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ABSTRACT

Findings are presented from a survey conducted by the Research About Teacher Education Project. The project is devoted to collecting information about institutions of higher education that engage in teacher education, as well as teacher education programs, faculty, and students. The data in this report were culled from analyses of three survey instruments--institutional, faculty, and students. The institutional survey solicited data characterizing the institutions and their teacher education programs, mission and structure, and areas of accreditation for the institutions. Data specific to teacher education were collected on number and types of programs, enrollments, level of accreditation and/or state approval, faculty and student demographics in relation to program type, program requirements for admission and exit, and faculty salaries and tenure. Following an introduction, four sections elaborate on the data collected. Section one presents the context for teacher education by examining data from the institutions as a whole and from the education unit. Section two concentrates on the anatomy of a program with a focus on secondary education. The third section looks at the education professoriate and section four looks at the students. The report concludes with a summary of highlights. (JD)

American Association of Colleges for Teacher Education

Teaching Teachers: Facts & Figures

1987

American Association of Colleges for Teacher Education

Teaching Teachers: *Facts & Figures*

Research About Teacher Education Project

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ERRATA

Teaching Teachers: Facts and Figures

PAGE 23

In Table 13, "Educatior Professoriate by Rark ard Race/Ethnicity" the figures showing percentages of Assistart Professors by race/ethnicity are incorrect. The correct figures are:

	Assistart Professor
White	89.5%
Black	3.6%
Hispanic	5.5%
Asian/Pacific	1.4%
American Indian/ Alaskan Native	-
Other	-

PAGE 27

In Figure 10, "Blacks and Hispanics in the Education Professoriate" the figures showing percentages of Assistart Professors for Blacks and Hisparics are incorrect. The correct figures are:

	Assistant Professor
Black	3.6%
Hispanic	5.5%

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The report presented in this document represents, on one hand, the culmination of nearly three year's work and, on the other hand, the initiation of what will be an ongoing activity for the American Association of Colleges for Teacher Education (AACTE). The accomplishments thus far could not have been achieved without the support of many people, just as future accomplishments will require the continuing support of those mentioned in these acknowledgments as well as many others.

The most important acknowledgment must be made to the 76 institutions who committed themselves to provide data for this project, and who maintained that commitment through a new and labor-intensive process. Without them, there could not have been the confidence in the quality of the information provided in this report that is now held.

This project has been supported since its inception by the AACTE Board of Directors. Representing the board, David G. Imig has given unstintingly of his time and effort and has continued to voice encouragement and optimism for this work.

Specific AACTE staff members also deserve special recognition. Elizabeth Ashburn, the former director of Research and Information Services, served not only as staff for this project but also as a full-fledged contributing participant. Since her departure from the organization, Mary Dilworth has picked up the staffing responsibilities with enthusiasm and expertise. Finally Sharon Givens continues to contribute her magic with words as both a critic and an accomplished editor.

The heart of the project has been the continuing involvement and effort contributed by the research team lead by Sam Yarger (University of Wisconsin-Milwaukee). Including Ashburn, Edward Ducharme (University of Vermont), Gary Galuzzo (Western Kentucky University), Ken Howey (Ohio State University), and Nancy Zimpher (Ohio State University), this initial team devoted many hours over long months conceptualizing the project, developing and field-testing instruments, analyzing data, writing reports, and making numerous public presentations. Without their collective efforts, the work presented in this report could never have been completed.

More recently, Richard Arends (University of Maryland) and Sally Schumacher (Virginia Commonwealth) have joined the team, and were integral in the work associated with producing this report and developing the second round of information. Jeff Molter, a graduate assistant at the University of Wisconsin-Milwaukee, provided logistic and communication support for the project during the past two years. Phil Smith from the University of Wisconsin-Milwaukee provided statistical consultation as well as support in computer operations.

Special thanks must be given to Richard Arends, Hilda Borko, James Cooper, and Donald Medley. These colleagues served a crucial role as critics of this project at specific points. Without their constructive suggestions, this project might never have been moved to the level that it has achieved thus far. A debt of gratitude

is owed to Sally Mertens; her analytical expertise and editorial consulting helped develop many of the analyses presented in this document. Finally a special thanks to Nancy Blyth of the University of Wisconsin-Milwaukee and Sharon Longley of the the University of Maryland for the excellent work they did in helping prepare the manuscript.

This list of people to be thanked for supporting a project of this type can become almost endless. Apologies are quickly offered to those not mentioned by name. The chair of the Committee on Research and Information as well as the members of that committee recognize and deeply appreciate the hard work of many people.

FOREWORD

As a dean of a school of education, I frequently receive questionnaires from various sources requesting that I complete the surveys and return the information within a short time period. These requests often annoy me, not just because of the time they require (assuming that I do complete them), but also because I usually have little confidence in the quality of the questionnaires, the methodology being used and, subsequently, the usefulness of the information generated. All too often the statistics used to describe our profession and its activities suffer from these defects.

A major exception to this gloomy portrait is AACTE's RATE Project report, Teaching Teachers: Facts and Figures, 1987, an exemplary model of sampling and instrument design, testing, and administration. In fact, the process employed by the Committee on Research and Information in generating this report is prototypical in its methodology. As a result, readers can enjoy a high level of confidence in the quality and accuracy of the information contained in this report. A brief overview of the process employed by the committee may help the reader to understand that this was no ordinary send-out-the-form-and-compile-the-data survey.

To begin with, a stratified random sampling of AACTE institutions was used to select 90 institutions for the study. Strata representing three different types of degree-granting institutions were identified: bachelors, masters, and doctoral. Eighty-four percent of the sample returned the requested data, an extraordinarily high return rate. The instruments used to collect the data underwent three iterations in their development, including the benefit of a review by a panel of teacher education and methodological experts. The instruments were also field-tested by institutional representatives from each of the three strata.

Another aspect of the process that greatly increased the quality of information obtained was the training of representatives at each institution to use common procedures and definitions. This training was reinforced during the study by regular telephone contact with the research staff at AACTE. The training alone distinguishes this study from the scores of surveys that come across my desk each year.

What about the study itself? Many of its findings simply confirmed beliefs and impressions that I already held. For example, the study found that:

- elementary education students take almost twice as many hours in professional education as secondary education students;
- university supervisors have little on site contact with student teachers (less than 2 percent of the time involved in student teaching);
- only 7 percent of the secondary education faculty have had no experience in schools;
- 89 percent of the students are white, and three-quarters are female; and

•the most frequently cited reason for becoming a teacher was to help children grow and learn (cited by 90 percent of the teacher education students).

On the other hand, some of the findings surprised me.

•More than 95 percent of the education units provide for supervision of student teaching by tenure-track faculty, and these faculty members supervise about 75 percent of the student teachers.

•Both students and faculty view secondary education methods courses to be as "rigorous" or "more rigorous" than comparable courses in English and history, but less rigorous than science and math courses.

•Males represent four-fifths of the professors, two-thirds of the associate professors, and less than half of the assistant professors. As male professors retire (average age is 53 years) and females are promoted, the professoriate will become increasingly female.

•Education students have nearly a 3.0 grade point average in their general liberal arts courses that prerequisite to entry into teacher education programs.

•More students in secondary education programs are enrolled in mathematics (26 percent) than any other subject.

I even found a few of the findings to be alarming. For instance, that teacher education students show little interest in teaching handicapped children, low income children, and children of low ability does not augur well for children at risk. I also found it distressing that only 29 percent of the secondary students believed they were "prepared" to teach with computers. I wonder to what extent their professors are modeling the various uses of computers in their own teaching?

The significance of the project, however, is not so much with the individual findings contained in the report. Its real significance lies in the level of confidence we can have in the accuracy of these data, and in our ability to monitor changes in teacher education programs over time, thereby increasing our capacity for longitudinal research.

AACTE's Committee on Research and Information, chaired by Sam Yarger, worked for three years on this project, and it is to be congratulated on a fine effort. As a teacher educator, I am grateful to the committee for putting into place a methodology for obtaining information on teacher education programs that has credibility.

James M. Cooper
Commonwealth Professor and Dean
Curry School of Education, University of Virginia

Rationale, Focus, and Methodology

Accurate, reliable data are essential for making informed decisions no matter what activities one undertakes. To compile such data for the enterprise of teacher preparation, the Committee on Research and Information of the American Association of Colleges for Teacher Education (AACTE) initiated the Research About Teacher Education (RATE) Project three years ago. The project is devoted to collecting information about institutions of higher education that engage in teacher education, as well as teacher education programs, faculty, and students.

In some cases, the results from the first year of data collection confirm common knowledge; for example, the RATE data support other studies' findings that teacher education students are predominantly White females. The results also challenge popular myths, such as the assumptioin that teacher education courses and students are of low quality. The RATE data show that Education courses are considered as rigorous as most noneducation courses, and that students typically graduate in the top third of their high school classes and maintain solid B averages in college.

From its conception, the RATE Project has been envisioned as an ongoing data collection effort to establish a reliable data bank of basic information about teacher education. As the project continues each year, the data will provide a foundation for analyzing trends in areas such as enrollment patterns, faculty composition, and student interests. With the nation's attention focused on teacher education, the RATE Project may prove useful in documenting the success of reforms and in stimulating improvements.

The data in this report were culled from analyses of three survey instruments--institutional, faculty, and student. Archival data from institutions covered the 1985 calendar year. Self-reported perceptual and factual data from faculty and students were collected in spring 1986. Administering the survey instruments were trained research representatives from each institution participating in the project. (See Appendix A for a list of the participating institutions.)

The institutions were selected from a stratified random sample of the 713 member institutions of AACTE in 1985. The institutions were stratified according to the highest degree offered within the school, college, or department of education.

- Stratum 1: "Bachelors," representing the 232 AACTE institutions that offer only baccalaureate degrees in Education.

- Stratum 2: "Masters," representing the 318 AACTE institutions that offer baccalaureate, master's, and six-year programs in Education.

- Stratum 3: "Doctoral," representing the 163 AACTE institutions that offer baccalaureate, master's, six-year, and doctoral programs in Education.

Thirty institutions were randomly selected from each stratum for a total of 90 institutions (12.6%). Of these, 76 institutions provided complete data, representing 84 percent of the sample. At the 95 percent confidence level, the error estimate for this participation rate ranges between one-fifth and one-third of a standard deviation, or between 2 and 10 percent for proportional data.

The institutional survey solicited data characterizing the institutons and their teacher education programs, faculty, and students. Questions sought data on enrollments, mission and structure, and areas of accreditation for the institutions. Data specific to teacher education were collected on number and types of programs, enrollments, level of accreditation and/or state approval, faculty and student demographics in relation to program type, program requirements for admission and exit, and faculty salaries and tenure.

To provide a more complete picture, surveys were administered to 360 Education faculty and 900 students. To eliminate bias, both groups were selected by first initial of surname. For the first round of data collection, these groups were drawn from secondary education methods courses. The second round of data collection will focus on foundations courses, and future surveys will explore other areas in teacher education.

The current report contains data from 215 faculty and 876 students. The error rates at the 95% confidence level for means were approximately one-tenth of a standard deviation for the faculty sample and less for the student sample. The error rates at the 95 percent confidence level for proportions were 3.5% for faculty and 2% for students. Error rates were slightly higher in both groups for individual strata.

Questions for faculty and students were developed with a concern for eliciting information that would help improve teacher education programs. The two groups supplied demographic and other factual data such as age, sex, race/ethnicity, and salary, and perceptual data on such things as program quality, course rigor, and future plans. Many of the opinion items compared faculty and student perceptions on common dimensions.

Before the three survey instruments were administered at participating institutions, they were reviewed by a panel of experts and field tested at four nonparticipating institutions that represented the three strata. Revisions followed both the critique and the field tests. To assure proper administration of the surveys, research representatives at participating institutions received extensive training provided by the Committee on Research and Information. Of particular importance, researchers were instructed not to estimate any of the data requested.

The data presented in this report are descriptive in nature and reported using measures of central tendency and cross-tabulations by category or interval. Aggregate data are weighted. Computer analyses were performed using the Statistical Package for the Social Sciences (SPSS). Numbers in the tables and figures may not add up to 100 percent due to rounding.

Following this introduction are four sections that elaborate on the data collected. Section one presents the context for teacher education by examining data from the institution as a whole and from the Education unit. Section two concentrates on the anatomy of a program with a focus on secondary education. Section three looks at the education professoriate and section four, students. The report concludes with a summary of highlights.

For those interested in more technical information from the RATE Project, supporting documentation for this report is available through the ERIC Clearinghouse on Teacher Education, One Dupont Circle, Suite 610, Washington, DC 20036. The documentation includes a more complete description of the procedures, a complete set of data tables, and the three survey instruments.

Teacher Preparation Institutions and Units: A Context

Prerequisite to an understanding of teacher education in America is an understanding of the diversity of institutions in which teacher education takes place. Given that about 1,200 institutions of higher education engage in teacher education, schools, colleges, and departments of education (for this report, these will be referred to as Education units) are distributed across a wide range of institutions. In this study of a sample of those institutions, the following five categories were used to describe the historical tradition of the institutions of higher education that prepare teachers: Public Land Grant, Public Non-Land Grant, Independent Liberal Arts, Church-related Liberal Arts, and Private University. (See Table 1.)

Table 1
Historical Tradition of Institutions that House Teacher Education

	Public Land Grant	Public Non-Land Grant	Independent Liberal Arts	Church-related Liberal Arts	Private University	Other	TOTAL
Bachelors	2	5	2	17	1	-	27
Masters	3	14	3	2	-	1	23
Doctoral	10	10	-	1	5	-	26
TOTAL	15	29	5	20	6	1	76

Source: RATE Project Institutional Survey

Of the Bachelors institutions 20 (74%) are private, while only six (26%) of the Masters and six (23%) of the Doctoral institutions are private. This fact will

help explain some of the data presented later. Doctoral institutions are more likely than Bachelors or Masters institutions to have a "land grant" heritage, while Masters institutions are more likely to be public, but not "land grant" colleges.

The institutions that house teacher education programs vary greatly in the size of their enrollments (Table 2.) This variation is, to a large degree, a function of the three types of institutions identified for this study: Bachelors, Masters, and Doctoral.

Table 2
Mean Enrollments in Institutions that House Teacher Education

	Undergraduate		Graduate	
	Full-Time	Part-Time	Full-Time	Part-Time
Bachelors	1,793	818	160	389
Masters	4,389	1,537	147	803
Doctoral	12,109	1,782	1,583	1,906

Source: RATE Project Institutional Survey

Enrollments in Bachelors institutions are typically about half the size of Masters institutions, but both are dwarfed by enrollments in Doctoral institutions. At the undergraduate and graduate levels, Bachelors and Masters institutions have much higher proportions of part-time to full-time students than Doctoral institutions. At the graduate level, part-time students outnumber full-time students in all three institutional types.

Table 3
Mean Enrollments in Education Units

	Undergraduate and Post BA		Graduate	
	Full-Time	Part-Time	Full-Time	Part-Time
Bachelors	214	125	NA	NA
Masters	581	235	48	317
Doctoral	937	210	218	498

Source: RATE Project Institutional Survey

An inspection of mean enrollments in Education units provide similar conclusions as institutional enrollments (Table 3). Approximately one-third of the students in Education undergraduate programs are part-time. Bachelors institutions rely more heavily on part-time enrollments in undergraduate programs than do Masters institutions, and both rely more heavily on part-time undergraduate enrollments than Doctoral institutions. Similarly, Masters and Doctoral institutions enroll more part-time than full-time graduate students. Doctoral institutions have slightly more than twice as many part-time as full-time graduate students, while Masters institutions have a ratio of more than six to one.

Importance of Education Units

If student enrollment is an indicator of importance, then Education units make significant contributions to their institutions. Both undergraduate and graduate programs in education serve substantial percentages of students attending institutions of higher education (Table 4).

Table 4
Education Unit Enrollment
as a Percentage of Institutional Enrollment

	Undergraduate		Graduate	
	Full-Time	Part-Time	Full-Time	Part-Time
Bachelors	12%	15%	NA	NA
Masters	13%	15%	33%	39%
Doctoral	8%	12%	14%	26%

Source: RATE Project Institutional Survey

Full-time undergraduate students in Education comprise 12 percent of the full-time undergraduate students in Bachelors institutions, 13 percent in Masters institutions, and 8 percent in Doctoral institutions. Part-time Education students comprise 12 to 15 percent of the undergraduate part-time student body. These comparisons are more dramatic at the graduate level. In Masters institutions, Education students comprise one-third of the full-time, graduate student body, and more than a third of the part-time graduate students. In Doctoral institutions Education graduate students make up 14 percent of the full-time graduate student body and more than one-fourth of the total part-time graduate student enrollment.

Diversity of Teacher Education Programs

A number of ways exist for someone to become a teacher. One can become a teacher by successfully completing a traditional baccalaureate teacher education program. A college graduate can enroll as a postbaccalaureate student and become a teacher without obtaining a graduate degree. A variety of master's degree

programs lead to teaching certificates. In some cases, undergraduate students in other fields accumulate enough credits in teacher education courses to qualify for certificates. And in some states, candidates with no teacher education course work can apply directly to the state education agency for certification and licensure.

Within an Education unit one finds an equally diverse number of teacher education programs. At the beginning of this study, 31 separate teacher education programs were identified as possibly existing in the respondent institutions, and the survey respondents suggested several others. On average, an Education unit offers 8 to 12 distinct teacher education programs.

Typically, Bachelors institutions provide a narrower array of teacher education programs than Masters and Doctoral institutions, with the latter offering the most variety. Programs offered by more than 75 percent of the Bachelors institutions include elementary education, biology, English, math, social science, and chemistry. In the same percentage of Masters institutions, the list includes English, math, elementary education, biology, chemistry, and special education. More than 75 percent of the Doctoral institutions surveyed offer music, special education, English, math, art, physical education, reading, elementary education, German and biology.

Teacher education programs do not necessarily match the subject or specialty areas needing teachers. According to these data, 90 percent of the institutions surveyed offer teacher preparation programs in elementary education and 72 percent offer physical education, both of which have experienced decreased demand over the past few years. Only 20 percent of the institutions offer programs in computer science, 36 percent in middle school education, and 30 percent in bilingual education or English as a second language.

Enrollment patterns in Education units allow one to develop some sense of what specialties students currently enrolled in teacher education programs find attractive (Table 5).

Table 5
Teacher Education Enrollment Patterns

	Baccalaureate	Postbaccalaureate
Elementary Education	35%	21%
Secondary Education	18%	21%
Special Education	12%	6%
Early Childhood Education	7%	4%
Other	28%	45%

Source: RATE Project Institutional Survey

Slightly more than one-third of the undergraduate students in Education units are enrolled in elementary education programs. Less than one-fifth are enrolled in secondary education, 12 percent in special education, and 7 percent in early child-

hood education. A fairly large number of students have opted for speciality areas such as physical education, reading and home economics. These enrollment patterns differ somewhat for students in postbaccalaureate programs.

Secondary education students appear to be interested in all the traditional content areas, with one exception -- foreign languages (Table 6). Only 6 percent of the students are studying languages in preparation for secondary teaching. The percentages of undergraduate secondary education students majoring in mathematics, English, social sciences, and science are approximately the same.

Table 6
Secondary Education Enrollment Patterns

	Baccalaureate	Postbaccalaureate
Math	26%	31%
English	25%	31%
Social Science	24%	22%
Sciences	21%	3%
Languages	6%	14%

Source: RATE Project Institutional Survey

Approximately three-fourths of the institutions participating in this study have some or all their programs accredited by the National Council for Accreditation of Teacher Education (NCATE). Approximately two-thirds of the Bachelors and Masters institutions have NCATE accreditation for their programs. In contrast, the frequency jumps to about 90 percent for Doctoral institutions. These data do not indicate why institutions hold accreditation for some of their teacher education programs, but not all of them. However, the recent decision of NCATE to move toward accrediting the Education unit will make this a moot point in future surveys.

Cost of Becoming a Teacher

Becoming a teacher is expensive, according to the students responding to the question of annual cost for their college education. The cost of attending Bachelors institutions, as Table 7 shows, is considerably higher than either Masters or Doctoral institutions, which may be related to the fact that 20 of the 27 Bachelors institutions in the study are private (see Table 1). Undergraduate students at the Doctoral institutions in the study, 76 percent of which are public, also pay more than their cohorts at Masters institutions. Students who commute claim to spend substantially less per year then those who live on campus. In this survey 47 percent of the students classified themselves as commuters.

The data in Table 7 show a variance by strata in the cost of becoming a teacher. It costs 2.5 times more to be a residential student at a Bachelors campus than to be a commuter on a Masters campus. Considering that 4.5 years may be spent to become a teacher, that difference in actual dollars can be more than $20,000.

Table 7
Cost of Attending College
Reported by Secondary Education Methods Students
(tuition, room, board, books, and incidentals)

	Bachelors	Masters	Doctoral
Residential			
Per yr.	$ 7,528	$ 4,799	$ 5,726
Total 4.5 yrs.	$33,872	$21,596	$25,767
Commuter			
Per yr.	$ 5,292	$ 3,041	$ 4,586
Total 4.5 yrs.	$23,814	$13,685	$20,637
Overall			
Per yr.	$ 6,521	$ 3,821	$5,242
Total 4.5 yrs.	$29,345	$17,195	$23,589

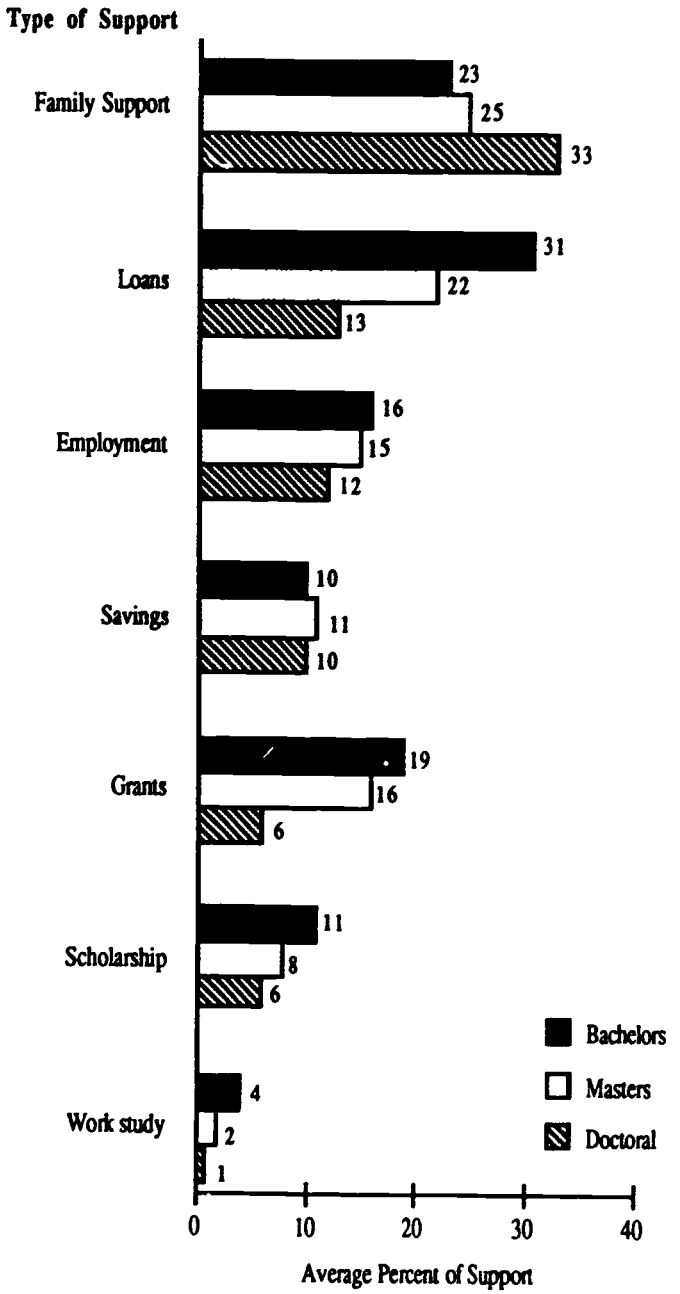
Source: RATE Project Student Survey

Students report seven sources of financial support for their undergraduate education (Figure 1). Although students at Bachelors institutions derive more benefit than students at Masters or Doctoral institutions from the federally subsidized work-study program, receive more scholarship support, and are the beneficiaries of more grants, they also borrow more money. Students at Doctoral institutions reported receiving more support from their families than do those attending other types of institutions. They also obligate themselves to far fewer loans and receive fewer grants and scholarship awards.

Other Business of Education Units

Although this report is about undergraduate teacher education, the institutional data indicate that Education units do much more than prepare teachers. The most obvious "other business" of Education units is the maintenance and prosperity of a range of graduate programs: master's degrees, certificates of advanced study, and doctoral degrees awarded in Education.

Figure 1
Students' Sources of Financial Support



Source: RATE Project Student Survey

Graduate students account for about 31 percent of the Education unit enrollment in Masters institutions, and about 38 percent of the enrollment in Doctoral institutions. In Masters institutions, the mean number of graduate students is 440. About 22 percent of those students are enrolled in certificate of advanced study (CAS) programs, with the remaining 78 percent pursuing master's degrees. In Doctoral institutions, the average number of graduate students enrolled is 715. Slightly more than 20 percent of those are doctoral students, about 65 percent are master's candidates, and the remaining 15 percent are pursuing certificates of advanced study. While some of the graduate students may be pursuing degrees directly related to classroom instruction, others may be pursuing advanced degrees or certificates in such areas as school administration, school psychology, counselor education, adult education, higher education, instructional development and design, or cultural foundations of education.

Education units also enroll undergraduate students who are not working toward teacher certification or licensure. These students distribute themselves unevenly across the three types of institutions represented in this study. Noncertificate undergraduate students enrolled in Education units represent less than 5 percent of the enrollment in Bachelors institutions, close to 10 percent in Masters institutions, and nearly 25 percent in Doctoral institutions.

Anatomy of a Program: Focus on Secondary Education

Although one can find numerous examples of innovative secondary teacher education programs, taken as a whole, they tend to follow a similar pattern, or sequence, of courses. Typically, a secondary teacher education student completes two years of general studies before admission to a teacher education program. "Foundations" courses usually are taken early in the sequence, and some form of field experience often accompanies these courses. "Methods" courses, which also frequently require some type of field experience, typically come in the middle to latter part of the sequence. A teacher education program usually culminates with student teaching

Program homogeneity is not a contradiction of the diversity described earlier. Although standard program requirements dominate the structure of teacher education, the ways to satisfy these requirements are numerous.

General Program Requirements

To graduate within the traditional four-year span, secondary teacher education students need 17 credit hours per semester to complete the average required 135 credit hours (Table 8). Although careful planning might make that four-year goal achievable for an elementary education student (Table 9), it would appear that secondary education students should count on at least one additional semester.

Secondary education students average 10 more required credit hours to complete their programs than elementary education majors, but the secondary education students take fewer courses in the Education unit. Elementary education students complete an average of 50 of their 125 hours of credit in the Education unit, compared with secondary education students who average only 26 hours of credit in Education.

Table 8
Average Credit Hours Required for Secondary Education Students

General Studies	52 hrs.
Academic Major	39 hrs.
Academic Minor	18 hrs.
Education Methods	7 hrs.
Education Foundations	9 hrs.
Student Teaching	10 hrs.
TOTAL	135 hrs.

Source: RATE Project Institutional Survey

Table 9
Average Credit Hours Required for Elementary Education Students

General Studies	55 hrs.
Professional Major (includes Foundations and Methods)	40 hrs.
Minor(s) and/or Area(s) of Concentration	20 hrs.
Student Teaching	10 hrs.
TOTAL	125 hrs.

Source: RATE Project Institutional Survey

Observational and tutorial field experiences prior to student teaching are common components of undergraduate teacher education programs. Of the institutions surveyed, 86 percent of the elementary and secondary education programs require early field experiences. Typically, students spend one or two days per week observing or tutoring in schools for approximately 12 weeks, often during the initial phases of the teacher education program. In about two-thirds of the programs, field experience also is associated with one or more methods courses later in the sequence.

On the average, 10 credit hours are awarded for the student teaching experience, which typically lasts for a full 12-week semester of the institution. Elementary and secondary schools, however, typically operate on a 17- or 18-week

semester. Thus, teacher education students get somewhat less than a full semester of student teaching with respect to the K-12 academic calendar.

The university supervisor in a Bachelors institution averages seven visits to a student teacher during the semester, while supervisors at Masters and Doctoral institutions average six visits. More than 95 percent of the Education units surveyed provide for tenure-track faculty to supervise student teachers, although the units also may use nontenure-track supervisors. Overall, tenure-track faculty supervise approximately 75 percent of the student teachers in all three strata. Graduate assistants provide on average less than 30 percent of the student teacher supervision in Doctoral institutions.

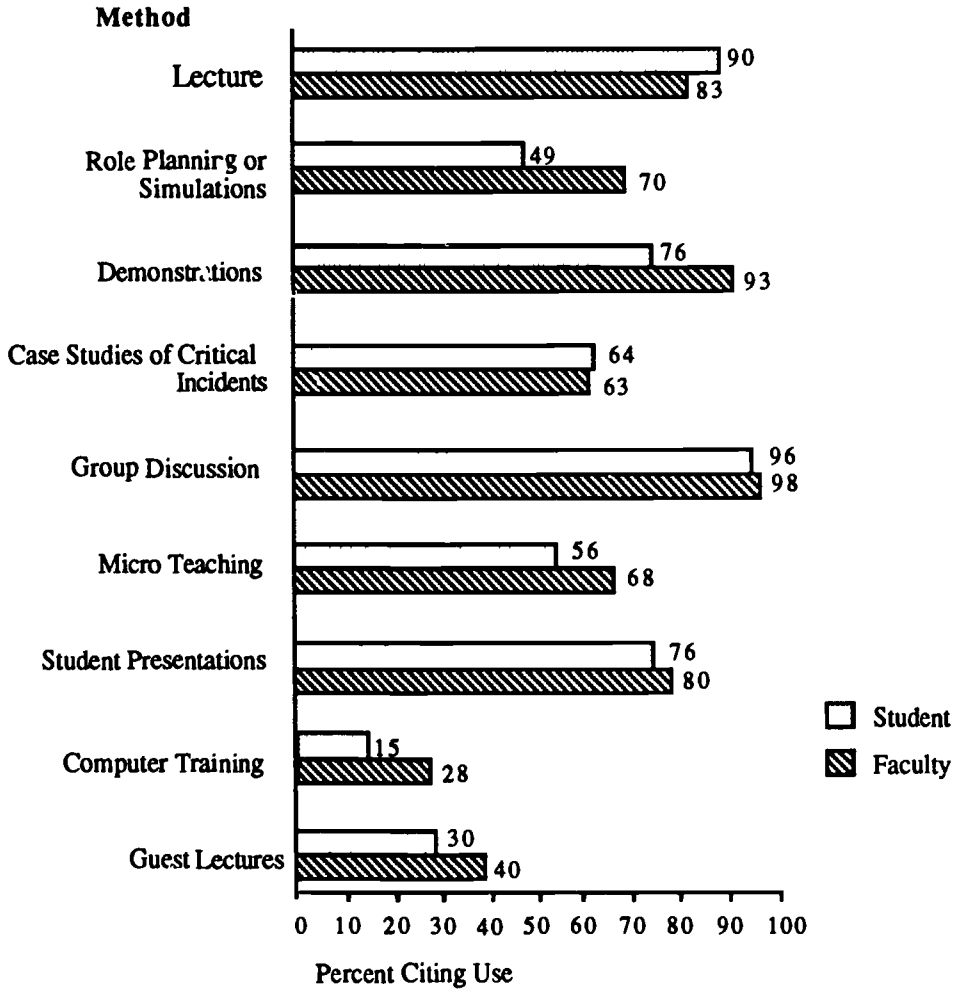
A student teacher spends an average of 30 hours per week in a classroom over a 12-week period for a total of 360 hours. Assuming that the university supervisor has made seven visits and stayed one hour each time, then the student teacher has received seven hours of supervision. In this example, student teachers are supervised on site by university representatives about 1.9 percent of the time they are engaged in student teaching. Therefore, the classroom cooperating teacher provides most of the clinical supervision for student teachers.

Secondary Methods Courses

In general, secondary education faculty and students depict their methods courses as focused and well-designed. Students' responses on the survey give the distinct impression of their serious intent to become good teachers. They perceive their secondary methods courses to be helpful in pursuing their goal.

Both faculty and students reported that a variety of instructional methods are used in secondary methods courses (Figure 2). Responses showed agreement between the two groups with respect to instructional methods employed and how frequently they are used. "Lectures" and "group discussions" are cited most often. Faculty view themselves to use "demonstrations" of teaching methods more frequently than the students perceive the technique to be used, although the students cite "demonstrations" at a high frequency. "Student presentations," "case studies of critical incidents," and to a lesser degree "role playing/simulations" and "micro-teaching" are also cited by half to three-quarters of the faculty and students. Students, however, view "role playing/simulations" and "micro-teaching" to be used less frequently than do faculty. "Computer training" and "guest lecturers" are cited by both groups as the least frequently used instructional methods.

Figure 2
Instructional Method Employed in Secondary Education Methods Courses



Source: RATF Project Faculty and Student Surveys

In addition to the secondary methods classes, 50 percent of the faculty require students to work in schools as a component of the methods courses. These field activities usually come after the early field experience but before student teaching. On average in methods courses, four school-based activities are assigned to students. These activities require an average of 23 hours per course for the student to complete. More than 90 percent of both the faculty and the students believe that cooperating classroom teachers understand the goals of the field-based activities assigned for specific secondary methods courses.

Faculty and students also generally agree on the relative importance of

specific activities in evaluating student performance. Four evaluative techniques were mentioned as "important" by more than 75 percent of faculty and students. These include, in descending order, "evaluation of written assignments" (e.g., term papers), "quality of class participation," "development of unit/lesson plans" and, "simulated teaching." Of lesser importance but cited by at least half were "assessment of performance in a laboratory/field setting" and "subjective and objective examinations."

In summing up their perceptions of the value of their secondary methods courses, nearly 90 percent of the students rated these courses as "important" or "extremely important" in contributing to their becoming competent classroom teachers. When asked to name the single type of person who had been most helpful in modeling teaching styles and strategies worth emulating in their teaching, the students most frequently cited "Education professor" (Table 10). The students responding, it should be noted, have not yet entered student teaching.

Table 10
Role Models for Prospective Teachers

	Percent who cited
Education professor	29%
Cooperating teacher	26%
Own elementary/secondary teachers	20%
Other professors	18%
Other teacher education students	2%
Other	5%

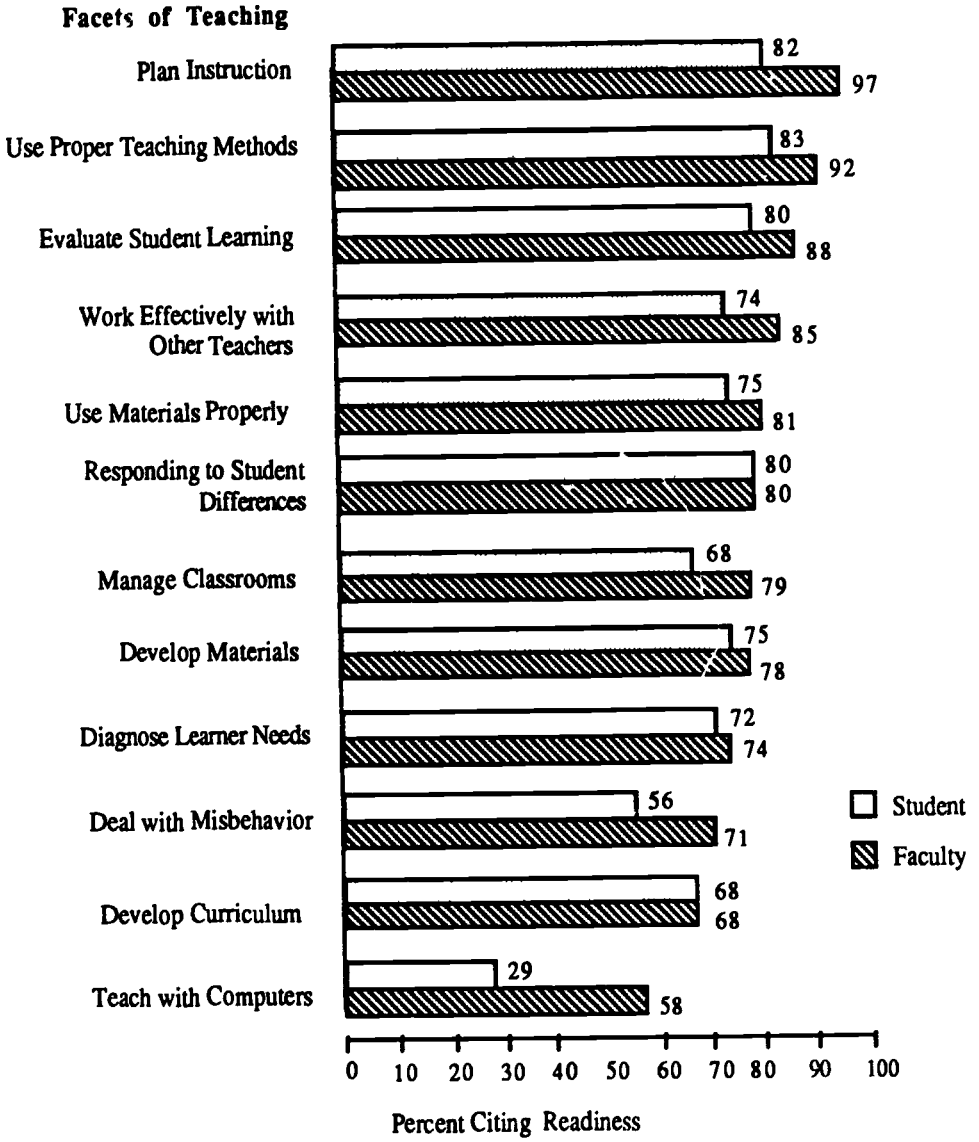
Source: RATE Project Student Survey

Outcomes of Teacher Education Programs

The results from the RATE Project surveys of faculty and students indicate that both groups perceive teacher education methods courses to fulfill their mission of preparing new teachers. In addition, a majority of the students believe their teacher education programs contribute significantly to their academic, intellectual, and creative abilities.

Both secondary education faculty and students were asked how effective they believe their teacher education program to be in preparing classroom teachers (Figure 3). The results show that faculty viewed the students to be slightly better prepared than did the students themselves. On all but two of the 12 facets of teaching, more than two-thirds of both groups considered students to be prepared to assume the tasks of classroom teaching. Students perceived themselves to be much less prepared to "teach with computers" (29%) and to "deal with misbehavior" (56%) than the faculty perceived them to be (58% and 71%, respectively).

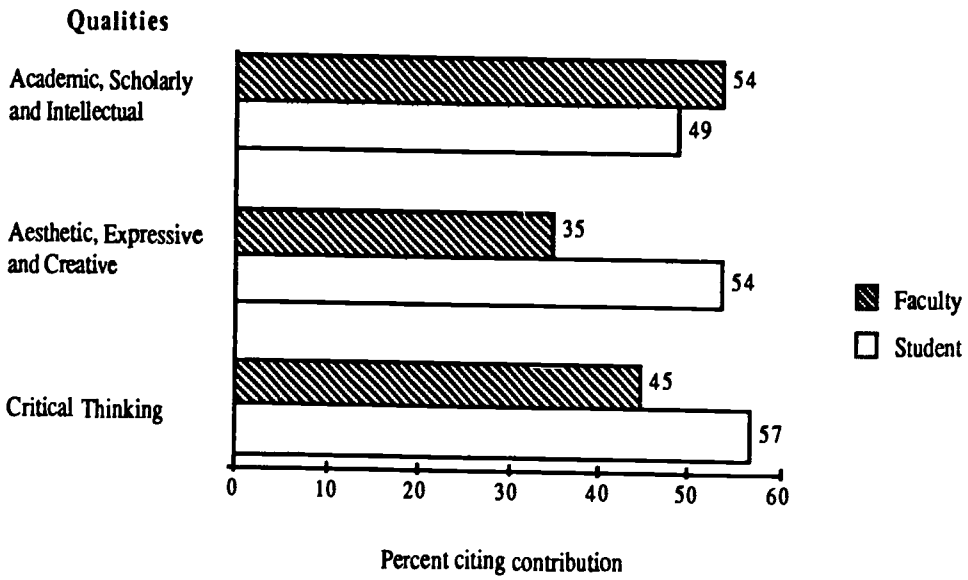
Figure 3
Perceptions of Readiness for Teaching



Source: RATE Project Faculty and Student Surveys

Both faculty and students also were asked to rate the contribution of their teacher education programs to development of student's academic, aesthetic, and critical thinking qualities (Figure 4). The results showed that half of the students think their programs make a contribution in all three categories. The percentages were consistent between faculty (54%) and students (49%) in the program's contribution to the development of "academic, scholarly, and intellectual qualities." However, in the areas of "aesthetic, expressive and creative qualities" and "critical thinking," the differences in percentages between the two groups were greater, with higher percentages of students reporting contributions than faculty.

Figure 4
Contribution of Teacher Education Programs to Development of Academic, Aesthetic, and Critical Thinking Qualities



Source: RATE Project Faculty and Student Surveys

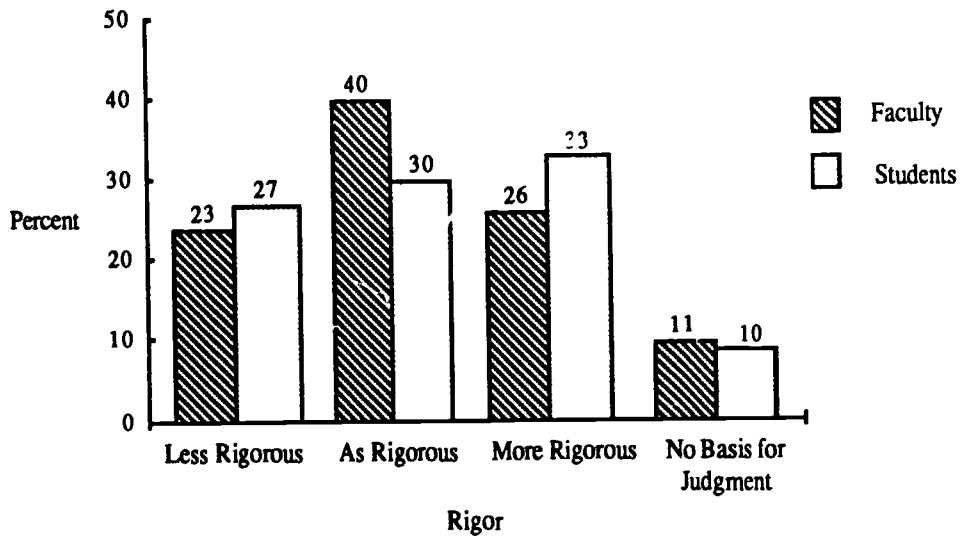
Quality of Teacher Education Programs

On questionnaire items related to program quality and rigor, a distinct and consistent tendency was noted. Faculty in Bachelors institutions appear to be more optimistic and more confident of their programs than their Masters or Doctoral colleagues. Students in Bachelors institutions reflect a lower level of confidence than faculty, although the students' views are positive, as are the views of their cohorts in other strata.

When asked to rate the "rigor" of teacher education courses in comparison to noneducation courses, the majority of faculty and students reported perceptions

that Education courses are "as rigorous" or more so than noneducation courses (Figure 5). A third of the students cited "more rigorous," while the largest percentage of faculty (40%) cited "as rigorous." Bachelors institution faculty tended to view Education courses as somewhat more rigorous than did their colleagues in Masters and Doctoral institutions.

Figure 5
Rigor of Education Couses
Compared to Noneducation Courses

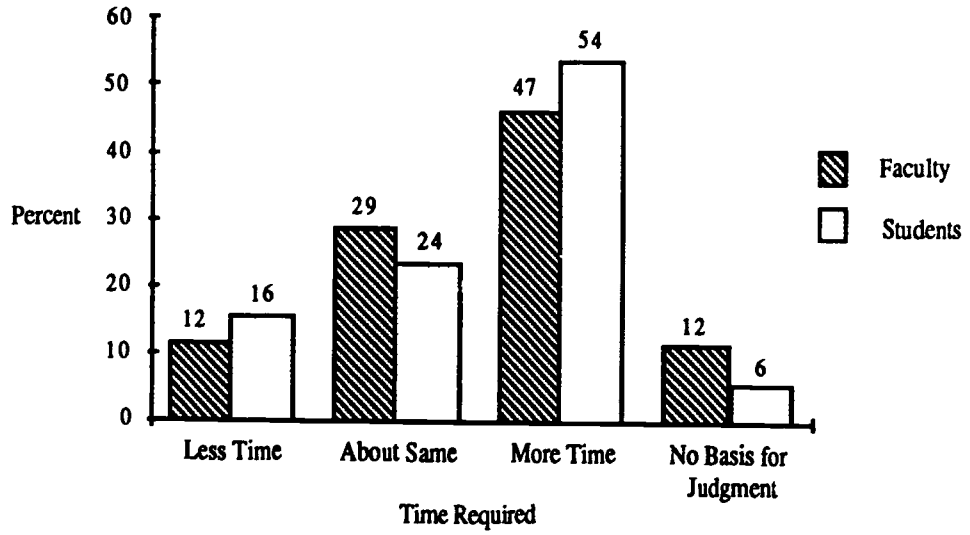


Source: RATE Project Faculty and Student Surveys

An element related to rigor is time. In this survey, Education courses, with their numerous classroom-oriented projects, lesson plans, and instructional materials, are seen as much more time-consuming than noneducation courses (Figure 6). About half of both the students and the faculty responding believe that Education courses require more time when compared with noneducation courses. Small percentages reported that less time is required for Education courses.

Students and faculty also were asked whether they believe that the amount of work expected in Education courses and the credits they carry are correctly aligned. About two-thirds of the students and three-fourths of their professors believe the alignment to be correct. However, more than 25 percent of the students and about 20 percent of the faculty believe that Education courses should carry more credit.

Figure 6
Time Required for Education Courses Compared to Noneducation Courses



Source: RATE Project Faculty Student Surveys

Both faculty and students were then asked to compare their specific secondary education methods course with a comparable course in five different content areas: English, history, foreign languages, science, and math (Table 11). Two-thirds or more of both groups viewed secondary education methods courses to be about as rigorous or more so than comparable courses in English and history. However, only small percentages of both groups perceived science and math courses to be more rigorous than secondary education methods courses. Of the five comparisons, foreign languages drew the most responses from both groups of "no basis for judgment." More than one-third of the students and one-quarter of the faculty were unable to compare their methods courses with foreign languages.

Overall, among secondary education methods faculty, these data conveyed confidence and pride in teacher education programs. Seventy-five percent of the faculty reported that their programs are either "above average" or "excellent." Sixty-nine percent believe prospective teachers studying at their institutions are "better prepared academically" than are students at other institutions. On a broader question, 85 percent of the faculty surveyed believe that the knowledge base supporting their teacher education programs has improved in the past decade.

Table 11
Perceived Rigor of Secondary Education Methods Courses Compared to Five Content Courses

	Less Rigorous	About Same	More Rigorous	No Basis for Judgment
English				
Faculty	10%	50%	23%	18%
Student	25%	40%	28%	6%
History				
Faculty	9%	44%	27%	19%
Student	27%	33%	30%	11%
Foreign Languages				
Faculty	19%	36%	17%	28%
Student	30%	20%	15%	35%
Science				
Faculty	41%	25%	11%	22%
Student	50%	25%	16%	9%
Math				
Faculty	37%	28%	12%	23%
Student	49%	24%	16%	11%

Source: RATE Project Faculty and Student Surveys

Of concern to secondary education methods faculty is the time allotted to teacher education programs. Thirty percent of the faculty surveyed believe that too little time is available in a teacher preparation program to adequately prepare a student to begin full time teaching in secondary schools. Faculty at doctoral institutions held this view at a slightly higher level (36%) than their colleagues at Bachelors(21%) and Masters(28%) institutions. A slightly higher percentage of faculty at Bachelors institutions (50%) than at Masters (43%) and Doctoral (47%) institutions believe that enough time is devoted to teacher education. Only 29 percent of faculty at Bachelors and Masters institutions and 17 percent at Doctoral institutions believe that teacher education is given more than enough time.

The Education Professoriate: Focus on Secondary Education

Although only one survey has been conducted for the data in this report, the findings already show some potential trends about the composition of the Education professoriate. This section of the report focuses on a detailed analysis of the demographics of the education professoriate, the perceptions among secondary education methods faculty of what they do and how they spend their time, and the salaries they earn.

Demographics of Faculty

The Education professoriate is about 93 percent White, nearly 3 percent Black, and about 3 percent Hispanic. Asians and Pacific Islanders represent about 1 percent of the professoriate, while American Indians, Alaskan Natives and "other" minorities contribute only a trace. Overall, about 70 percent of Education faculty are White males. (See Tables 12 and 13.)

Table 12
Education Professoriate by Rank and Gender

	Professor	Associate Professor	Assistant Professor
Male	84%	68%	46%
Female	16%	32%	54%

Source: RATE Project Institutional Survey

Table 13
Education Professoriate by Rank and Race/Ethnicity

Race/Ethnicity	Professor	Associate Professor	Assistant Professor
White	96.0%	92.0%	89.0%
Black	1.6%	3.9%	4.3%
Hispanic	1.3%	2.8%	5.6%
Asian/Pacific	.8%	.8%	1.7%
American Indian/ Alaskan Native	.2%	.2%	-
Other	.2%	.2%	-

Source: RATE Project Institutional Survey

The professoriate is over 75 percent tenured. The average age for professors is 53 years and for associate professors 47 years, with men being several years older than women in both ranks. Assistant professors are about 42 years old, and women are almost two years older than men in this rank. Nearly 45 percent of the professoriate have achieved the rank of professor, and approximately half of these are more than 53 years old. Education faculty typically come to their positions from graduate school. About 90 percent of both the professors and associate professors hold doctoral degrees (Table 14). That number drops to about two-thirds for assistant professors.

Table 14
Percentage of Faculty with Doctorates

Rank	Females	Males
Assistant	65%	68%
Associate	85%	89%
Professor	99%	88%

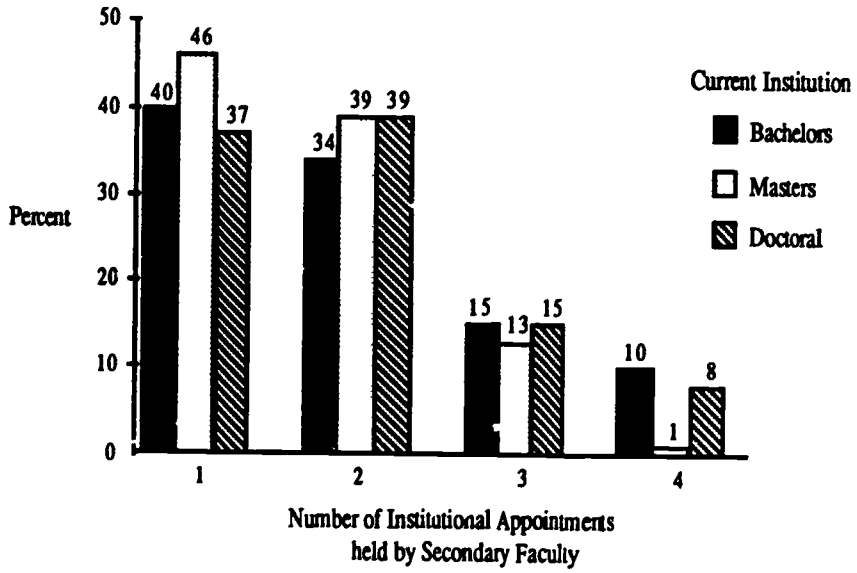
Source: RATE Project Institutional Survey

In general, regardless of institution type, the percentages of males and females holding doctorates are similar as a function of rank. One notable exception

is found at the professor level, where a smaller percentage of male professors hold the doctorate than females. This may be explained as a function of age and the changing expectations of educational achievement for the professoriate.

The Education professoriate is an experienced group of professionals. The secondary education methods faculty who responded to the survey have been employed by the institutions where they hold their current appointments for an average of 13 years. Although approximately 20 percent of the respondents are uncertain about their future plans, nearly 75 percent expect to continue working at their current institutions for the foreseeable future.

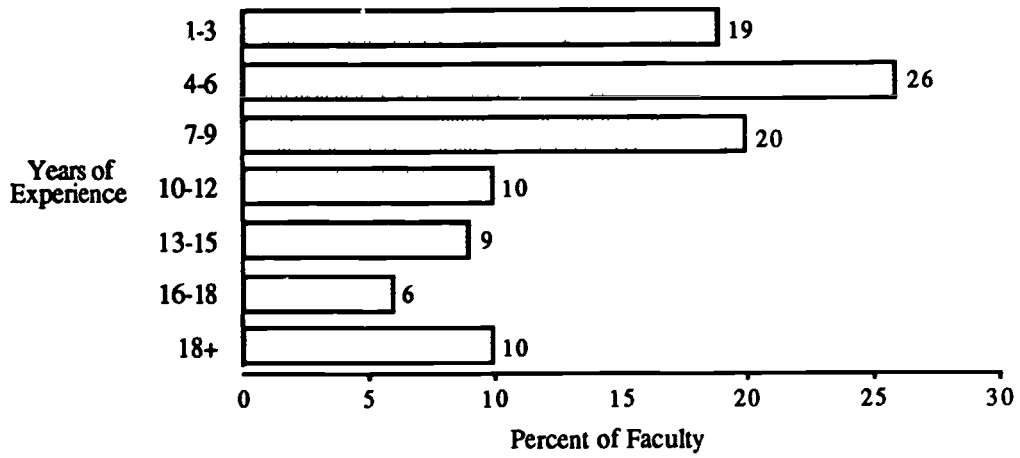
Figure 7
Faculty Mobility Within Higher Education



Source: RATE Project Faculty Survey

The majority of secondary education methods faculty have taught at only one or two institutions (Figure 7). Less than half of the professoriate surveyed have served only one institution, and more than a third have worked in at least two institutions.

Figure 8
Faculty Experience in Elementary and Secondary Education

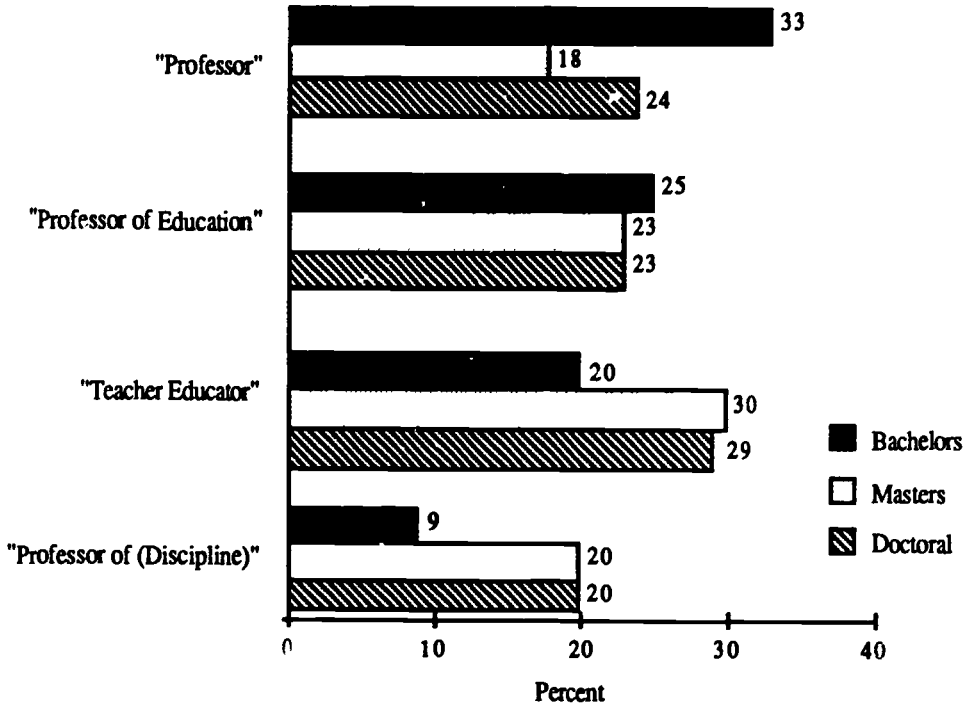


Source: RATE Project Faculty Survey

The survey also showed that secondary education methods faculty have spent a number of years working in elementary and secondary education (Figure 8). More than 90 percent of these faculty reported experience in other education institutions, primarily as elementary and secondary teachers and/or administrators. Only 7 percent reported having no experience in schools. Faculty averaged almost nine years of experience in schools, and almost all of them reported having had classroom teaching experience. In addition, nearly a quarter of them had been department chairs and nearly a third had held some other position, such as curriculum specialist or administrator. Almost one-third of the faculty had experience working in three or more elementary or secondary positions. Another one-third had served in two school positions and the final third had served in only one school position.

Secondary education methods faculty prefer a range of titles to identify themselves (Figure 9). Among the choices, there seems to be no clear favorite, and the distinctions that do occur are not related to type of institution. About half prefer to be referred to as either "professor" or "professor of education." However, about a third prefer the title "teacher educator," while a smaller number would like their professorial title to be attached to a discipline, e.g., "professor of educational psychology."

Figure 9
Professional Titles Preferred
by Secondary Education Methods Faculty



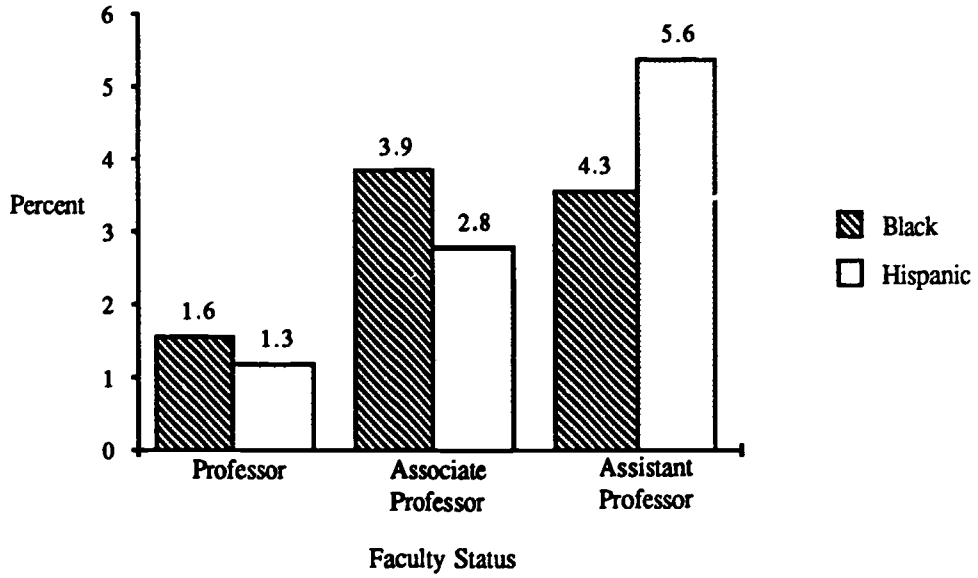
Source: RATE Project Faculty Survey

The Future Professoriate

The results from this survey provide baseline data for watching potential gender and race/ethnicity trends within the Education professoriate. From these data, one sees that men dominate the rank of professor, but women comprise the majority of the assistant professor rank. Whereas more than four-fifths of the faculty who hold the rank of professor are male, only two-thirds of the associate professors and less than half of the assistant professors are male. For two reasons, one can project that more women are likely to be promoted to the rank of professor in the future: The average age for male professors is 53, and more women are in the lower professorial ranks to be promoted when these men retire.

The status gains of minorities in the professoriate, though more modest than the gains of women, are encouraging (Figure 10). At the professor

Figure 10
Blacks and Hispanics in the Education Professoriate



Source: RATE Project Institutional Survey

level, a scant 1.6 percent are Black and 1.3 percent Hispanic. Those percentages jump to 3.9 percent and 2.8 percent respectively, at the associate professor level. At the assistant professor level, the percentages increase slightly for Blacks (4.3%) and double for Hispanics (5.6%). Summarizing these data, the combined percentage of Blacks and Hispanics steadily increases from about 3 percent at the professor level to almost 10 percent in the entry-level assistant professorship. Again, these figures provide a baseline for watching trends.

One other data set may help predict the demographic makeup of the future Education professoriate--that is, the composition of the doctoral candidates enrolled in the institutions represented in this study (Table 15). These data show that women dominate doctoral programs in Education 57 percent to 43 percent. Compared with the professoriate data, there is also a greater proportion of women in doctoral programs than in the assistant professor rank.

Enrollment percentages for Blacks (5%) and Hispanics (3%) in Education doctoral programs are marginal compared to Whites (86%). Although trendline data are not available, it appears that there are not enough Blacks and Hispanics in doctoral programs (8%) to sustain the modest gain reflected in the assistant professor demographics (almost 10%) of the current Education professoriate.

Table 15
Enrollment in Education Doctoral Programs

	Female	Male	TOTAL
White	49%	37%	86%
Black	3%	2%	5%
Hispanic	2%	1%	3%
Others	3%	3%	6%
TOTAL	57%	43%	100%

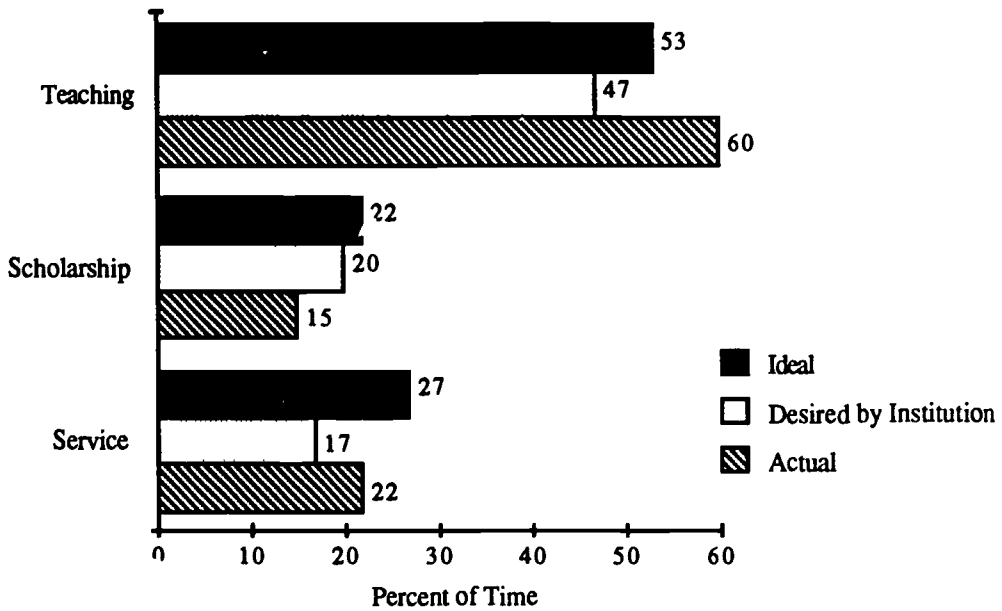
Source: RATE Project Institutional Survey

Faculty Perceptions of Academic Life

Academic life traditionally is divided among teaching, scholarship, and service, areas that the RATE Project probed in detail in surveying secondary education methods faculty. The results show that 60 percent of this group's time is devoted to teaching, while 22 percent is spent for service and 15 percent for scholarship (Figure 11). Faculty in Bachelors institutions reported that they teach the equivalent of about 7.5 courses during an academic year. Masters institution faculty teach about 8 courses while Doctoral institution faculty teach slightly over five. On the average, the typical secondary Education methods faculty teaches three or four courses each semester.

Faculty from all three strata teach more than they believe their institutions desire and more than they think would be ideal. They devote less time to scholarly activities than they would like, and less than they believe their institutions desire of them. Finally, they spend more time providing service to the institution and to the profession than they believe their institutions would like, but less time than they consider ideal.

Figure 11
Faculty Perceptions of Time Spent for Teaching, Scholarship and Service: Actual Time Spent Compared with Time Desired by the Institution and Time Considered Ideal

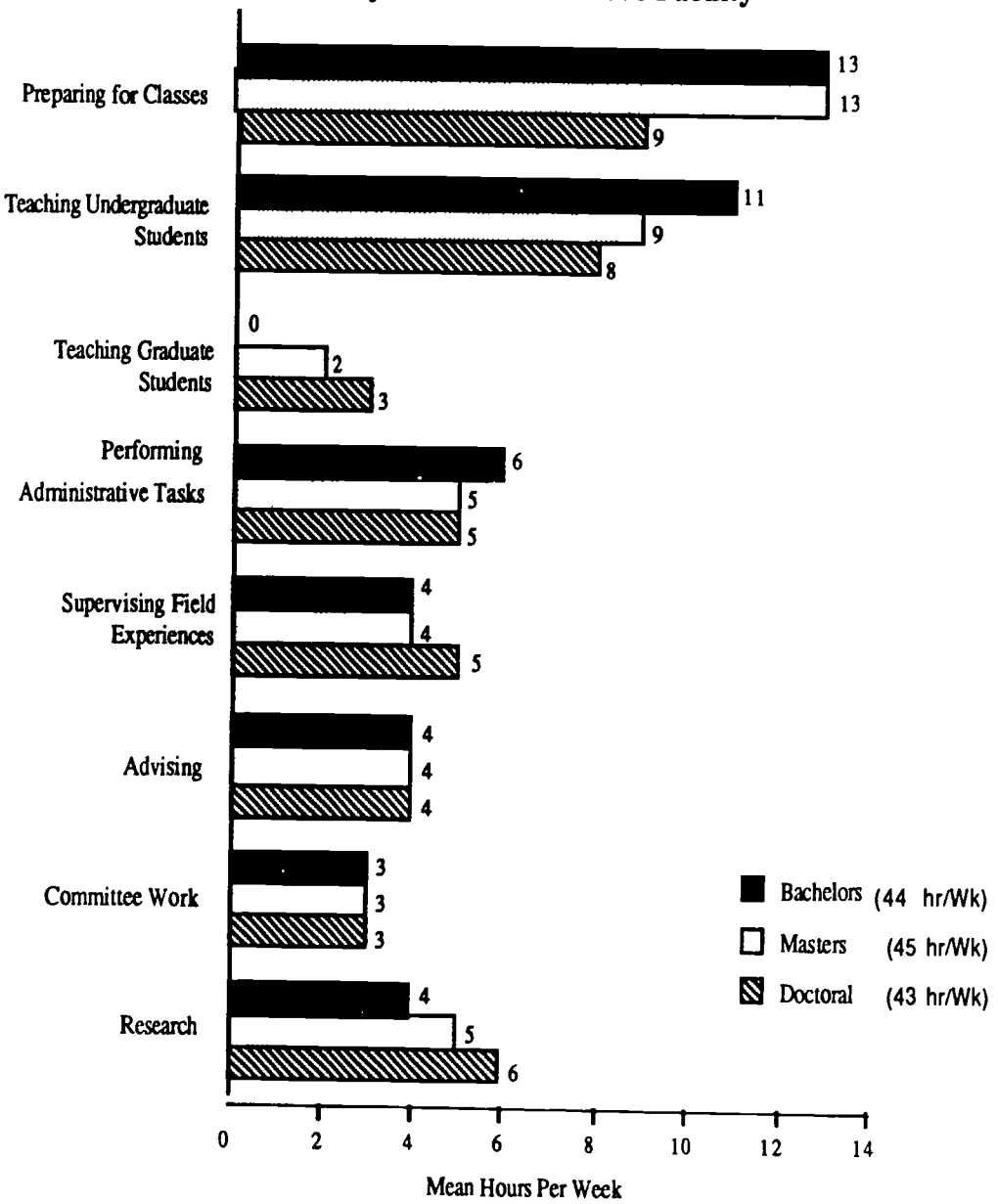


Source: RATE Project Faculty Survey

During a typical week faculty reported spending the greatest amount of time either in preparing to teach or in teaching itself (Figure 12). It is evident that even faculty at Doctoral institutions spend a good deal of time instructing undergraduate students (8 hours/week). Beyond teaching, faculty time appears to be distributed uniformly among performing administrative tasks, supervising field experience, advising students, and working on committees. Faculty in Masters and Doctoral institutions spend the least amount of time teaching graduate students (two and three hours/week, respectively), and faculty in all strata spend only four to six hours per week engaged in scholarly activities.

Field Activities. Of their time spent in K-12 schools, secondary education methods faculty reported on five specific activities (Figure 13). The largest percentages of faculty from all three institutional strata indicated that they supervise student teachers, and more than a third of the faculty supervise early field experiences. Slightly more than half the faculty at Masters and Doctoral institutions

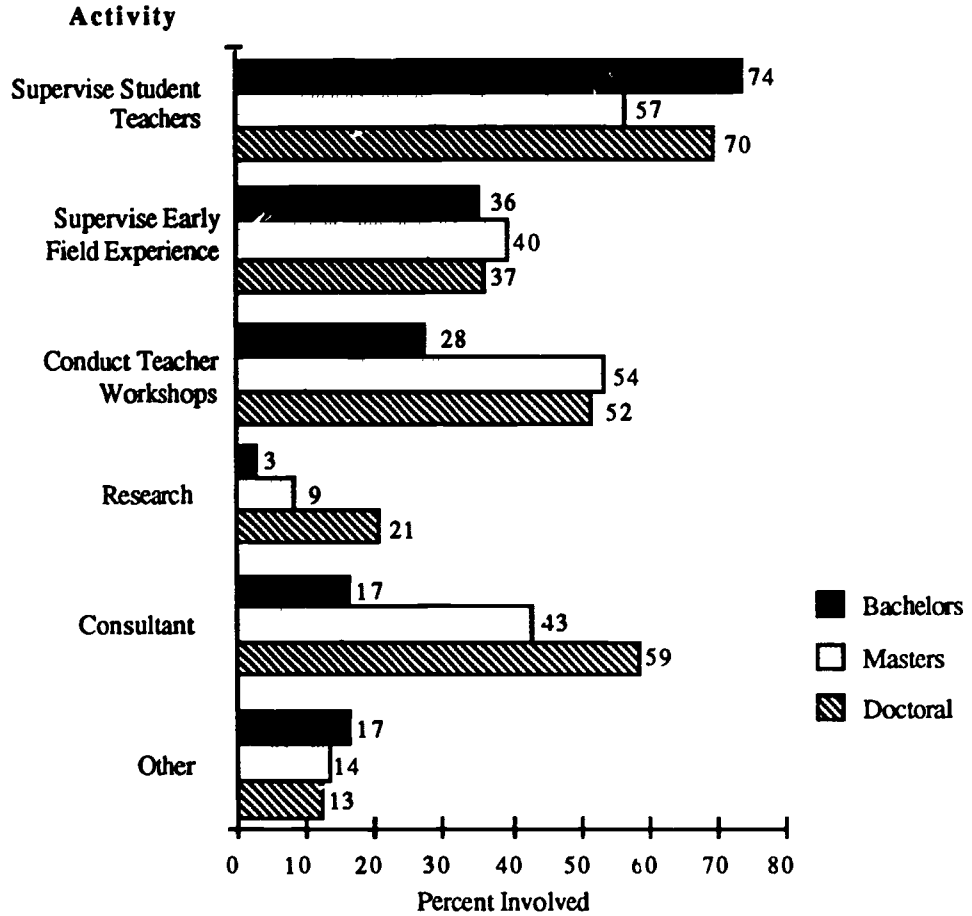
Figure 12
Weekly Distribution of Time for Secondary Education Methods Faculty



Source: RATE Project Faculty Survey

conduct workshops for teachers, compared with a quarter of the Bachelors institution faculty. Doctoral institution faculty provide much more consultation to elementary and secondary schools than do Masters institution faculty, while the faculty from Bachelors institutions devote little time to this activity. Of the Doctoral institution faculty surveyed, 21 percent devote time to research in K-12 schools; however, only 9 percent of faculty in Masters and 3 percent in Bachelors institutions devote time to this activity.

Figure 13
Field Activities of Secondary Education Methods Faculty



Source: RATE Project Faculty Survey

Not only is the supervision of student teaching the most frequent activity performed in the schools, it is also the most time consuming. Faculty reported that they spend 13 to 18 hours per month supervising student teachers. Typically, faculty supervise between six and nine student teachers as the equivalent of a three-credit teaching load. The next most time-consuming activity in the field is supervision for early field experiences; faculty spend approximately five hours per month on these activities. Two to four hours per month are typically spent in such activities as providing workshops, conducting research and consulting.

Scholarship. Scholarship in the context of this report encompasses not only publishing, but also professional meetings, affiliations, and reading.

Scholarly productivity in publishing is much more obvious at Doctoral institutions than at either Masters or Bachelors institutions where it appears to be roughly equivalent (Figure 14). "Writing articles for refereed journals" and "contributing chapters to scholarly books" are reported to be the most prevalent forms for demonstrating and documenting activities related to scholarship (Figure 15). However, faculty at Doctoral institutions use other forms with more frequency than their colleagues at Bachelors and Masters institutions.

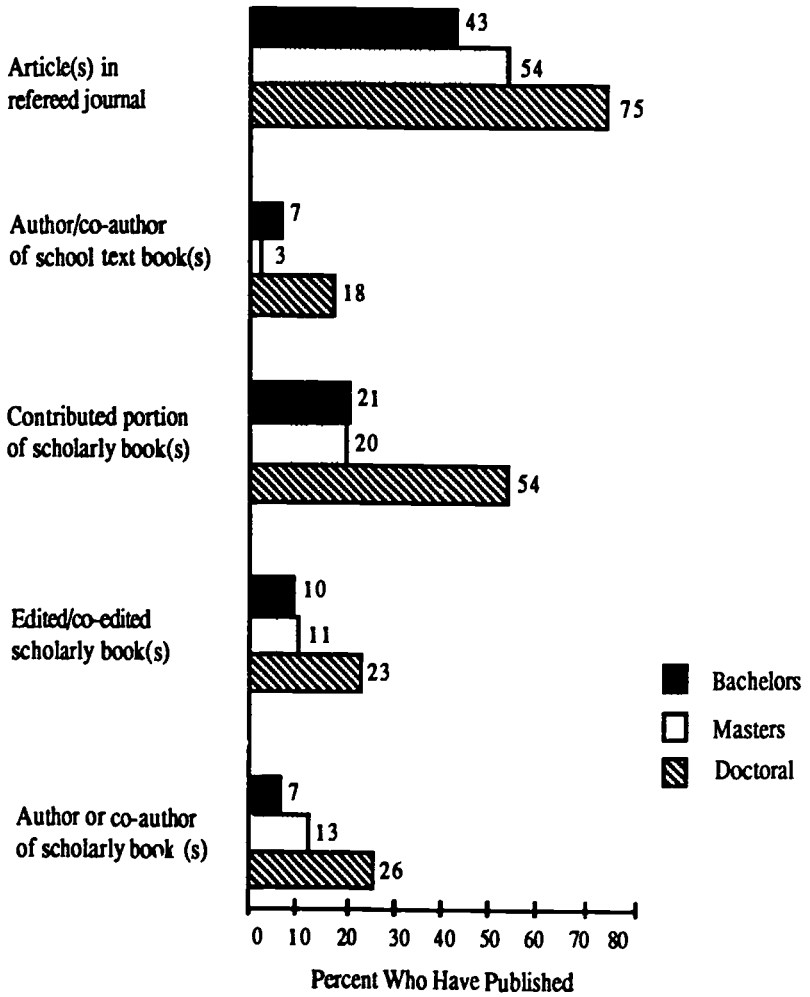
During their professional careers, more than 25 percent of the respondents have had 10 or more articles published in refereed journals, with more than 15 percent reporting 13 or more journal articles published. In contrast, almost 25 percent reported never having had published an article in a refereed journal.

On the average, secondary education methods faculty attend two professional meetings per year. About two-thirds of the faculty receive some institutional support for travel to these meetings. At Bachelors and Masters institutions, faculty receive an average of $350 per year toward their expenses at professional meetings, while their colleagues in Doctoral institutions average $500. It is important to note that these data show a tremendous variance, which suggest that some professors receive little support, while others receive substantially more than the average.

Secondary education methods faculty read a lot of content-oriented journals (e.g. Mathematics Teacher in addition to many other education journals. Of the latter, five stand out as being read by more than 25 percent of the respondents. These include the Journal of Teacher Education (33%), American Educational Research Journal (30%), Phi Delta Kappan (29%), Educational Leadership (26%), and Journal of Educational Research (25%).

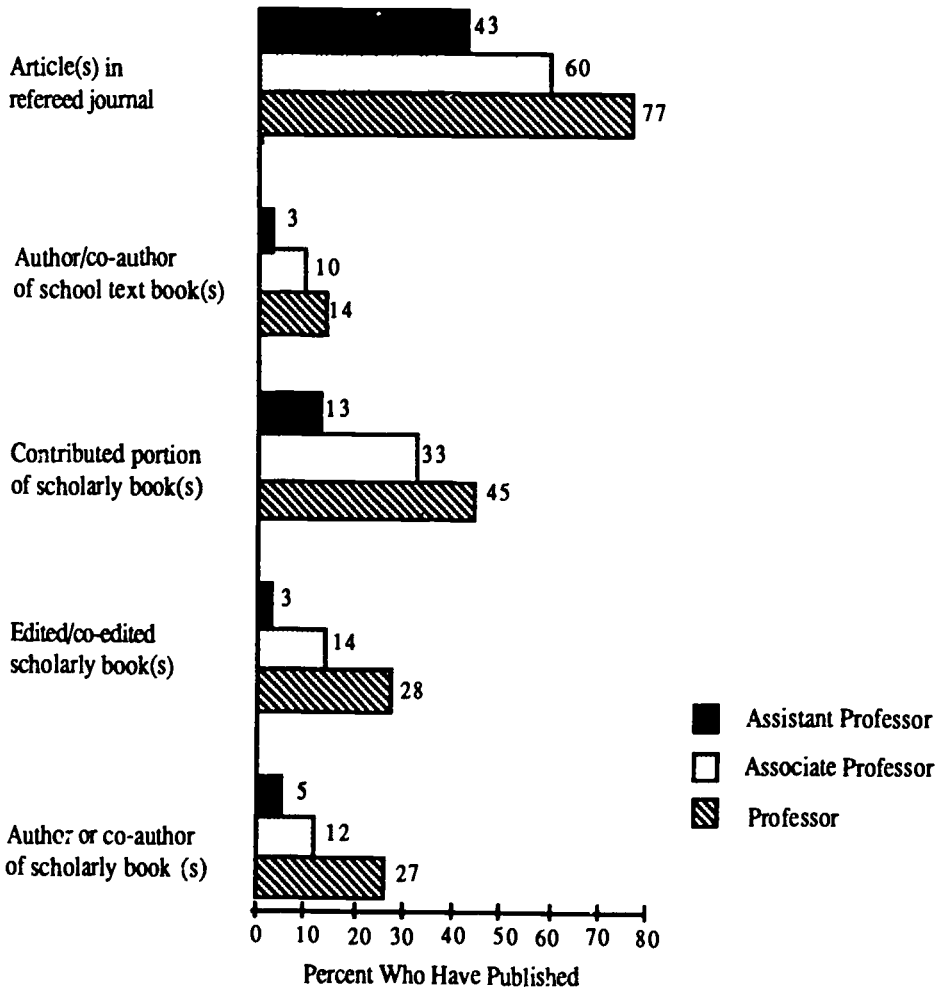
About half of the respondents belong to Phi Delta Kappa, a quarter belong to the Association of Teacher Educators (ATE), and about 12 percent belong to the American Educational Research Association (AERA). Faculty in Doctoral institutions belong to AERA at a rate ranging from three to five times as great as faculty from either Masters or Bachelors institutions.

Figure 14
Faculty Publishing Records
by Type of Institution



Source: RATE Project Faculty Survey

Figure 15
Faculty Publishing Records by Rank



Source: RATE Project Faculty Survey

Faculty Salaries

While it was not the intent of the RATE Project to provide an in-depth analysis of faculty salaries, data were collected on this aspect of academic life. For this report, these data were analyzed by rank and institution type, and by gender. The results indicate expected differences.

Table 16
Average Academic Year Salaries
for the Education Professoriate

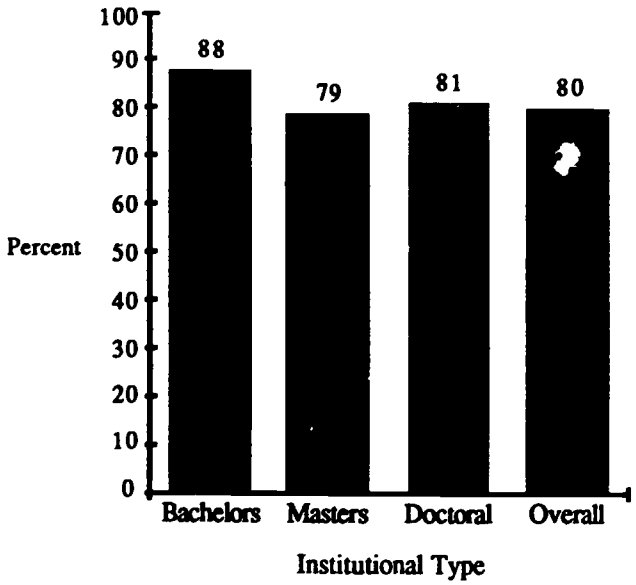
	Professor	Associate Professor	Assistant Professor
Bachelors	$31,164	$24,614	$21,623
Masters	$33,554	$26,299	$21,753
Doctorate	$41,196	$31,475	$24,698
Weighted Overall Average	$38,689	$29,602	$21,984

Source: RATE Project Institutional Survey

The range of salaries earned by the Education professoriate is a function of type of institution and faculty status: the higher the faculty level, the higher the salary, consistently across all institutional types (Table 16). Certain other facts emerged that make these data more understandable. Twenty-two percent of the Doctoral institution faculty receive academic salaries of more than $40,000 per year, while no Bachelors institution faculty receive that much. Conversely, 24 percent of the Bachelors insitution faculty earn less than $20,000 per year, while only 2 percent of the Masters institution faculty and 4 percent from the Doctoral institutions fall below that figure. A professor at a Doctoral institution can expect to earn, on the average, about $10,000 per year more than his or her counterpart at a Bachelors institution. For the associate professor, that difference is almost $7,000, and for the assistant professor, $3,000. Irrespective of institution type, increase in annual salary is greater between the associate and full professor levels than between the assistant and associate levels.

Salary inequities still exist between men and women in Education units (Figure 16). At every professorial level within every institutional type, men make more money on average than women. With one notable exception, women earn about 8? percent of what men earn during the academic year in Education units. Data from Bachelors institutions, however, show women's salaries approaching 90 percent of men's.

Figure 16
Women's Salaries as a Proportion of Men's in Education Units



Source: RATE Project Institutional Survey

Teacher Education Students: Focus on Secondary Education

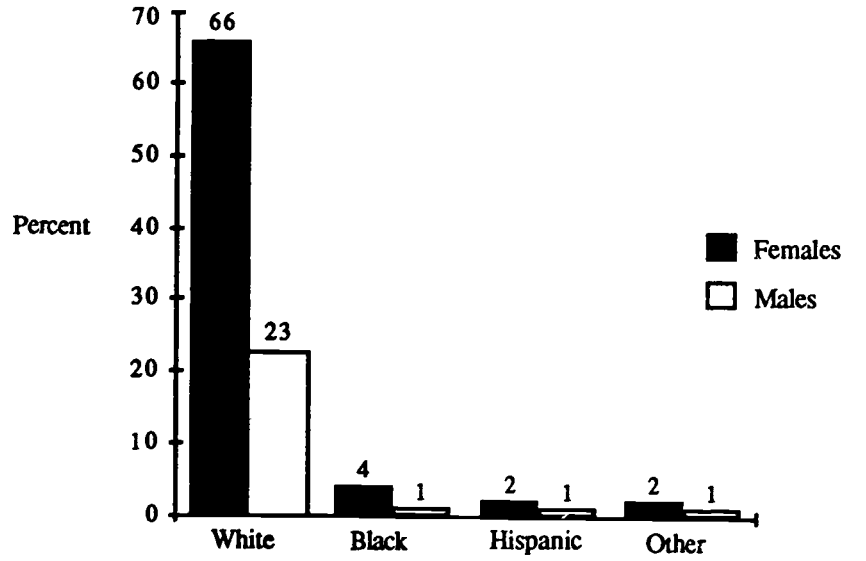
Numbering in the hundreds of thousands, teacher education students make up a notable proportion of the nation's collegiate enrollment. The following describes a specific subset of those students, namely, undergraduate secondary education methods students.

Student Demographics

The average age of junior and senior students enrolled in undergraduate teacher preparation programs is about 23 years. The average age upon graduation will be between 24 and 25. About 10 percent of the students enrolled in teacher preparation programs are postbaccalaureate students, that is, students who have completed undergraduate degrees, but who need a sequence of teacher education courses to qualify for certification. The postbaccalaureate students are older with an average age of 34 years. Slightly more than three-quarters of both undergraduate and postbaccalaureate students are women.

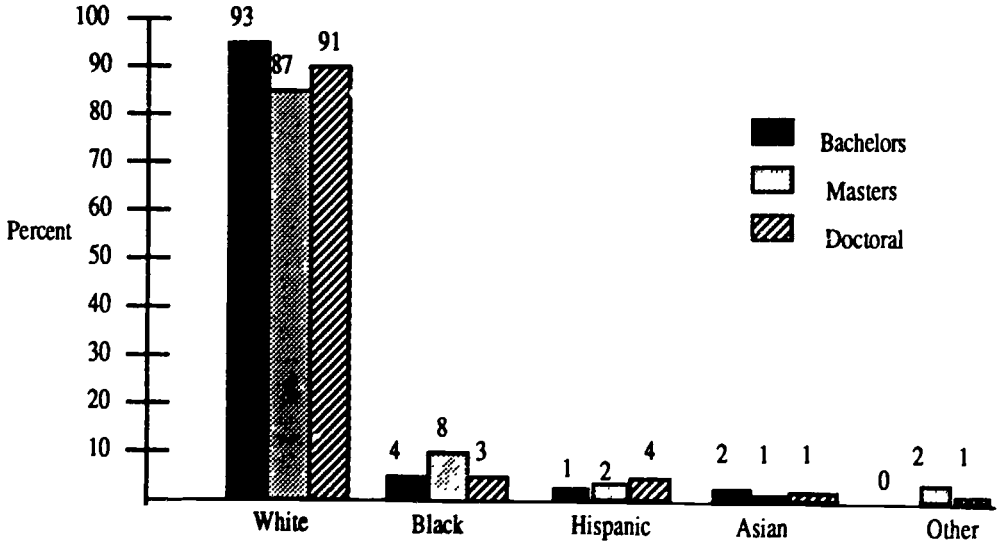
The racial and ethnic representation of Education students reinforces the severity of the problems of recruitment and retention of minority students in teacher education programs (Figure 17). The composition of students is 89 percent White, 5 percent Black, 3 percent Hispanic, and 3 percent divided among Asians, Pacific Islanders, Native Americans, and Alaskan Natives. The data show that the overwhelming majority of students are White women. Another way of examining these data is by race/ethnicity and institution type (Figure 18).

Figure 17
Demographics of Education Students by Race/Ethnicity/Gender



Source: RATE Project Institutional Survey

Figure 18
Demographics of Education Students By Race/Ethnicity and Institution Type



Source: RATE Project Institutional Survey

Figure 18 shows that more Black undergraduates attend Masters institutions than Bachelors and Doctoral institutions, while more Hispanic undergraduate students attend Doctoral institutions. White students are about equally divided among the three strata. The Bachelors institutions in the study had no American Indians or Alaskan Natives enrolled in Education programs.

Of the students responding, about one-quarter are married and nearly half (47%) are commuters. (Commuters are defined as living in their own or their parents' home and not relocating to a dormitory or residence for the specific purpose of attending college.) About 80 percent of the student respondents are enrolled full-time. A notable difference between the institutional types in regard to the proportion of part-time students is evident. In Doctoral institutions, 87 percent of the students are enrolled full-time, while that number drops to about two-thirds in Bachelors and Masters institutions.

Table 17
Undergraduate Students' Allocation of Time
(Average Hours Per Week)

	Institution Type		
	Bachelors	Masters	Doctoral
Estimated Time in Class	12	12	12
School Related Out of Class Work	18	17	19
Employment	14	26	19
TOTAL	44	55	50

Source: RATE Project Student Survey

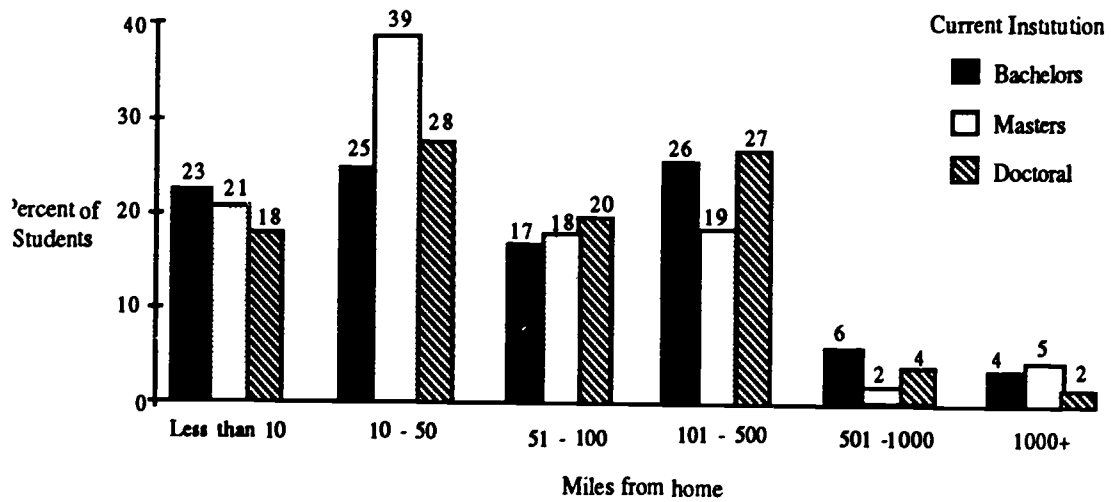
About three-fourths of the student respondents reported that they have some form of outside employment. The scope of that involvement varies among institutional types (Table 17). Full-time Masters institution undergraduate students reported that in, addition to attending class and spending about 17 hours per week in school-related out-of-class activities, they are employed, on the average, about 26

hours per week. In contrast, their cohorts in Bachelors and Doctoral institutions spend 14 and 19 hours, respectively, in paid employment.

Forty percent of the secondary education methods students began their college careers in institutions other than their current ones. About one-third of those transferees came to their teacher preparation programs from community colleges, and approximately another third came from state institutions. Smaller numbers transferred from branch campuses and private institutions.

About half of the students reported no familiarity with another language. Although about one-quarter reported familiarity with Spanish, only 2 percent claimed to be fluent. Fewer students reported knowledge of French or German.

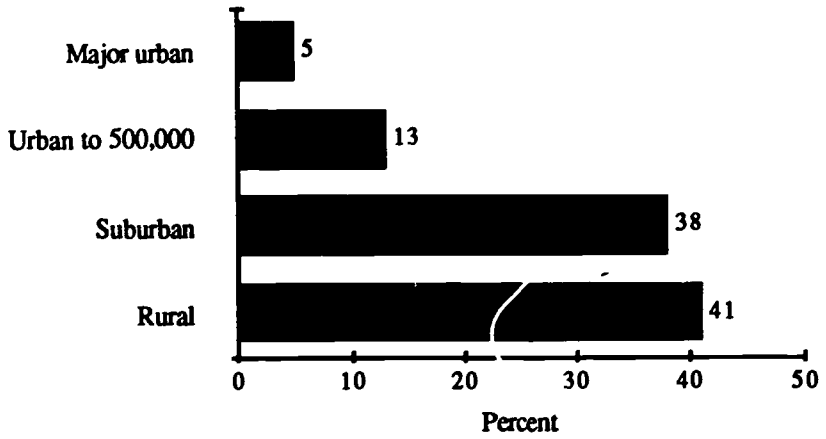
Figure 19
Proximity of College to Home Community
for Secondary Education Methods Students



Source: RATE Project Student Survey

For the most part, these secondary education methods students attend colleges close to their home communities (Figure 19). About one-half attend college within 50 miles of their home, with about 20 percent of that group traveling less than 10 miles. Less than 10 percent travel 500 miles or more from their home communities to attend college.

Figure 20
Size of Home Communities for Secondary Education Methods Students



Source: RATE Project Student Survey

The teacher education students in this study can be characterized as "nonurban"; this is true of minority as well as White students (Figure 20). Only about 5 percent of the students came from urban centers of half a million people or more. Approximately two-fifths of the students came from suburban communities, and another two-fifths identified themselves as coming from rural areas. The majority of Black and Hispanic students also described their home communites as either rural or suburban.

Quality of Education Students

Contrary to popular opinion, the data collected for the RATE Project consistently show that students enrolled in teacher education programs are of average ability compared with undergraduate students in general. Education students can be described accurately as "a solid B" (Table 18). Upon graduation they have cumulative grade point averages in the 3.0 range, and similar averages in their academic major as well. They achieve slightly higher grades in their Education courses. Education students also have nearly a 3.0 average in their general liberal arts courses, which are prerequsite to entry into teacher preparation programs.

Table 18
Mean Grade Point Averages (GPA) of Education Students

	Elementary Ed Students	Secondary Ed Students
Cumulative GPA	3.1	3.1
GPA in academic major	3.2	3.0
GPA in Education courses	3.4	3.4
GPA prior to entry into teacher preparation	2.9	2.8

Source: RATE Project Institutional Survey

In gathering data on quality indicators of Education students, the RATE Project researchers discovered that students' high school percentile rank is a commonly available measure. Standardized test scores are less readily available. Only 14 institutions in the study could provide Education students' scores on the American College Test (ACT) and 19 institutions had available data on Scholastic Aptitude Test (SAT) scores. (See Table 19.) In most cases, test scores are unavailable because the institutions do not require either the SAT or the ACT as a prerequisite to admission.

Table 19
Quality Indicators of Education Students

	Elementary Ed	Secondary Ed
High school percentile rank	70.2%	72.1%
ACT Math	17	18
ACT Verbal	20	19
SAT Math	475	509
SAT Verbal	451	476

Source: RATE Project Institutional Survey

The data that are available support the conclusion that prospective teachers are college students of average verbal and math abilities, as indicated by the average SAT math scores of 475 to 509 and SAT verbal scores of 451 to 476. The high school graduating class percentile rank reinforces this conclusion. The typical teacher education student is in the top third of his or her high school graduating class.

Reasons for Becoming a Teacher

After a recent drought of students, they are returning to Education programs with the goal of becoming classroom teachers. The reasons why the students surveyed have chosen teaching as a career are neither surprising nor new (Table 20).

Table 20
Students' Reasons for Becoming Teachers

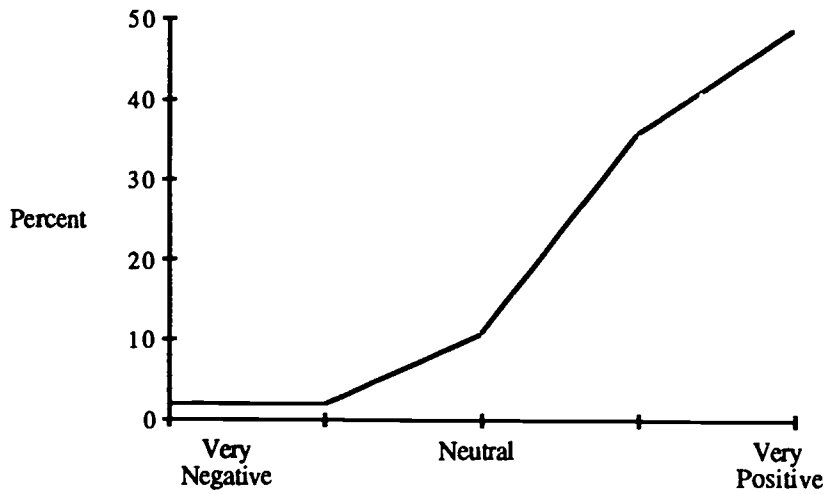
Reasons	Cited by
Helping children grow and learn	90%
Seems to be a challenging field	63%
Like work conditions (e.g., job market, calendar, security)	54%
Inspired by favorite teachers	53%
Sense of vocation and honor of teaching	52%
Could lead to other career	44%
Could be admitted and would succeed	41%
Liked reputation of Education on campus	22%
Friends are majoring in Education	20%

Source: RATE Project Student Survey

The most frequently cited reason for electing to pursue teaching as a career is that students can envision themselves helping children. In addition, prospective teachers view the classroom as a challenge, they view their chances for success as relatively high, and they think that teaching is an honorable career. The results indicate an altruistic element at work in the students' decision-making process.

Despite the criticism attendant to education in recent years, prospective teachers have positive feelings about their career choice (Figure 21). Less than 5 percent of the secondary education methods students responding expressed a "very negative" attitude toward a career in the classroom.

Figure 21
Feelings about Teaching as a Career



Source: RATE Project Student Survey

Although attitudes about teaching are mostly positive, students seem to be less confident about salaries. Salary levels do not appear from these data to be incentives for selecting teaching as a career. About 60 percent of the student respondents believe that a teaching salary is "just adequate" to support a single person. More than 80 percent believe that the salaries associated with teaching are less than adequate to support a family.

Students hold definite ideas about the setting in which they prefer to teach: They reported wanting a "traditional classroom" in "a traditional school" in "a middle-income neighborhood" with "children of average ability." Three-fourths of the students, when asked to describe what they consider to be the most desirable teaching environment, opted for these characteristics. To a lesser extent, students would find teaching gifted students and those from high-income homes acceptable. The respondents, however, showed little interest in teaching handicapped children, low income children, and children of low ability.

Career Plans

Students now enrolled in teacher education programs view themselves to be preparing for long-term careers in the classroom (Table 21).

Table 21
Number of Years Planned as Teachers

1- 5 years	13%
6-10 years	17%
11-20 years	18%
More than 20 years	27%
Uncertain	25%

Source: RATE Project Student Survey

Only 13 percent of the students believe that they will spend less than five years as teachers. Conversely, nearly half of the student believe their teaching careers will span 10 or more years, and 27 percent project more than 20-year teaching careers. One-quarter of the students reported being uncertain as to how long they think they will teach.

Teacher preparation students are clear about geographic preference for their first teaching positions. About 75 percent of them would like to stay within 100 miles of their home communities, but most of those same students (70%) reported they are willing to go anywhere within their geographic region (e.g., the Midwest). There is, however, some reluctance to going beyond their home regions. Only slightly more than one-third of the students indicated that they would move anywhere within the country to secure their first teaching positions.

From these data it would appear that inner city schools will have trouble finding teachers. Eighty-two percent of the students indicated that they prefer to teach in rural or suburban environments. Only 18 percent, given the choice, would opt for urban areas, and most of those would prefer cities under 500,000. Less than 4 percent of the students indicated that they prefer a major urban area for their first teaching position.

These data indicated that Black students in teacher education programs have simlilar aspirations to White students. Like their White cohorts, most of the Black respondents (72%) grew up in either rural or suburban communities, and that is exactly were they prefer to secure their first teaching positions.

In Summary

This study about teacher education has enlisted the support of research representatives from 76 institutions randomly selected within three strata, along with more than 200 faculty and 850 students. Because of the efforts of these people and many others, important progress has been made by establishing a foundation for keeping track of changes in the higher education institutions that prepare teachers. This foundation will allow for comparisons with data gathered in future years. Although the longitudinal benefits of this first study will be realized in years to come, a wealth of timely data that are important today has been generated. The following represent some of the highlights embedded in these data.

•Education students represent a substantial proportion of the total enrollments in institutions of higher education that prepare education professionals.

•Education students have not escaped the high costs of attending college, and they obtain support from a wide variety of sources.

•If Education students plan their programs carefully from the day they enter college, they will need on average 125 to 135 semester credit hours or about 4.5 years to complete their preparation to become teachers.

•Secondary education students describe faculty as important role models for selecting teaching as a career.

•Secondary education faculty believe that their students are prepared to assume initial teaching positions, and students concur with this perception of readiness.

•Both secondary education faculty and students believe that Education courses are as rigorous as most noneducation courses, and both groups perceive that Education courses require notably more time.

•The gender demographics of the Education professoriate are changing, with women representing less than one-fifth of the professors but more than half of the assistant professors.

•Most secondary education methods faculty have worked in elementary and secondary education before entering the higher education professoriate.

•Modest gains in the recruitment of both Black and Hispanic faculty have been made in the Education professoriate, but the racial and ethnic makeup of the doctoral student population suggests that these gains may be difficult to maintain.

•Secondary education methods faculty work in the field with their students, though not for extended periods of time.

•Women in the Education professoriate earn about 80 percent of the salaries their male counterparts earn.

•Education students are predominantly White women.

•A typical full-time student also holds a part-time job of more than 10 hours per week.

•About 80 percent of the prospective teachers grew up in suburban and rural settings, and they intend to teach in those environments.

•Grade point average, test score indicators, and high school rank all indicate that teacher education students are of average ability; they maintain solid-B averages in college.

•Prospective teachers believe that teacher salaries may support an individual, but not a family.

•Prospective teachers perceive themselves as entering long-term careers.

These highlights, and the many other facts and perceptions presented in this report and contained in the data, portray teacher education as a viable and vital part of the education enterprise. These data were not collected, however, with any preconceived notions about what they would show. Rather, the RATE Project is a long-term venture to establish a reliable data base for analyzing trends in teacher education, and thereby providing essential information for intelligent decisonmaking. The second round of data collection and analysis, with a focus on education foundations faculty and students, is underway. Future surveys will explore other areas of teacher education.

Appendix A: Institutions in RATE Project

Institution	City
Arizona State University	Tempe AZ
Augusta College	Augusta GA
Baylor University	Waco TX
Bellarmine College	Louisville, KY
Belmont College	Nashville TN
Bethany College	Bethany WV
Boston College	Chestnut Hill MA
Canisius College	Buffalo NY
Carson-Newman College	Jefferson City, TN
Chaminade University, Honolulu	Honolulu HI
College of William and Mary	Williamsburg VA
Concordia College	River Forest IL
Concordia College-Wisconsin	Mequon WI
Eastern Kentucky University	Richmond KY
Eastern Mennonite College	Harrisonburg VA
Fort Hays State University	Hays KS
Francis Marion College	Florence SC
George Washington University	Washington DC
Georgia Southern College	Statesboro GA
Georgian Court College	Lakewood NJ
Governors State University	Park Forest South IL
Graceland College	Lamoni IO
Illinois State University	Normal IL
Indiana University	Bloomington IN
Indiana University of PA	Indiana PA
Inter-American University of PR	Rio Piedras PR
Jarvis Christian College	Hawkins TX
Kean College of New Jersey	Union NJ
Kentucky State University	Frankfort KY
Luther College	Decorah IO
Metropolitan State College	Denver CO
Milligan College	Milligan College TN
Mississippi State University	Mississippi State MS
Monmouth College	West Long Beach NJ
Montana State University	Bozeman MT
Moorhead State University	Moorhead MN
Moravian College	Bethlehem PA
Muhlenberg College	Allentown PA
Nazareth College	Kalamazoo MI
Newberry College	Newberry SC
Nicholls State University	Thibodaux LA

Northern State College	Aberdeen SD
Ohio Northern University	Ada OH
Oklahoma State University	Stillwater OK
Shippensburg State University	Shippensburg PA
Simpson College	Indianola IO
Slippery Rock University	Slippery Rock PA
St. Ambrose College	Davenport IO
State Univ. of NY-Plattsburgh	Plattsburgh NY
Syracuse University	Syracuse NY
Taylor University	Upland IN
Texas A&I University	Kingsville TX
University of Akron	Akron OH
University of Delaware	Newark DE
University of Georgia	Athens GA
University of Kansas-Lawrence	Lawrence KS
University of Kentucky	Lexington KY
University of Mississippi	University MS
University of Missouri-Kansas City	Kansas City MO
University of North Carolina-Chapel Hill	Chapel Hill NC
University of North Carolina-Charlotte	Charlotte NC
University of Science and Arts of Oklahoma	Chickasha OK
University of Tennessee	Knoxville TN
University of Tennessee at Martin	Martin TN
University of Texas at Austin	Austin TX
University of Texas, El Paso	El Paso TX
University of Vermont	Burlington VT
University of Wisconsin-Parkside	Kenosha WI
University of Maine-Farmington	Farmington MA
Valparaiso University	Valparaiso IN
Washington State University	Pullman WA
West Virginia Inst. of Technology	Montgomery WV
Western Kentucky University	Bowling Green KY
Wichita State University	Wichita KS
William Penn College	Oskaloosa IO
Youngstown State University	Youngstown OH