	124	42.0
Special Education	15	5.1
Post Secondary	6	2.0
Other	3	1.0
Total	295	100.0

Attitude Toward Teaching in General

The overwhelming majority of the graduates who were teaching (88.2%) described themselves as being "very satisfied" or "somewhat satisfied"

relative to "teaching in general". Only 35 "teaching" graduates (11.8%) described their attitudes toward "teaching in general" as being "neutral", "somewhat dissatisfied", or "very dissatisfied".

Table 32

<u>Attitudes Toward Teaching</u>	<u>Frequency</u>	<u>Percentage</u>
Very Satisfied	160	53.9
Somewhat Satisfied	102	34.3
Neutral	14	4.7
Somewhat Dissatisfied	20	6.7
Very Dissatisfied	1	.3
Total	297	100.0

Attitude Toward Present Teaching Position

Approximately eight-percent of the "teaching" respondents reported that they were "very satisfied" or "somewhat satisfied" in their teaching positions. Twenty-six of these first year teachers (8.8%) were "neutral" concerning their attitude toward present positions while just over one-tenth of the graduates stated that they were "somewhat dissatisfied" or "very dissatisfied" in their teaching positions.

Table 33

<u>Attitude Toward Present Job</u>	<u>Frequency</u>	<u>Percentage</u>
Very Satisfied	121	40.7
Somewhat Satisfied	119	40.9
Neutral	26	8.8
Somewhat Dissatisfied	23	7.7
Very Dissatisfied	8	2.7
Total	297	100.0

Perceptions of Professional Preparation

Graduates who were currently teaching were asked to indicate their perceptions concerning their professional preparation by circling as many alternatives that applied to their undergraduate education at The Ohio State University. A total of nine alternatives were listed. More graduates (89.6%) selected the alternative, "my student teaching was useful" than any other alternative. The second highest percentage of "teaching" graduates (71.7%) indicated that ". . . the program courses (courses taken after one has been screened into the College of Education) were useful." Approximately two-thirds (68.7%) of the respondents "reported that ". . . the College of Education did a good job preparing me to teach." An almost equal percentage (65.7%) of "teaching" graduates stated that their ". . . interaction with other students was useful." Just under one-half (48.5%) of the respondents indicated that "the core courses (courses taken before screening into the College of Education), were useful." Almost one-fifth (18.9%) reported that these same courses were useless. An additional 23.6% circled the following alternatives: 1) "overall, the College of Education did not do a good job preparing me to teach," 2) "the program courses were not useful," and 3) "my student teaching was useless."

Table 34

<u>Professional Preparation</u>	<u>Frequency</u>	<u>Percentage</u>
Core Courses Useful	144	48.5
Core Courses Useless	56	18.9
Program Courses Useful	213	71.7
Program Courses Useless	26	8.8
Student Teaching Useful	266	89.6
Student Teaching Useless	12	4.0

Table 34 (cont'd)

Professional Preparation	Frequency	Percentage
Student Interaction Useful	195	65.7
Overall Good Preparation	204	68.7
Overall Poor Preparation	32	10.8
Total	1148	

Upgrading Teaching Effectiveness

One hundred and three of the 253 "teaching" graduates reported that having "fewer or smaller classes" would be the most helpful in upgrading their teaching effectiveness. The alternatives "more lesson preparation time" and "better professional preparation" were selected by 22.9% and 19.0% of the "teaching" graduates, respectively as most helpful in improving their teaching. Finally, approximately one-tenth (9.9%) of the respondents stated that "more support from other school personnel" would be the most helpful means in upgrading their teaching effectiveness.

Table 35

Upgrading Teaching Effect	Frequency	Percentage
Smaller Classes	103	40.7
Better Professional Preparation	48	19.0
More School Support	25	9.9
More Lesson Preparation	58	22.9
Other	19	7.5
Total	253	100.0

Most Valuable Library-Media Center Service

Over one-third (37.1%) of the "teaching" graduates reported that, "development and production of audiovisual materials for classroom use" was the most valuable library-media center service. Approximately one-tenth of the respondents (11.2%) who were teaching reported that the most valuable library-media center service was "regular assistance to students in developing class projects" while 11.6% indicated that the "development of bibliographies of center materials relevant to your own and students' needs in the classes" was the most valuable service offered. The remaining 40.3% of the respondents who were teaching reported that the services were inadequate, not offered, not needed, or that they didn't have time to use them.

Table 36

<u>Valuable Library-Media Service</u>	<u>Frequency</u>	<u>Percentage</u>
Development of Production of Materials	86	37.1
Assistance to Students	26	11.2
Development of Bibliography	27	11.6
Services Not Valuable	48	20.7
No Services Offered	38	16.4
No Time to Use Services	5	2.2
Not Needed	2	1.0
Total	232	100.0

Guidance Staff Availability

Eighty-one respondents (30.8%) reported that there was a guidance staff member available to work with pupils on a full-time basis while 80 respondents

(30.4%) stated that a guidance staff member was available to students on a part-time basis. Fifty-eight of the respondents (22.1%) stated that a member of the guidance staff was available to work with parents. Finally, 40 "teaching" graduates reported that no guidance services were offered to either pupils or their parents.

Table 37.

Guidance Staff Availability	Frequency	Percentage
Available to Parents	58	22.1
Available to Students Full-time	81	30.8
Available to Students Part-time	80	30.4
No Service Offered	40	15.2
Other	4	1.5
Total	263	100.0

Assistance With Discipline Problems

One hundred and ninety-two of the 275 teaching graduates (69.8%) who responded to the question concerning the availability of assistance with discipline problems reported that such assistance was "available and effective." Fifty-one respondents (18.5%) reported that either no such assistance was available or that it was available only in extreme circumstances. Twenty-five respondents (9.1%) stated that "assistance was available but admission of need was viewed negatively." Only six respondents (2.2%) specified that they had no discipline problems while 1 respondent reported that assistance was available, but ineffective.

Table 38

<u>Discipline Assistance</u>	<u>Frequency</u>	<u>Percentage</u>
Assistance Available	192	69.8
Assistant Available for Extreme Cases	44	16.0
No Assistance Available	7	2.5
Viewed Negatively But Available	25	9.1
No Problems	6	2.2
Available but Ineffective	1	.4
Total	275	100.0

Supervision of Extracurricular Activities

Approximately two-thirds (64.6%) of the teaching graduates reported that supervision of activities was voluntary. Seventy-five of the teaching respondents (28.9%) reported that the supervision of extra-curricular activities was either required or expected by their school administrators. Finally, 17 graduates (6.5%) stated that such supervision was a condition of their employment with the school district.

Table 39

<u>Extracurricular Supervision</u>	<u>Frequency</u>	<u>Percentage</u>
Voluntary	168	64.6
Expected By Administration	59	22.7
Required by Administration	16	6.2
Condition of Employment	17	6.5
Total	260	100.0

Evaluation of Teaching By School Administrators

Slightly over one-third of the graduates who were teaching (34.0%) reported that their teaching was evaluated by a school administrator two to three times while 29.4% of these graduates stated that their teaching was evaluated on a single occasion by a school administrator. Thirty-three teaching graduates (11.8%) did, however, report that they were evaluated on four or more occasions by a school administrator. Finally, almost one-fourth (24.8%) of the graduates stated that they had not been evaluated by a school administrator.

Table 40

<u>Times Evaluated</u>	<u>Frequency</u>	<u>Percentage</u>
0 Times	70	24.8
1 Time	83	29.4
2-3 Times	96	34.0
4-6 Times	23	8.2
Over 6 Times	10	3.6
Total	282	100.0

Formal Evaluation of Teaching

The responders were asked to name the persons who formally evaluated their teaching. (More than one response was possible). Sixty-six of the 160 "teaching graduates" (41.3%) who responded to the questionnaire item concerning the evaluation of their teaching reported that their department heads were responsible for evaluating their teaching. About one-third of the "teaching" respondents (30.6%) stated that curriculum specialists evaluated their teaching. Approximately one-fourth of the first year teachers (24.4%) indicated that principals or other administrators evaluated their teaching. Finally, one-fifth of the respondents reported

that their teaching colleagues evaluated their teaching while slightly fewer respondents (18.8%) stated that their students evaluated their classroom teaching.

Table 41

<u>Formal Evaluation</u>	<u>Frequency</u>	<u>Percentage</u>
Teaching Colleagues	32	20.0
Department Head	66	41.3
Students	30	18.8
Curriculum Specialist	49	30.6
Principal/ Administrator	39	24.4
County Supervisor	1	.6
Total	217	100.0

Means of Evaluating Teaching

An open-ended questionnaire item requested graduates to describe the means by which they evaluated their own teaching. Their feedback was placed in the following four categories: 1) test scores, 2) other teachers, 3) student feedback, and 4) student improvement. Ninety-eight of the 215 respondents (45.6%) stated that they relied on the test scores of their students while 41.9% of the first year teachers used other types of student feedback to evaluate their teaching. Sixteen respondents (7.4%) reported that they relied on their teaching peers to help them evaluate their teaching. Finally, "student improvement" was listed by 11 "teaching" graduates (5.1%) as a means for evaluating their teaching.

Table 42

Means of Evaluating Teaching	Frequency	Percentage
Test Scores	98	45.6
Other Teachers	16	7.4
Student Feedback	90	41.9
Student Improvement	11	5.1
Total	215	100.0

Most Help to Professional Development

Graduates who were presently teaching were asked to indicate the people who were most helpful to their professional development. The majority of those who responded (83.0%) reported that their teaching colleagues were the most helpful in terms of their development. Approximately one-fourth (22.7%) of the "teaching" graduates stated that school administrators played helpful roles in promoting their professional development. Department chairpersons were perceived by 13.0% of the respondents to be helpful in this respect. School counselors, "being on my own," reading specialists, and "others" received only limited recognition by this study's first year teachers.

Table 43

Help to Professional Development	Frequency	Percentage
Administrators	63	22.7
Teaching Colleagues	230	83.0
Department Head	36	13.0
Counselor	13	4.7
Being on my own	4	1.4
Reading Specialists	1	.4
Others	1	.4
Total	278	100.0

Key Person Who Provided Support

Just over one-half of the "teaching" graduates reported that a "fellow teacher" was the key person who provided support during their first year. School administrators and relatives were indicated by 22.6% and 20.6%, respectively, of the respondents as being the key people who provided support. School counselors, supervisors, and "themselves" were selected by a total of 13 respondents as being key persons who provided support.

Table 44

<u>Key Person For Support</u>	<u>Frequency</u>	<u>Percentage</u>
Administrator	58	22.6
Counselor	10	3.9
Fellow Teacher	133	51.8
Relative	52	20.6
Supervisor	2	.8
Themselves	1	.4
Spouse	1	.4
Total	257	100.0

Teacher Warmth and Closeness Versus Getting Work Done

First year teachers were asked to indicate which of the following teaching qualities was more important: 1) "warmth and closeness" or 2) "getting work done". The "teaching" graduates favored "warmth and closeness" over "getting work done" by a margin of 58.9% to 41.1%.

Table 45

<u>Closeness Versus Work Done</u>	<u>Frequency</u>	<u>Percentage</u>
Closeness	155	58.9
Getting Work Done	108	41.1
Total	263	100.0

Major Attraction of Teaching

One hundred and seventy-four of the total 216 "teaching" graduates (80.6%) reported that their "working with children" was the major attraction that the teaching profession held for them. "Personal enjoyment" derived from teaching was listed by 58 "teaching" graduates (26.9%) as being the "major attraction". The amount of vacation time afforded to teachers was indicated by 15.7% of the respondents as being the major attraction that teaching held for them. The chance to coach was listed by 17 first year teachers (7.9%) as the major attraction relative to teaching.

Table 46

<u>Attraction of Teaching</u>	<u>Frequency</u>	<u>Percentage</u>
Vacation Time	34	15.7
Work with children	174	80.6
Coaching	17	7.9
Personal Enjoyment	58	26.9
Total	216	100.0

General Comments

The final item on the demographic instrument provided the respondents an opportunity to list their general comments about years in the OSU College

of Education. A total of 62 separate comments were made by 60 respondents. The comments were placed into 7 categories. One-half of the graduates' comments praised their preparation at OSU. The lack of actual teaching was focused upon in 11 of the graduates comments. Six graduates commented that the Education Foundation and Research courses were too idealistic and overlapping. Five graduates related that the branch campuses of The Ohio State University were better than the main campus. The need for courses focusing on evaluation and administration was the subject of four comments. Three graduates commented that the math/science program at OSU was the best. Finally, two graduates stated that the services offered by Education Personnel Placement Office were poor.

Table 47

General Comments	Frequency	Percentage
Math/Science is best	3	4.8
F&R Classes are idealistic and overlapping	6	9.7
Not Enough Field Experience	11	17.7
Poor Placement Service	2	3.2
I'm Well Prepared	31	50.0
Need Evaluation Course and Administration Course	4	6.5
Branch Campus Was Better	5	8.1
Total	62	100.0

Summary of Demographic/Professional Perspectives

Questionnaire Results (Math/Science Graduates 1975-1979)

The Typical Math/Science Graduate: A Composite Portrait

From the overwhelming data, this composite of the typical 1975-1979 Math/Science graduate emerges:

- white male, although 42.0% of the graduates were female
- age 20-25
- one or more years of teaching experience
- completed entire degree at OSU
- rated the Placement Service as good or better
- plans to get an MA in a field other than education in the next few years
- obtained his/her teaching position through a variety of means, i.e., personal contacts, placement office, etc.
- taught in a suburban setting,
- has occasional discipline problems
- teaches classes which ranged in size from 21 to 30 pupils
- teaches in schools with enrollments of under 1000
- teaches in a public school in a self-contained classroom in a middle-class school with few minority students
- is "very satisfied" with teaching in general
- is very satisfied or "somewhat satisfied" with their present position
- teaches in schools where students have access to full-time guidance personnel

- has effective assistance available when discipline problems occur
- feel his/her OSU education was generally adequate
- uses student test scores as a means for evaluating his/her teaching
- is helped the most in promoting his/her professional developments by his/her teaching colleagues
- is supported by his/her teaching colleagues
- thought that "getting work done" is more important than "warmth and closeness"
- was attracted to teaching because he/she wanted to work with children

These specific data will amplify the above composite.

Current Employment

Approximately one-half (49.6%) of the math/science graduates who responded to demographic instrument reported that they were teaching while four other graduates were currently substitute teaching at the K-12 level. Five respondents were employed in post-secondary education. Eight graduates were employed by the military. A like number were unemployed. Four of the 141 respondents entered into graduate studies while two were involved in coaching. Over one-fourth of the graduates (28.4%) reported that they were employed in a variety of positions. These responses were categorized under the heading, "other".

Table 48

<u>Current Employment</u>	<u>Frequency</u>	<u>Percentage</u>
Classroom teaching	70	49.6
Post Secondary	5	3.5
Subbing	4	2.8
Unemployed	8	5.7
Coaching	2	1.4
Grad studies	4	2.8
Military	8	5.7
Other	40	28.4
Total	141	100.0

Age, Sex, Race

Just over one-half of the math/science graduates were between the ages 20-25. Fifty-five graduates (38.5%) were between 26-30 years of age. The 11 remaining graduates (7.7%) were 31 years old or older.

Table 49

<u>Age</u>	<u>Frequency</u>	<u>Percentage</u>
20-25	77	53.8
26-30	55	38.5
31-35	8	5.6
36-40	2	1.4
Over 40	1	0.7
Total	143	100.0

Eighty-three of the graduates (58.0%) were male while 60 were female (42.0%). All 143 of the math/science respondents were white.

Table 50

<u>Sex</u>	<u>Frequency</u>	<u>Percentage</u>
Female	60	42.0
Male	83	58.0
Total	143	100.0

Table 51

<u>Race</u>	<u>Frequency</u>	<u>Percentage</u>
White	143	100.0
Total	143	100.0

Years Teaching Experience

Approximately one-third of the respondents (32.2%) reported that they had not taught. Twenty-seven graduates (18.9%) stated that they had taught one year while an identical number indicated they had 4 or more years of teaching experience. Twenty-three of the respondents (16.1%) had taught three years. Finally, 20 graduates (14.0%) had taught 2 years.

Table 52

<u>Years Teaching Experience</u>	<u>Frequency</u>	<u>Percentage</u>
1	46	32.2
2	27	18.9
3	23	16.1
4 or more	27	18.9
Total	143	100.0

Students Who Transferred to Ohio State

Slightly over three-fourths of the math/science graduates completed their entire undergraduate degree at OSU. Twenty-two of the graduates (15.6%) transferred to OSU during their sophomore year while 7 (5.0%) transferred during their junior year.

Table 53

<u>Transfer Students</u>	<u>Frequency</u>	<u>Percentage</u>
Did not transfer	107	75.9
Transferred Soph. year	22	15.6
Transferred Jr. year	7	5.0
Other	5	3.5
Total	141	100.0

Program Area

Approximately one-half of the 143 graduates (47.6%) majored in the program area, Math Education. The second largest number of graduates, 44 (30.8%) of the total 143) majored in Biological Science. Eighteen graduates

(12.6%) majored in Science Education while 10 (7.0%) majored in Earth Science. The program area, Physical Science, was majored in by 3 (2.1%) of the math/science respondents.

Table 54

<u>Program Area</u>	<u>Frequency</u>	<u>Percentage</u>
Biological Science	44	30.8
Earth Science	10	7.0
Math Ed	68	47.6
Physical Science	3	2.1
Science Ed	18	12.6
Total	143	100.0

Educational Placement Service

Over one-half of the 141 respondents (54.6%) indicated that "assembling credentials and making these available to hiring officials" was the most helpful service provided by the Education Personnel Placement Office. "Providing graduates with information regarding vacancies" was reported by 15.6% of math/science graduates to be the most helpful service offered. Five of the respondents stated that recommending graduates for specific positions was the most helpful service while 1 graduate selected the alternative, "helping me prepare my data sheet or resume; helping me prepare for interviews." Six graduates listed a variety of "most helpful services" listed on the demographic instrument. Finally, 30 graduates (21.3%) indicated that none of the placement services listed were perceived to be helpful.

Table 55

Placement Service	Frequency	Percentage
Assembled Credentials	77	54.6
Provided information	22	15.6
Recommended for positions	5	3.5
Resume help	1	.7
None	30	21.3
Other	6	4.3
Total	141	100.0

The second questionnaire item which pertained to the Education Personnel Placement Office requested the math/science respondents to rate the Placement services offered. Almost two-thirds of the graduates (63.8%) rated the services as "excellent" or "good." Twenty-three respondents (16.3%) rated the services as "fair" while 3 (2.1%) rated them as "unsatisfactory." Twenty-five of the graduates (17.7%) did not rate the services offered because they did not use these services.

Table 56

Placement Office	Frequency	Percentage
Excellent	33	28.4
Good	57	40.4
Fair	23	16.3
Unsatisfactory	3	2.1
Did not use	25	17.7
Total	141	100.0

Future Professional Study

When asked if they were considering further professional study over one-third of the math/science graduates responded that any further study would be in the pursuit of their Master's Degree in Education; one graduate reported that he/she was considering further professional study that would lead to a Doctorate Degree in education. Three other graduates (2.1%) indicated that they were considering further professional study that would lead to a Specialist Degree in education. Fifty-seven graduates (40.1%) stated that they were considering further professional study which would lead to degrees outside of the educational field. Forty of these graduates (28.2%) were considering degrees in engineering. The remaining 17 graduates (12.0%) were considering degrees in fields such as biology, natural resources, nutrition, accounting, business, law, and medicine.

Table 57

<u>Future Professional Study</u>	<u>Frequency</u>	<u>Percentage</u>
MA Ed	55	38.7
PhD Ed	1	.7
Specialist Degree	3	2.1
Engineering	40	28.3
No Study	26	18.3
Biology, nat resources, nutrition	7	4.9
Accounting, Business, Law	6	4.2
Other	3	2.1
Medical Field	1	.7
Total	142	100.0

Employment Related to Teaching, But Not Teaching

Graduates were asked if their present jobs, while not teaching positions, were still directly related to their degree obtained from OSU. Of the 141 graduates who responded to this item only 8 (5.7%) confirmed that they had taken this type of employment.

Table 58

<u>Employment Related to Teaching</u>	<u>Frequency</u>	<u>Percentage</u>
Related Jobs	8	5.7
Does not apply	133	94.3
Total	141	100.0

Seeking a Teaching Position

Sixty-three "nonteaching" math/science graduates (44.1% of the total math/science respondents) responded to the item which asked them if they had ever sought a teaching position. Almost three-fourths of the respondents (71.4%) reported that they sought a teaching position but did not gain employment.

Table 59

<u>Seeking a Position</u>	<u>Frequency</u>	<u>Percentage</u>
Yes	45	71.4
No	18	23.6
Total	63	100.0

Reasons for Not Teaching

Approximately one-half of the "nonteaching" math/science graduates (48.3%) reported that the reason they were not teaching was due to their decision to change professions. Slightly less than one-third of these graduates (30.0%) listed a variety of reasons why they were not teaching, these reasons were categorized under the heading, "other." Finally, 8 of the graduates (13.3%) indicated low salaries was the main reason why they were not teaching while 5 graduates (8.3%) stated that no jobs were available.

Table 60

<u>Reasons for Not Teaching</u>	<u>Frequency</u>	<u>Percentage</u>
Changed Professions	29	48.3
No Jobs available	5	8.3
Low Salary	8	13.3
Other	18	30.0
Total	60	100.0

Regret for Not Teaching

Graduates were asked if they regretted that they were not teaching. Of the 61 who responded to this item, only 10 graduates stated that they regretted not teaching.

Table 61

<u>Regret for Not Teaching</u>	<u>Frequency</u>	<u>Percentage</u>
Yes	10	16.4
No	51	83.6
Total	61	100.0

Current Employment of Non-Teaching Graduates

Forty-eight "nonteaching" graduates responded to the open-ended question concerning their present employment. Twenty of these graduates (41.7%) were employed in the fields of business, sales, and law. Eight graduates (16.7%) began further graduate study while 6 graduates (14.8%) entered into the military. The remaining graduates found employment in administration, medically-related fields, substitute teaching. One graduate reported employment as a housewife.

Table 62

<u>Employment of Non-teachers</u>	<u>Frequency</u>	<u>Percentage</u>
Graduate student	8	16.7
Subbing	2	4.2
Housewife	1	2.1
Administration	5	10.4
Business, Sales, Law	20	41.7
Military	7	14.8
Medical Field	5	10.4
Total	48	100.0

Happy in Current Position

When asked if they were happy in their current positions, all but 3 of the "nonteaching" graduates reported that they were happy.

Table 63

<u>Happy in Position</u>	<u>Frequency</u>	<u>Percentage</u>
Yes	59	95.2
No	3	4.8
Total	62	100.0

Usefulness of Education Degree

The "nonteaching" graduates were asked to indicate the usefulness of their Education degree in terms of their obtaining employment. Two-thirds of these respondents stated that their degrees helped them in their present jobs. Ten of the 60 "nonteaching" respondents (16.7%) reported, however, that they ". . . could have majored in anything to get this job." Another 6 (10.0%) indicated that they needed their Bachelor's Degree to be employed in their present jobs, but that they did not apply what they learned at OSU. One-fifth of the "nonteaching" graduates listed a variety of comments concerning the usefulness of their degrees; these comments were categorized under the heading, "other".

Table 64

<u>Usefulness of Ed Degree</u>	<u>Frequency</u>	<u>Percentage</u>
Helped with present job	40	66.7
Needed B.S. to get job but did not apply	6	10.0
Majored in anything	10	16.7
Other	12	20.0
Total	60	100.0

Current Educational Employment

Eighty-one of 143 graduates (56.6%) were currently teaching at the time they completed the demographic/professional perspective instrument. Sixty-nine of these 81 "teaching" graduates (85.2%) stated that they were employed in their major field of study while 7 graduates (8.6%) reported that they were employed in their minor field of study. The 5 remaining graduates (6.2%) were either employed in educational fields other than those they were prepared for at OSU or responded "not applicable".

Table 65

<u>Current Educational Employment</u>	<u>Frequency</u>	<u>Percentage</u>
Employed in Major field	69	85.2
Employed in Minor field	7	8.6
Employed in other field	2	2.5
Not applicable	3	3.7
Total	81	100.0

Aid in Securing Employment

Approximately one-third of the "teaching" graduates (35.4) indicated that the Education Personnel Placement Office was the most helpful means in aiding them to secure employment. Slightly over one-fifth of the graduates (22.8%) reported that completing a dual major at OSU was the single most helpful means in aiding them to obtain employment. Thirteen of the "teaching" graduates (16.5%) stated that a College of Education faculty member was the most helpful means in securing their teaching positions. Just over one-tenth of the graduates (10.1%) reported that their ability to assume coaching duties facilitated their obtaining their present positions. Seven of the graduates (8.9%) who were currently teaching stated that they relied on their own personal initiative in securing their positions. The

four remaining alternatives to this item: 1) referrals by department chairpersons, 2) referrals by faculty outside one's department, 3) personal contacts, and 4) securing employment were selected by a total of 5 graduates.

Table 66

<u>Aid in Securing Employment</u>	<u>Frequency</u>	<u>Percentage</u>
Faculty member	16.5	13
Dept. Chairperson	1	1.3
Placement Office	28	35.4
Dual Major	18	22.8
Coaching	8	10.1
Self	7	8.9
Outside faculty member	2	2.5
Personal contacts	1	1.3
Subbing	1	1.3
Total	79	100.0

How Did You Obtain Your First Teaching Position?

Twenty-eight of the "teaching" respondents (35.4%) listed a wide variety of ways in which they obtained their first teaching positions. These responses were categorized under the heading, "other". Approximately one-third of the "teaching" graduates (32.9%) indicated that they obtained their positions through the "Placement Office or other College assistance. Slightly over one-fifth (21.5%) reported that they secured employment with the help of personal contacts (friends, relatives). Finally, four respondents (5.1%) reported that they found a job in the district where they

student taught while an equal number stated that they began as a substitute teacher and were later hired as regular teachers.

Table 67

<u>How Teaching Position Obtained</u>	<u>Frequency</u>	<u>Percentage</u>
Where student taught	4	5.1
Via subbing job	4	5.1
Personal contact	17	21.5
Placement Office	26	32.9
Other	28	35.4
Total	79	100.0

Location of School in Which You Teach

Approximately one-half of the "teaching" respondents (47.5%) reported that they taught in suburban schools. Over one-third of the graduates (37.5%) taught in rural settings while 15.0% taught in urban settings.

Table 68

<u>Location of School</u>	<u>Frequency</u>	<u>Percentage</u>
Urban	12	15.0
Suburban	38	47.5
Rural	30	37.5
Total	80	100.0

Typical Student Motivation

Over one-half of the "teaching" graduates (58.0%) reported that their students' motivation level was "average". Eighteen of the "teaching" graduates (22.2%) rated their students' motivation level as "high" while 16 first

year teachers (19.8%) rated their pupils' motivation level as "low".

Table 63

<u>Student Motivation</u>	<u>Frequency</u>	<u>Percentage</u>
High	18	22.2
Average	47	58.0
Low	16	19.8
Total	81	100.0

Classroom Discipline

The largest number of first year teachers (49 of the 80 respondents or 61.3%) reported that they had "occasional" classroom discipline problems. Over one-third of the respondents (35.0%) stated they had "no problems" while only 3 "teaching" graduates (3.7%) indicated that they had "many problems" concerning classroom discipline.

Table 70

<u>Classroom Discipline</u>	<u>Frequency</u>	<u>Percentage</u>
No Problems	28	35.0
Occasional Problems	49	61.3
Many Problems	3	3.7
Total	80	100.0

Parent Participation

All but 9 of the 78 "teaching" graduates (88.5%) who responded to the item concerning the degree of participation by the parents of their pupils rated such participation as "moderate" (44.9%) or "low" (43.6%). The

remaining 9 graduates (11.5%) rated the parents' participation as "high".

Table 71

Parent Participation	Frequency	Percentage
High	9	11.5
Moderate	35	44.9
Low	34	43.6
Total	78	100.0

Typical Socio-Economic Status of Students' Families

Approximately two-thirds of the first year teachers (65.4%) rated the typical SES of their pupils' families to be "middle". The remaining respondents were almost equally divided in their ratings with 14 graduates (17.9%) indicating that the SES of their pupils' families as being "lower" while 13 graduates (16.7%) rated their pupils' families SES as "upper".

Table 72

Socio-Economic Status of families	Frequency	Percentage
Upper	13	16.7
Middle	51	65.4
Lower	14	17.9
Total	78	100.0

Racial Mix of Pupils

Approximately three-fourths of the "teaching" graduates (74.1%) reported that they had "few minority students" in their classrooms. Just under one-fifth of the respondents (19.7%) stated that they had "some minority, some white" students in their classrooms while 5 first year teachers (6.2%) indicated that their students were "predominantly minority".

Table 73

<u>Racial Mix</u>	<u>Frequency</u>	<u>Percentage</u>
Few Minority	60	74.1
Some Minority	16	19.7
Predominantly minority	5	1.2
Total	81	100.0

Pupil-Teacher Ratio

The clear majority of the "teaching" graduates (71.8%) taught in classes which ranged in size from 21 to 30 pupils. Approximately one-fourth of the graduates (23.1%) were teaching classes of 20 or less pupils while just 4 graduates (5.1%) taught classes of 30 or more pupils.

Table 74

<u>Pupil-Teacher Ratio</u>	<u>Frequency</u>	<u>Percentage</u>
1-20	18	28.1
21-30	56	71.8
Over 30		5.1
Total		100.0

School Size

Thirty-five of the "teaching" graduates (40.8%) taught in schools with enrollments of 500-1000 pupils. One-third of the graduates taught in schools with enrollments of 500 pupils or less while 18 first year teachers (22.5%) taught in larger schools where the total number of pupils was over 1000.

School Size	Frequency	Percentage
Under 500	27	33.8
500-1000	35	43.8
Over 1000	18	22.5
Total	80	100.0

School Type

Seventy-one of the "teaching" graduates (89.9%) taught in public schools. The remaining 8 respondents (10.2%) taught in private institutions or in some "other" type of school.

Table 76

School Type	Frequency	Percentage
Public	71	89.9
Private	7	8.9
Other	1	1.3
Total	79	100.0

Type of Classroom

As could be expected, most of the "teaching" graduates (89.9%) taught in self contained classrooms. Only 8 of the 79 respondents (10.2%) taught in open or "other" types of classrooms.

Table 77

Type of Classroom	Frequency	Percentage
Self Contained	71	89.8
Open	7	8.9
Other	1	1.3
Total	79	100.0

Grade Level Taught

All but 6 of the math/science "teaching" graduates (92.7%) taught at the secondary level (7-12). Five of the 6 remaining graduates (6.1%)

taught at the post-secondary level while a single graduate taught at the elementary level (1-6).

Table 78

<u>Grade Level Taught</u>	<u>Frequency</u>	<u>Percentage</u>
1-6	1	1.2
7-12	76	92.7
Post-Secondary	5	6.1
Total	82	100.0

Attitude Toward Teaching in General

Eighty-three first year math/science teachers responded to the question, "Which one of the following best describes your present attitude toward teaching in general?" Sixty-three of these respondents (75.9%) described their attitudes toward teaching as "very satisfied" or "somewhat satisfied". Five respondents (6.0%) were "neutral" while 14 graduates (16.9%) described their attitudes toward teaching in general as "somewhat dissatisfied". Only 1 respondent (1.2%) stated that they were "very dissatisfied" relative to teaching in general.

Table 79

<u>Attitude Toward Teaching</u>	<u>Frequency</u>	<u>Percentage</u>
Very satisfied	34	41.0
Somewhat satisfied	29	34.9
Neutral	5	6.0
Somewhat dissatisfied	14	16.9
Very dissatisfied	1	1.2
Total	83	100.0

Attitude Toward Present Teaching Position

Just over three-fourths of the "teaching" respondents (75.6%) indicated that they were either "very satisfied" or "somewhat satisfied" in their present teaching position. Fourteen graduates (17.1%) reported they were "somewhat dissatisfied" while only 2 respondents (2.4%) stated they were "very dissatisfied" in their present position. Finally, 4 "teaching" graduates rated their attitude towards their present positions as "neutral".

Table 80

<u>Attitude Toward Present Job</u>	<u>Frequency</u>	<u>Percentage</u>
Very satisfied	31	37.8
Somewhat satisfied	31	37.8
Neutral	4	4.9
Somewhat dissatisfied	14	17.1
Very dissatisfied	2	2.4
Total	82	100.0

Perceptions of Professional Preparation

"Teaching" graduates were requested to select from a list of 9 alternatives those statements which were true about their professional preparation. They could select as many statements as applied to their college education. The 81 respondents selected a total of 316 statements.

Seventy-four of the "teaching" graduates (91.4%) indicated that student teaching was useful while only 6 graduates (3.7%) reported that it was useless. Fifty-six respondents (69.1%) stated that they received overall good preparation. Twelve graduates (14.8%) opposed this view by indicating that they received overall poor preparation. Approximately two-thirds of the graduates (64.2%) reported that courses were useful while 9.9% thought these courses were useless. Almost one-half of the respondents (48.1%) stated that the program courses were useful as opposed to 25.9%

of the graduates who stated they were useless. Finally, over two-thirds of the graduates (69.1%) reported that interacting with their fellow students was helpful.

Table 81

Perceptions of Preparation	Frequency	Percentage
core courses useful	52	64.2
core courses useless	8	9.9
program courses useful	39	48.1
program courses useless	21	25.9
student teaching useful	74	91.4
student teaching useless	3	3.7
student interaction helpful	51	63.0
overall good preparation	56	69.1
overall poor preparation	12	14.8
Total	316	

Upgrading Teaching Effectiveness

Over one-third of the "teaching" graduates (38.2%) indicated that the one factor that would do most to upgrade their teaching effectiveness would be teaching "fewer or smaller classes." Slightly over one-fourth of the respondents (27.6%) reported "more lesson preparation time" was the most important factor. The factor, "more school support" was listed by 9 graduates (11.8%) as the most important factor while the factor "better professional preparation" was selected by 5 graduates (6.6%). A variety of "factors" were reported by 12 respondents (15.8%). These factors were categorized under the heading, "other".

Table 82

<u>Upgrading Effectiveness</u>	<u>Frequency</u>	<u>Percentage</u>
Smaller Classes	29	38.2
Better Professional Preparation	5	6.6
More School Support	9	11.8
More Lesson Preparation	21	27.6
Other	12	15.8
Total	76	100.0

Continued on next page

Most Valuable Library-Media Center Service

Just over one-fourth of the "teaching" graduates (26.1%) indicated that the most valuable library-media center service was, "development and production of audio-visual materials for classroom instruction." The services, "Assistance to students in developing class projects" and "development of bibliographies of center materials relevant to your own and students' needs in your classes" were reported to be the most valuable services offered by 7.2% and 4.3% of the graduates, respectively. Overall, almost two-thirds of the respondents (62.3%) stated that "the services were not valuable," "no services were offered," or that they had "no time to use the services offered by the library-media center."

Table 83

<u>Valuable Library-Media Service</u>	<u>Frequency</u>	<u>Percentage</u>
Development and production of audiovisual materials	18	26.1
Assistance to students in developing projects	5	7.2
Development of bibliographies	3	4.3
Services not valuable	22	31.9
No services offered	16	23.2
No time to us	5	7.2
Total	69	100.0

Guidance Staff Availability

Over one-half of the graduates (57.3%) who were presently teaching reported that a member of their school's guidance staff was available on a full-time basis to students. Eight respondents (10.7%) stated that a guidance counselor was available to students on a part-time basis. Guidance staff availability to work with parents was indicated by 22 "teaching" graduates (29.3%). Only 2 graduates reported that no guidance services were available.

Table 84

<u>Guidance Staff Availability</u>	<u>Frequency</u>	<u>Percentage</u>
Available to parents	22	29.3
Available to students full-time	43	57.3
Available to students part-time	8	10.7
No service offered	2	2.7
Total	75	100.0

Assistance With Discipline Problems

Forty-seven of the "teaching" graduates (61.0%) reported they were assisted with classroom discipline problems and that such assistance was effective. Twelve respondents (15.6%) indicated that help was available but only in extreme circumstances while 11 graduates (14.3%) stated that assistance was available but admission of need was viewed negatively. Only "teaching" respondents (9.1%) reported that no assistance was available or that they had no discipline problems.

Table 85

<u>Assistance w/ Discipline Problems</u>	<u>Frequency</u>	<u>Percentage</u>
Assistance available	47	61.0
Assistance available in extreme circumstances	12	15.6
No assistance available	3	3.9
Available but viewed negatively	11	14.3
No problems	4	5.2
Total	77	100.0

Supervision of Extracurricular Activities

Approximately one-half (49.3%) of the "teaching" graduates indicated that supervision of extracurricular activities was completely voluntary on their part. Twenty-two of the graduates (30.1%) did, however, report that such supervision was expected by their school's administrators while another 15 respondents (20.5%) stated that supervising extracurricular activities was either required by their school administrators or a condition to be met for their employment.

Table 86

<u>Supervision of Extracurricular</u>	<u>Frequency</u>	<u>Percentage</u>
Voluntary	36	49.3
Expected by Administration	22	30.1
Required by Administration	5	6.8
Condition of Employment	10	13.8
Total	73	100.0

Evaluation of Teaching By School Administrators

One-third of math/science graduates who were teaching reported that they were not evaluated even once by their school administrator. Twenty-two respondents (28.6%) indicated that they were evaluated on a single occasion while an identical number of first year teachers stated that they were evaluated 2-3 times by school administrators. Only 7 graduates (9.1%) stated that they were evaluated on 4 or more occasions.

Table 87

Administrators Evaluating	Frequency	Percentage
0 times	26	33.8
1 time	22	28.6
2-3 times	22	28.6
4-6 times	6	7.8
over 6 times	1	1.4
Total	77	100.0

Formal Evaluation of Teaching

The 48 "teaching" graduates who responded to the item concerning the formal evaluation of their teaching had the opportunity to indicate 1 or more professionals who were responsible for evaluating their classroom performance. Twenty-one of the 48 graduates (43.8%) reported that they were evaluated by their department chairperson while one-third of these respondents stated that they were evaluated by their building principals. Nine first year math/science teachers (18.8%) were evaluated by their students, 8 graduates (16.7%) by curriculum specialists, and 5 respondents (10.4%) by their teaching colleagues.

Table 88

Evaluation of Teaching	Frequency	Percentage
Teaching Colleague	5	10.4
Dept. Head	21	43.8
students	9	18.8
curriculum specialist	8	16.7
principal or other administrator	16	33.3
Total	88	100.0

Means of Evaluating Teaching

Over one-half of the "teaching" graduates (53.6%) reported that they used student test scores as a means for evaluating their teaching. Over one-fourth of the respondents (28.6%) used student feedback to evaluate their teaching and 6 first year teachers (10.7%) depended on their teaching peers to evaluate their teaching. Finally, 4 teachers indicated that "student improvement" was a means employed for evaluating their teaching.

Table 89

<u>Means of Evaluation</u>	<u>Frequency</u>	<u>Percentage</u>
Test scores	30	53.6
Other teachers	6	10.7
Student feedback	16	28.6
Student improvement	4	7.1
Total	56	100.0

Most Help to Professional Development

Most graduates who were teaching (79.5%) stated that their teaching colleagues were "most helpful" in promoting their professional development. Approximately one-fourth of the graduates (24.4%) reported that school administrators were "most helpful" relative to their professional development. Department heads were selected as the "most helpful" people in furthering professional development by 11 of the math/science graduates (14.1%). Eight graduates (10.3%) stated that "being on their own" was the "most helpful" means for promoting their professional development. Counselors and reading specialists also were listed as helpful people in promoting the professional development of the first year teachers.

Table 90

<u>Help for Professional Dev.</u>	<u>Frequency</u>	<u>Percentage</u>
Administrators	19	24.4
Teaching Colleagues	62	79.5
Dept. Head	11	14.1
Counselor	3	3.8
Being on Own	8	10.3
Reading Specialist	1	1.3
Total	104	100.0

Key Person Who Provided Support

Fellow teachers were viewed as the key people who provide support to first year teachers by 45 math/science graduates (62.5%). Sixteen of the respondents (22.2%) reported that administrators played a supportive role. Relatives, supervisors, and counselors also were mentioned as people who provided support and encouragement to the first year math/science teachers.

Table 91

<u>Most Supportive Person</u>	<u>Frequency</u>	<u>Percentage</u>
Administrator	16	22.2
Counselor	1	1.4
Fellow Teachers	45	62.5
Relative	6	8.3
Supervisor	4	5.6
Total	72	100.0

Teacher Warmth and Closeness Versus Getting Work Done

Approximately three-fourths (72.0%) of the "teaching" graduates reported that "getting work done" was more important than teacher warmth and closeness.

Table 92

<u>Closeness vs Work</u>	<u>Frequency</u>	<u>Percentage</u>
Closeness	21	28.0
Getting work done	54	72.0
Total	75	100.0

Major Attractions of Teaching

"Working with children" was listed by 46 graduates (73.0%) as the major attraction that teaching held for them. One third of the first year teachers stated that "personal enjoyment" was the major attraction that teaching held for them while 15 graduates (23.8%) indicated that the amount and distribution of vacation time was the major attraction for entering the teaching profession. Nine graduates (14.3%) reported that the opportunity to coach was a major attraction that teaching as a professional held. The availability of jobs for men was listed by a single respondent as the "major attraction."

Table 93

<u>Attraction to Teaching</u>	<u>Frequency</u>	<u>Percentage</u>
Vacation Time	15	23.8
Working with Children	46	73.0
Coaching	9	14.3
Personal enjoyment	21	33.3
Jobs available for men	1	1.6

General Comments

As might be expected, almost one-half (48.6%) who listed general comments stated that the math/science program was "the best". Over one-fourth of these graduates (27.0%) indicated that the Education Foundations and Research classes were too idealistic and overlapping while approximately one-fifth of the recent graduates (18.9%) commented that they did not receive enough actual teaching. Five graduates (13.5%) stated that they need an evaluation course and/or an administration course. Three graduates rated the Placement Service as "poor" while 2 graduates reported that they were well prepared.

Table 94

<u>General Comments</u>	<u>Frequency</u>	<u>Percentage</u>
Science/Math Program the best	18	48.6
F & R Classes are Idealistic & Overlapping	10	27.0
Not Enough Teaching	7	18.9
Poor Placement Service	3	8.1
Was Well Prepared	2	5.4
Need and Evaluation and Administration Course	5	13.5

Summary of the Health Education Results

1. Health Education respondents perceived the knowledge, skill, and attitude/value (K,S, A/V's) items to be relatively important. On a scale of 1-6, the grand means of these items ranged from 4.49 to 5.46 on the "Importance" scale.

2. Respondents rated the adequacy of their preparation to perform the K,S,A/V's lower than the importance of the K,S,A/V's, there also was more variance in the "Adequacy" grand means. On a scale of 0-6, the grand means for the knowledge, skill, and attitude/value items ranged from 3.14 to 4.92.

3. Respondents thought that of all the content areas Health Educators teach, drugs, alcohol, and tobacco, and human sexuality and family life were most important while the content areas, philosophy and life sciences were viewed as least important.

4. The skills which respondents thought most important were "facilitates students' understanding of controversial health issues in a professional manner" and "presents health related information in an organized and clear manner"; skills viewed as least important were: "analyzes historical and philosophies developments in the field of health education and their implications for today's health education programs" and "assists in maintaining appropriate health and safety records".

5. The attitudes/values rated by respondents as being the most important were: "demonstrates a concern for students" and "accepts personal responsibility to stay up-to-date in the fields of health and health education by reading the professional literature and participating in educational opportunities"; "expresses a philosophy of education and clarifies

its relationship to school health education" and "supports the planned comprehensive, sequential approach to curriculum design in preference to the crisis-oriented approach" were the attitudes/values which were thought to be least important.

6. Respondents thought they were most adequately prepared to teach the content areas, "first aid and accident prevention" and "human sexuality and family life" and least adequately prepared in the areas of "death and dying" and "dental health".

7. Skills in which respondents felt that they were most proficient were: "demonstrates appropriate first aid techniques and skills", operates a wide range of audio-visual equipment", and "utilizes the services that community health agencies and personnel provide in promoting the effectiveness of the total school health program"; "assists in preparing budget items for the school health instruction program", allows for cultural differences in program planning and implementation", and "utilizes effective disciplinary strategies in managing the classroom" were the skills which the 1970-79 Health Education graduates felt least adequately prepared to perform.

8 Respondents reported that they were most adequately prepared to attain the attitudes/values: "advocates health and health education as an important, integral means for obtaining a personally satisfying life" and "realizes the importance of possessing first aid skills" while they perceived that they were least adequately prepared to attain the attitudes/values: "demonstrates support for health oriented activities by assuming related supervisory responsibilities" and "supports an ecological perspective of

health and wellness".

9. Fifty of the possible 56 correlational relationships between respondents' "Importance" grand means on the knowledge items, skill items, and attitude/value items and their "Adequacy of Your Preparation" grand means on the same items were significant at an alpha level of .05.

10. There were significant differences at the .05 level between the grand means of respondents who were grouped by selected demographic and employment related variables; these variables included "graduate degree hours completed," "percentages of professional duties related to health instruction", "sex", "year of graduation", and "school health educator status." (See Hawk dissertation in OSU Libraries for further details).

Teacher Concerns Questionnaire -- Summary
of Results for the 1978-1979
College of Education Graduates

Degree of Concern

Approximately one-third of the 56 teacher concern items (33.9%) received means of 3.50 or higher on the "1" (not concerned) to "5" (extremely concerned) scale. The item, "Whether my students can apply what they learn," was rated the highest of all items with a mean of 3.95. This item was followed by the items, "Motivating my students to study", and "Increasing students' feelings of accomplishment" which received means of 3.94 and 3.92, respectively. (See Appendix B for a complete list of the means for each teacher concern questionnaire item).

Seven of the 56 concern items (12.5%) received means of 2.50 or lower on the 5-point scale. Only 1 received a mean of under 2.00 (a little concerned). This item dealt with having students asking their teachers personal questions. The items, "Too many non-instructional duties at my school" and "Becoming too personally involved with students" received low means of 2.20 and 2.29, respectively.

Degree of Preparation

The 1978-79 graduates were requested to indicate the degree of preparation they received relative to all but 8 of the 56 concern statements. It was felt that it was improbable for the College of Education graduates to have received any preparation relative to these

statements, therefore they were excluded. Eight of the remaining 48 statements (16.7%) received a mean of 3.50 or higher on the 5-point scale where "3" was equal to "adequately prepared". The "concerns", "The nature and quality of my instructional materials" and "My ability to present ideas to my class" received means of 3.64 while the "concerns", "Working productively with other teachers" and "Doing well when a supervisor is present" received means of 3.60. Two of these "concerns" described in the statements for which graduates felt they were "adequately prepared" received means of 3.50 or higher on the "Degree of Concern" scale. In other words, they were prepared to cope with important "concerns". On the other hand, one of these "concerns" was rated low on the "Degree of Concern" scale. This indicates that graduates were prepared to cope with a "concern" which they felt really was not that important.

Only one "concern" statement received a rating of less than 2.50 on the "Degree of Preparation" scale. This "concern", "Student use of drugs", received a rating of 2.32 on the "Preparation" scale and a mean of 3.39 on the "Degree of Concern" (See Appendix B for further details).

Source of Preparation

Graduates were requested to indicate the source of their preparation by selecting one or more of the 5 following alternatives: 1) "don't know", 2) "independent study", 3) "inservice training", 4) "teaching itself", and 5) "coursework at OSU". The alternatives, "teaching itself", and "coursework at OSU" were indicated by the 1978-1979 College of Education graduates as being the two major sources of preparation. In fact, in 37 of the 48 "concern" statements, the respondents chose

"teaching itself" as the dominant source of their preparation. In only 11 statements, "coursework at OSU" was selected as the major source of preparation. In these statements "teaching itself" was listed as the second major source of preparation. The alternative, "coursework at OSU" was selected as a second major source of preparation for 29 "concern" statements. The rank order of the alternatives: 1) "don't know", 2) "independent study", and 3) "inservice training" varied depending on the "concern" statement. The number of graduates selecting these 3 alternatives was considerably less than the 2 discussed above.

Teacher's Concerns Questionnaire --

Summary of Results for the 1975-1979 Math/Science Graduates

Degree of Concern

As with the 1978-1979 College of Education Graduates, approximately one-third of the 56 teacher concern items (33.9%) received means of 3.50 or higher on the "1" (not concerned) to "5" (extremely concerned) scale. The item which was the greatest concern to the 38 Math/Science graduates was, "Insuring that my students grasp subject matter fundamentals." This item received a mean of 3.97. The items, "Whether my students can apply what they learn" and "Motivating my students to study" received high mean ratings of 3.92 and 3.89, respectively. (See Appendix C for a complete list of the means for each teacher concern questionnaire item).

Nine of the 56 concern items (26.1%) received means of 2.50 or lower on the 5-point scale. Three of these 9 items received means of under 2.00 (a little concerned). The item, "Lack of academic freedom" received a mean of 2.94 while the items, "Acceptance as a friend by my students" and "Being asked personal questions by my students" received identical means of 1.95 on the 5-point scale.

Degree of Preparation

As was the case with the 1978-1979 College of Education graduates the 38 Math/Science graduates rated the adequacy of their preparation relative to 48 of the 56 concern statements. Seven of these "concern" statements received a mean of 3.50 or higher on the 5-point scale where "3" was equal to "adequately prepared". The item, "Insuring that my

students grasp subject matter fundamentals" received a mean of 3.68 while the item, "Selecting and teaching content well in my class" received a mean of 3.63. Both of these items received means of 3.50 or higher on the "concern" scale. Thus, graduates were adequately prepared to cope with important "concerns". This was not the case with a third item, ("Doing well when a supervisor is present") which received a high rating (3.62) on the "adequacy of preparation" scale but a low rating (2.58) on the "degree of concern" scale. In other words, they were well prepared to deal with seemingly unimportant teaching "concerns."

Eight of the statements (16.7%) received means of 2.50 or less on the 5-point "adequacy of preparation" scale. Unfortunately, 6 of these 8 statements which were rated low on the "preparation" scale were rated high on the "concern" scale. This meant that graduates were less than adequately prepared to cope with important teacher concerns. The six "concerns" along with their means on the "Preparation" scale follow:

- 1) "Challenging unmotivated students I have contact with" (2.11),
- 2) "Student use of drugs" (2.15), 3) "Diagnosing student learning problems" (2.21), 4) "Whether each student is getting what he or she needs" (2.43), 5) "Motivating my students to study" (2.46) and 6) "Slow progress of certain students in my class" (2.46).

Source of Preparation

The two sources of preparation which were reported by the 1975-1979 Math/Science graduates were: "teaching itself" and "coursework at OSU". The alternative, "teaching itself," was indicated as a source of preparation by more respondents than any other source in 43 of the total 48 statements. In the remaining 5 statements, "teaching itself"

received the second greatest number of responses by the graduates. The alternative, "coursework at OSU" was selected by the greatest number of respondents for 4 "concern" statements and was viewed as the second most dominant source of preparation for 29 other statements. As was the case with the 1978-1979 College of Education graduates, the rank order of the alternatives: "don't know", "independent study", and "inservice training" varied depending on the "concern" statement. The number of graduates selecting these 3 alternatives was considerably less than the 2 discussed above. (For more detailed information on the source of graduates preparation, please contact the Follow-Up Office.)

Summary of Interview/Observation Results

A Brief Summary of Findings

In a project with as many graduates as there are at Ohio State, interviewing and visiting each one is obviously an impossibility. It was possible, however, to visit a handful of selected teachers who graduated in 1978-79, who lived in the Columbus area. By doing this the Follow-up Project added another dimension to its data. Thus, not only are mail findings presented in this report but more personal interview kinds of findings, especially data, are also reported.

The visits were begun in February of 1980. Three persons on the Follow-up staff made the visits to a total of 12 teachers. All these teachers had graduated in the 1978-79 academic class and were presently teaching in the Columbus area. This sample was not chosen randomly, but rather was chosen in a fashion which would represent as many grade levels and different kinds of schools as possible.

Instrumentation

Each Follow-up staff member took a packet of instrumentation with him or her when the site visit was done. On the next few pages the instrumentation is reproduced so that the reader can see what the visit entailed. As for the observations, three different kinds of observations were made. One staff member was familiar with the Hough-Duncan category system of observation and used that exclusively. Two other members used more narrative format developed by John Goodlad (1970) which tended to provide a snap-shot of the classroom rather than data

categorized into behavioral categories of the teacher. Finally a third procedure was piloted, one that has been used in a field evaluation portion of an undergraduate class which required the rater to indicate by checking categories whether certain behaviors were occurring or not occurring. The results of using these three different systems was to emphasize the use of the Goodlad system in collaboration with the rating system and to deemphasize the use of the Hough-Duncan observation system.

The interview was the 1980 version of an instrument developed by the director of the Follow-up project the previous year. This year questions were added which directly related to questions that programs might have about specific parts of their curriculum for their courses. All staff members used the same interview. At the end of this section an entire interview is reproduced verbatim so that the reader will get a flavor of the mindset of a working teacher in a typical suburban school in the Columbus area.

Interview Findings

The first set of findings to be presented here are those of the interview.

1. Think back to when you first decided to choose teaching as a profession. Why did you decide to become a teacher?

Almost every response was the same for this question. Some of the verbatim responses given were indicative of the similarity among responses: "I always wanted to teach first grade." "I never thought about it, I was always teaching from the time I was a little

kid." "My parents were teachers." "I liked working with children, not necessarily elementary age, just I would say any age." "I was first interested in children from the sixth grade to eighth grade, and working with them. I just decided that once I got to college, they tell you to experiment and go observe and so I really did like the younger children better, I always like teaching younger children." "I like to work with people, you can make more of a difference here than you can in some other professions." "I love education, I like learning myself and if I had the opportunity I would have spent more years in college." "Both of my parents were teachers, I never considered doing anything else." "I always wanted to be a teacher, I had Future Teachers of America in High School and that's when I decided to work with special children." "My mother was a teacher, and two teachers in Junior High really influenced me."

There seems to be one or two major reasons why people choose education but whether the reason is that their parents were teachers or that they just always wanted to be a teacher, each person had decided before he or she started their college career that education was their field of choice. These data are congruent with data gathered last year when a similar question was asked on site visits. Again, most of the people had known before they started college that they wanted to major in education.

2. Did you consider other program areas?

Almost every person considered some other program area than the one they graduated in, whether it was in the education department itself or in another department on campus. The trend was most prevalent among persons who finished in Elementary Education who either could not

get into another program or carefully looked at two or three others before deciding on Elementary Education. Some of the programs that were looked at were Health Ed. (from a person who graduated from Physical Education), Math Ed. (from a person that finished in Special Education), Biology and Pre-Med (from a person who finished in Secondary Math Education), and Exceptional Children (from a person who finished in Elementary Education). Three of the 12 teachers said that they would have majored in Special Education if the entrance requirements hadn't been so restrictive. All three of these teachers chose Elementary Education for their major.

3. Based on your teaching experience, how satisfied are you now with your overall preparation at OSU?

As can be seen by Figure 1 , which gives an indication of each person's overall feeling about his or her preparation, opinions ranged from totally dissatisfied to completely satisfied with the preponderance of responses falling into the positive category, that is; seven of the people responded with generally positive comments, three responded with ambivalent feelings about their college preparation and one person was quite dissatisfied. One of the comments most heard from respondents was that no matter how much they valued their training at OSU most of what they now practiced was learned on the job. This is not surprising given the fact that classroom teaching is a very practical application of college preparation. However, this fact seemed to surprise many of the teachers, who were disturbed when they first entered teaching that they didn't know everything they needed to be successful on the first day.

4. Looking back would you want the program to be more practical or more theoretical?

Respondents were unanimous in answering this question. As it is easy to guess, every respondent said "more practical!". In keeping with Fuller's stages of the beginning teacher, most of these people seemed to be concerned with surviving the first year, and having the benefit of a more practical experience with more field training appealed to all of them.

5. Can you think of areas that were neglected or overemphasized in your program?

The responses for this question were: "Practices about discipline were neglected." "I thought they spread things out pretty well except for the planning of objectives. They also emphasized open classrooms." "I think there should be more field practice, more coursework out in the field where you work with students, with the teachers and in the schools. I was told that there was one program, an internship I believe, I found out about it accidentally just after I graduated, I probably would have extended my time there and gone through the internship if I had known about it." "Yes, ways to motivate and discipline students. Overemphasized the fact of treating each student as an individual, I do this anyway." "They need to explore, when you go to different schools where something is tolerated and something is not tolerated, that was a concern of mine that wasn't answered; even review exactly what law applies in what states or even different counties because most of the teachers are going to go back out to some county in Ohio." "One thing that was neglected was dealing with problem kids,

bully and shy kids, kids like that." "I can't think of anything, they just need to make the program more practical."

As can be seen by these sample comments the responses varied but it appeared that there was no general feeling about aspects that were either neglected or overemphasized. Each respondent seemed to have his or her own personal "pet peeve".

6. No preparation for any job is ever perfect, was there any part of teaching that caught you completely by surprise after you began your employment?

Again, direct quotes is probably the most useful way of capturing the flavor of the aspect of teaching that most surprised the twelve people that answered this question. "Yes, it's important for teachers coming out of OSU that they can't teach the way they want and the overload is part of the teaching job. By that I mean bookkeeping, classroom size, limited space and overabundance of everything to do." "I think it's so much of a work load, everything you have to do, the lesson plans, all of that stuff, papers to grade, giving tests, then your duties, then your meetings, then your workshops, and then meeting with parents. So much time is taken out, that is something that really surprised me, how much time it involves." "Well I don't know if other school districts face this but I'm sure they do, there's a lot of legalities involved. It seems that principals cannot do certain things unless they follow certain procedures consequently I just can't take somebody down and say do this and do that because the person disrupted my class, threw a paper-wad at me or whatever, I just wasn't really prepared for the discipline. I had famous advice to teachers to start being hard and then let off at the end of the year but I

didn't believe it, I figured, you know, I would just work on the concept as I had learned there at school, it just didn't work. I'll give you an example, I picked up one boy in the hall, he was not only having a hard time walking, he was having a hard time seeing where he was going, I smelled alcohol on his breath. I took him to the office and explained to them what had happened and a half hour later when I was back in class one of the vice-principals came up and said they were not going to do anything to him, no punishment and no reprimand at all, they allowed him to remain in school. The reason being for this is that he had always been in trouble, he had just gotten out of the DH (a juvenile delinquency home) and they decided that if they punished him now it wouldn't do him any good. I was totally unprepared for that. I hadn't even expected to find such problems in school in terms of alcohol and drugs, it's really prevalent here, a big problem, I never expected that."

These three or four quotes point out the complexities of teaching and the fact that it's difficult to prepare a teacher for this complexity by coursework training such as any university program consists of. Almost every respondent made some mention of the complexity and overload attendant with teaching. Whether or not increased field experience in keeping with the new State Code for Education in Ohio will alleviate this problem or not seems debatable. Yet most of the teachers that were observed seemed to be managing quite well in their position. Perhaps this is simply a form of culture shock of persons entering the profession which is unavoidable.

Summary

Complete responses to all the questions on the interview form can be obtained through the Follow-up Office at The Ohio State University. This section has attempted to give an overview of the feeling and the attitudes and frustrations of the first year teacher who had just graduated from Ohio State. Overall most teachers agree that the College of Education is doing a fine job preparing them for what can be prepared for. What does come out of these conversations is that there are many parts of teaching for which college preparation leaves one unprepared. These teachers realize that only by teaching could one gain that kind of knowledge. Most surprising to these teachers was the amount of work involved in teaching, the long hours, the multiple tasks one is expected to do simultaneously, and the constant overload teaching engenders. Yet, as mentioned before, all these teachers seem to be coping well with their classrooms.

Figure 1

THE TEACHERS WHO WERE VISITED HAD THESE CHARACTERISTICS:

Teacher	Grade	Program at OSU	Overall feeling about preparation	most concerned about:
1	4 (urban)	El. Ed.	"dissatisfied"	challenging unmotivated students; students who disrupt classes; maintaining class control
2	LD tutor- 7th grade (suburban)	Eng. Ed.	College of Ed needs "to offer more methods, classroom management courses"; "Reading methods were especially poor"	motivating students; lack of instructional materials; diagnosing student learning problems; student use of drugs; slow progress of some students in class
3	2nd- (urban)	El. Ed.	overall good job preparing me to teach, the foundations courses were a waste of time	maintaining class control; poor quality of materials; diagnosing learning problems; meeting each student's needs; politics of dealing with other teachers
4	9-12 Vocational Ed (rural)	Distributive Ed.	"Voc-Ed did a great job preparing me. Mainly because my supervisor was so great."	discipline; motivating Voc-Ed students who are just waiting to quit school; becoming like other teachers who don't do anything.
5	Middle Elem. (Catholic)	El. Ed. (EPK)	"I never appreciated my Education while I was getting it but I highly appreciate it now. Many times I felt Ed. classes weren't preparing me for teaching but now I see they were."	dealing with problem kids like bullies, shy kids, etc; overload or the job; all the bookkeeping

TEACHER CHARACTERISTICS (cont'd)

Teacher	Grade	Program at OSU	Overall feeling about preparation	most concerned about:
6	3rd (suburban)	El. Ed.	generally quite satisfied	the surprise of such a heavy workload; making like the student is learning; lack of instructional materials
7	9-12 Math (suburban)	Math. Ed.	"student teaching was the high point of my preparation, methods courses do not help in my day-to-day teaching. Communication across the college is especially bad."	knowing if the students understand; motivating students; all the non-instructional duties at my school; student use of drugs.
8	7-9 English Literature (suburban)	English Ed.	"I wouldn't go anywhere else to get an education, but view of OSU is too idealistic, not pragmatic enough."	motivating my students; maintaining class control; being impartial toward students; working with too many students each day; chronic absenteeism; student use of drugs
9	1st (suburban)	El. Ed.	Foundations courses were a waste of time, first 3 years were useless, but the senior year (methods, students teaching) were useful. "Tried to shove the open classroom down my throat!"	meeting each child's needs; whether students are learning; selecting and teaching content in classroom; evaluating my students' progress; slow progress of some of the students in my class

TEACHER CHARACTERISTICS (cont'd)

Teacher	Grade	Program at OSU	Overall feeling about preparation	most concerned about:
10	intermediate Special Education	Excep. Children	"Although courses in Special Ed. were very good, there was too much stress on behavior mod and not enough on practical teaching strategies."	teaching kids what they need to know as an adult; increasing students' selfworth; motivating students; lack of materials; meeting the needs of each student; disruptive students.
11	PE 7-12 (rural)	Phys. Ed.	"My student teaching was <u>very</u> useful, I was really well prepared but still learned $\frac{1}{2}$ of what I know from on-the-job training. Ed. 435 was a great class."	reaching students so they really care; dealing with students who refuse to learn; evaluating students' progress.

Appendix A

A Procedure for Checking the Generalizeability of the Survey Results

As is the case with most survey research, not every person in the population of 943 first-year graduates responded to requests for information. And, since the returns received were not random, there was the question of how generalizeable the results were to the entire population.

A relatively simple procedure was used to reject the hypothesis that at the .05 level, there was a statistically significant difference between the responses of the voluntary respondees and the population. First, a random sample of 20 persons was drawn from the group who returned questionnaires, and a sample of the same size was drawn from the population. From the first group, responses to the questions on the demographic/professional questionnaire were obviously available. From the second sample, answers were available for only 12 of the 20 persons. The second step, then, was to locate the eight persons who had not responded to the questionnaire. These eight persons were fortunately located, and administered the questionnaire over the telephone. The information from these eight persons was added to the population sample findings, and responses on three questions were compared for differences between samples. A simple statistical test (t-test) performed on the means of each pair for each question showed no significant differences between pairs.

Thus, there did not seem to be any systematic variance working in the group who voluntarily responded to the demographic/professional questionnaire. With a high degree of confidence, then, it seems justifiable to assert that the "returns group" is representative of the entire population.

Appendix B

Means of College of Education Graduates

Number of "Concern" Statement	Degree of Concern (Mean)	Degree of Preparation (Mean)
1	3.07	2.98
2	2.81	3.20
3	3.66*	3.50*
4	3.23	3.23
5	3.87	3.35
6	2.65	---
7	3.92*	3.26
8	3.69*	3.64*
9	3.46	3.50*
10	3.94*	2.98
11	2.94	3.61*
12	3.38	---
13	2.39**	---
14	2.99	3.27
15	2.50**	3.54*
16	2.29**	3.18
17	3.45	3.33
18	2.45*	---
19	3.11	---
20	3.65*	3.22
21	2.97	3.60*
22	3.64*	2.24**
23	3.38	3.35

Number of "Concern" Statement	Degree of Concern (Mean)	Degree of Preparation (Mean)
24	3.66*	2.53
25	3.37	---
26	1.92**	3.42
27	2.20**	---
28	3.76*	3.50*
29	3.03	2.89
30	3.78*	2.76
31	3.08	3.39
32	3.45	3.22
33	3.95*	3.39
34	2.64	3.33
35	3.78*	3.14
36	3.65*	2.12**
37	2.78	---
38	3.22	2.84
39	3.18	3.13
40	2.93	3.38
41	2.34**	3.50*
42	3.26	2.56
43	3.40	3.14
44	2.78	3.18
45	3.39	2.32**
46	3.40	3.06
47	3.60*	3.16

Number of "Concern" Statement	Degree of Concern (Mean)	Degree of Preparation (Mean)
48	3.26	3.32
49	3.35	3.17
50	3.67*	3.02
51	3.28	3.64*
52	3.74*	2.79
53	3.80*	3.02
54	3.52*	3.29
55	3.52*	3.29
56	2.57	3.41

*Mean equal to 3.50 or higher.

**Mean equal to 2.50 or lower.

Appendix C

Means of Math/Science Graduates

Number of "Concern" Statement	Degree of Concern (Mean)	Degree of Preparation (Mean)
1	3.22	3.17
2	2.89	3.16
3	3.69*	3.63*
4	3.11	2.94
5	3.62*	3.23
6	2.08**	---
7	3.73*	2.92
8	3.47	3.54*
9	3.32	3.50*
10	3.89*	2.46**
11	2.82	3.45
12	3.05	---
13	2.05**	---
14	2.63	3.30
15	2.33**	3.30
16	2.05**	3.34
17	3.55*	3.38
18	1.95**	---
19	2.89	---
20	3.72*	2.58
21	2.58	3.62
22	3.54*	2.76
23	3.58*	3.31

Number of "Concern" Statement	Degree of Concern (Mean)	Degree of Preparation (Mean)
24	3.68*	2.21**
25	2.83	---
26	1.95**	3.38
27	2.56	---
28	3.97*	3.68*
29	3.14	2.80
30	3.60*	2.11**
31	3.34	2.97
32	3.38	2.89
33	3.92*	3.22
34	2.47**	2.87
35	3.73*	3.20
36	3.76*	2.57
37	2.46**	---
38	2.70	2.14**
39	3.11	2.73
40	3.11	3.27
41	3.27	3.53*
42	3.32	2.42**
43	1.94**	2.97
44	2.62	2.78
45	3.63*	2.15**
46	3.05	2.81
47	3.56*	2.81

Number of "Concern" Statement	Degree of Concern (Mean)	Degree of Preparation (Mean)
48	2.97	2.97
49	3.31	3.17
50	3.71*	2.46**
51	3.41	3.51*
52	3.81*	2.54
53	3.64*	2.43**
54	3.32	3.40
55	3.38	2.69
56	2.51	3.11

*Mean equal to 3.50 or higher.

**Mean equal to 2.50 or lower.