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A Study of the Employment of 1969 Central Washington State College Graduates in Education

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A STUDY OF THE EMPLOYMENT OF 1969 CENTRAL WASHINGTON STATE COLLEGE GRADUATES IN EDUCATION

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APPROVED FOR THE GRADUATE FACULTY

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CHAPTER I

THE PROBLEM

It has become increasingly apparent that the educational institutions of our nation cannot function as separate entities from the publics and social systems which they serve. Dramatic technological advances which facilitate the expansion of knowledge, communications, and citizenry involvement in all facets of the government have required educators to evaluate and revise traditional programs and methodology. These changes are occurring at the college and university as well as the public school level.

Keeping pace with the times is particularly challenging to those who prepare prospective school teachers. Teacher preparation programs must be accountable not only to the innovative changes being made in methodology, curriculum content, and technological devices, but must also be cognizant of the prevailing market for employment once training is completed. In essence, teacher training programs must become relevant not only in curriculum design of academic courses, but to wider societal factors, including the economic and occupational feasibility of the profession.

Revisions and innovations in teaching methods and curriculum content at the public school level are processes which do not take place as swiftly as the population may demand. Many experienced teachers, accustomed to familiar methods and materials, often find the innovative changes requested of them frustrating and personally

threatening. However, to the "teachers of teachers" at the college level, the execution of program changes is even more time-consuming and difficult. Allen and Mackin question whether teacher educators are even serious about change in teacher education. They make this strong indictment:

> Similarly, those of us in teacher education are quite adept at dreaming. . . Translating words into action requires many times the effort that merely theorizing does, and for many the demands are too great, the rewards too meager. Sadly, we must concur with our educational critics that we do have an absurdly antiquated educational system, unresponsive to massive social and technological changes, and that teacher education serves as a major reinforcer of the stagnation and traditionalism permeating this system (1:485).

A survey of the majority of teacher preparation programs across the country has shown that educators have relied upon almost identical programs for educating prospective teachers (1;11;13;14;19). According to Allen and Mackin, the fact that the majority of teachers today continue to train within the standard foundations-methods-student teaching framework, without options and without opportunities for individualization, "Is an embarrassment to our profession and one that we seek to end immediately" (1:487). Hertzberg tends to agree and pointed out the irrelevancy of the traditional training program:

> A rigidly prescribed curriculum for teacher training is plainly antithetical to the cultivation of the inquiring mind and free spirit. Responsible institutions should be free to develop experimental programs in response to the rapidly changing requirements of society, scholarship, and students. . . (14:284).

The United States Office of Education has estimated that in the mid 1970's, for the first time on a large scale, many more teachers will be certified for jobs than the schools will be able to accomodate (1:485). Current conditions are indicating that this estimation

is undoubtedly true. This factor points out additional rationale for an evaluation of the teacher training program:

> . . . when a sufficient abundance of certified teachers appears in the mid 70's, the schools will be able to be more discriminating in their choices and to demand the type of teachers they desire--and if they have out-distanced most teacher educators in implementing educational change, they will become the policy makers in developing personnel training programs to fit their new needs (1:488).

Since it appears that hiring agencies will be able to be selective and discriminating in their choice of personnel, teacher educators need to assess the current quality and quantity of certified teachers graduating in certain fields of specialization. Furthermore, studies have shown that more men are needed in the elementary levels (24:45). Teacher educators must be aware of these hiring trends and be prepared to modify their programs, if necessary.

Today, the concern for professional expertise in areas such as the environment and ecology, early childhood education, and the disadvantaged, have placed additional impetus upon teacher training personnel to evaluate their programs. At the same time, educators are realizing that change cannot take place for the sake of change itself, but in accordance with the reality of the needs of the society, and the resources of the educational institution.

In effect, any attempts to revise existing teacher education programs must be prefaced by an assessment of prevailing conditions and practices. We need to know where we are, before we can decide where we should be going.

I. STATEMENT OF THE PROBLEM

In an effort to offer an effective preparation program for prospective teachers, the institution must first analyze its present status--"What are we now doing?" Such an assessment, a point of reference, is necessary before speculations about modifications can be put into action.

The problem undertaken in this study was to ascertain the status of the 1969 teacher education graduates from Central Washington State College in regard to their major field of preparation and subsequent placement within, or outside that field of preparation.

II. PURPOSE OF THE STUDY

The purpose of the study was to determine whether or not education graduates found employable positions for which they had trained. The study attempted to discover whether or not their major academic field of preparation was applicable to the open market as indicated by their job placement position.

III. SIGNIFICANCE OF THE STUDY

A training agency, private or public, has the responsibility of providing relevant training experiences to the program participants. Teacher preparation programs cannot attempt to offer professional training courses simply because tradition has dictated that this be done. It is necessary to assess the relevancy of certain academic

fields in accordance with the technological and social advances being made in the public schools. If jobs are obsolete, or projected to become obsolete in certain areas, prospective teachers should be given this information, and training directed to more realistic areas. The study of 1969 Central graduates, into their major fields of specialization and subsequent job placement, will help give teacher educators an assessment of prevailing conditions, and perhaps provide rationale for future expansion or limitations of enrollment in certain academic fields.

The presentation of the results of this study may be significant to educators in that very few efforts to influence changes in certification and fields of undergraduate specialization have been documented (1:485). This study may provide insight into the relevancy of the current teacher training program in light of other innovative educational programs taking place in the public schools and innovative teacher training programs being undertaken at other institutions.

Increased funding from federal sources for urban and rural disadvantaged has resulted in education programs in the schools which require teachers who have been trained in innovative techniques. The increased utilization of audio-visual equipment such as the videotape, "listening center" media, and computer data processing devices indicate that teachers beginning their professional careers may need special preparation to step into these classroom situations. The study may help determine whether or not there is a trend for recent graduates to specialize in academic fields which might more feasibly

offer these training experiences.

Authorities in education, psychology, and sociology are saying that elementary school children, especially those from disadvantaged backgrounds, need the influence of the male image, and that men should be teaching at all grade levels in the elementary schools. This study will indicate the number of 1969 male graduates certified at specific grade levels, and in certain academic major fields.

This descriptive study will enable teacher educators at Central to examine the status of 1969 graduates in education. While the College Placement Office provides a comprehensive report of yearly placement activities, this combines the totals of all persons using the facilities of the office and does not give a separate breakdown for recent graduates. Furthermore, there are a considerable number of graduating seniors who do not use the services of the Placement Office, and therefore are not included in the yearly Placement Report. This study was an effort to supplement the existing records of students graduating during 1969.

IV. LIMITATIONS OF THE STUDY

This study was limited to the 879, 1969 graduates in education from Central Washington State College. No attempt was made to evaluate the first year performance of these graduates in their teaching positions. The study was limited to determing if graduates found employment within their major field of preparation. It was further limited to a mere categorization of these major academic areas, and no attempt

was made to evaluate the teaching methodology or curriculum content of these academic fields.

Students designated as 1969 graduates with a B/A in Education included the following graduates: fall quarter, 1968; winter quarter, 1969; spring quarter, 1969; and summer quarter, 1969.

V. SCOPE OF THE STUDY

The study was undertaken after reviewing literature that enabled the writer to develop a rationale for proceeding with an investigation of the teacher education graduates and their major fields of preparation and placement. Data was made available through the college library and faculty, as well as Office of the Registrar, Office of the Director of Placement Activities, and the Teacher Certification and Advisement Office. Placement reports from Western Washington State College, Eastern Washington State College, Washington State University, and other institutions of higher learning were examined before undertaking the study, to provide background information and an analyses of placement and teaching positions acquired through those offices. The Office of Teacher Certification at the Superintendent of Public Instruction's Office, Olympia, was utilized to ascertain the job placements of those graduates for which placement records could not be determined at Central.

When records were investigated to provide information regarding the 1969 graduate's major academic area, and his subsequent placement as a teacher, the information was categorized and shown

on tables. The results of the analyses of the data were used to formulate conclusions, implications, and offer recommendations for further study.

VI. OVERVIEW OF THE REMAINDER OF THE STUDY

Chapter II provides a review of current literature relating to teacher supply and demand, and the need for innovative change in the teacher preparation program. The chapter describes employment conditions in relation to the population growth and economic circumstances of hiring districts. A projection of future trends and rationale for modification of training programs was also given. Models of innovative teacher education programs were outlined, and a national strategy for teacher preparation change was explained.

Chapter III describes the methods and procedures used to compile the data for the study.

Chapter IV delineates the 1969 graduates in education according to sex, certification levels, major fields of undergraduate preparation, and subsequent employment status.

Chapter V summarizes the study, presents conclusions reached, implications of the data, and offers recommendations for further study in the area of teacher preparation.

CHAPTER II

REVIEW OF LITERATURE

I. SUPPLY AND DEMAND IN TEACHER PLACEMENT

As recently as October, 1969, educators at Central Washington State College were optimistic regarding the employment market for certified teachers. Indeed, records from the Director of Placement Activities showed that during 1968-69, there continued to be an increased demand for qualified teachers and administrators (18:14). Recently, however, authorities at the national, state, and local levels are pointing out that 1970 will show the beginning of a decline in teaching positions across the country. In Washington State, the rumors of a reduction in personnel began when the national economic decline reached major industries on the West Coast. According to the Washington Education Association, "for the first time in almost 30 years--the supply of trained teachers may exceed the number of jobs available" (16:1). Factors which indicate this decline in Washington include:

> The districts which once maintained chamber-of-commerce style booths at the Inland Empire Education Association's annual convention [Spring, 1970] weren't there this year.
>
> District personnel officers report they aren't going out-of-state or onto campuses much, just relying on applications.
>
> First-class districts report a total of 800 fewer jobs than last year.
>
> One district admits it had 100 applicants for one job.

> WEA's Teacher-Position Listing Service has a longer list of applicants and a shorter list of vacancies than usual at this time.
>
> As early as March, one principals' association called it a "buyer's market on qualified teachers", listing lower enrollments, more trainees, and less money as reasons (16:1).

It appears that no longer will the certified teacher be able to pick and choose his location and job. Reinforcing this statement is a report from the WEA which states:

> . . . the number of pupils enrolled from 1964 to 1969 in grades 1-12 increased 97,700. Reliable forecasts indicate that school enrollments will increase only 46,400 during the next five-year period. . . that means only half as many "new hires" would be needed in the next five years as in the last five (16:1).

Krohn raised the question: "Where can the applicants turn?" According to the College Placement Council, industry is already experiencing the fewest jobs available in ten years (16:1).

George D. Fischer, National Education Association President, believes the supply of teachers should permit more upgrading of the quality of education by adding teachers to reduce the maximum class size, to provide special education and other programs to all pupils needing them, and to extend education to younger and older aged people (10:70). However, the problems of obtaining adequate funding to finance a reduced classroom size, and other special programs, may not allow teachers to find such positions.

The NEA Research Division's fall, 1969, survey of state education departments and 76 of the nation's 80 largest school systems, indicated that beginning elementary school teachers in 1970, may exceed the number of positions to be filled by as many as 16,000. At the

secondary level, indications were that there would be an excess of 22,000 teachers. The survey report stated:

> Only two states (Connecticut and Iowa) indicated a substantial shortage of teacher applicants. This compares with 20 states reporting substantial shortages in 1966, and five states in 1968 (10:70).

The survey indicated however, that there would still be a shortage of qualified teachers in certain major fields. These areas included mathematics, natural and physical sciences, industrial arts, special education, some vocational-technical subjects, women's physical education, elementary school librarian and elementary school guidance counselor (See Figure 1). Other significant results of the NEA survey showed that where there were teacher shortages, the majority of shortages were in rural areas of a state (10:70).

One problem to be faced regarding the supply of teachers is that a great proportion of the current graduates have specialized in fields which already have an over-abundance of certified personnel. The rapid increase in the numbers of teachers going into the profession has helped to improve conditions in assignment areas that have had inadequate supplies for several years, but in many of the major fields of preparation, the supply continues to be out of balance with the demand (17:51-52). Table I shows total figures depicting the supply and demand for teachers across the country, as described in the Spring, 1970, National Education Association's Teacher Supply and Demand in Public Schools report.

FIGURE I

SUPPLY AND DEMAND FOR BEGINNING TEACHERS, BY TYPE OF ASSIGNMENT, ADJUSTED TREND CRITERION ESTIMATE, 1963

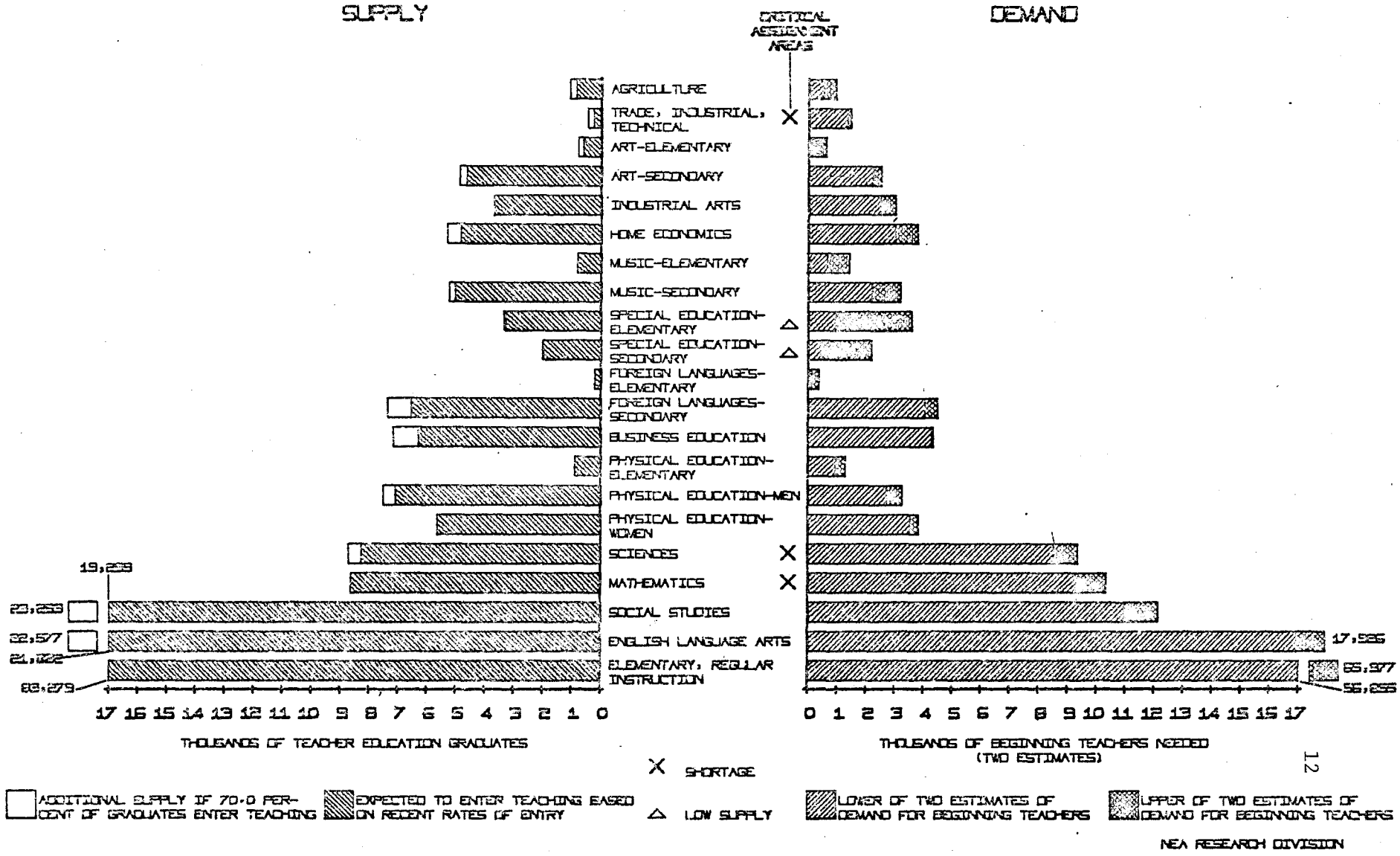

TABLE I

ESTIMATED NATIONAL SUPPLY & DEMAND

Level & Criterion For Estimate	Supply of Beginning Teachers	Demand for Beginning Teachers	Diff.	Supply as Per cent of Demand
Elementary School				
Distribution of new teachers last year	89,147	72,900	+16,247	122.3
Estimated Nat'l distribution	89,147	59,786	+29,361	149.1
*Quality criterion	89,147	256,450	-167,303	34.8
Secondary School				
Distribution of new teachers last year	105,694	82,400	+23,294	128.3
Estimated Nat'l distribution	105,694	78,213	+26,035	135.1
*Quality criterion	105,694	166,550	-60,856	63.5
Total				
Distribution of new teachers last year	194,841	155,300	+39,541	125.5
Estimated Nat'l distribution	194,841	137,999	+56,842	141.2
*Quality criterion	194,841	423,000	-224,159	46.1

*NEA's "Quality Criterion Estimate" of demand is based upon the turnover and re-entry rates of qualified experienced teachers "of recent years," in addition to the quality levels criterion recommended in all grades by the National Education Association (23:5-50).

This same report surveyed state department of education personnel to determine the numbers of school systems which were encountering "extreme difficulty" in filling teacher positions for 1969-70. Table II illustrates the critical assignment areas and number of systems reporting shortages:

TABLE II

CRITICAL ASSIGNMENT AREAS AS REPORTED BY SCHOOL SYSTEMS

Assignment	Number of Systems	Number of Unfilled Positions
Industrial Arts	46	288
Special Education	29	627
Mathematics	27	398
Trade, industrial, vocational	21	116
Natural and Physical Sciences	14	146
Physical Education (women)	11	167
Instruction of Educationally Disadvantaged	11	194
Remedial Reading, Speech, Etc.	9	205
Librarians	8	123
Elementary, regular instruction	2	1,140

(23:7)

Research has shown that schools in the next few years will be able to be quite selective during the recruitment of new teachers. This poses a real problem for teacher educators. Their's is the job of preparing students to find employment upon graduation. Teacher educators, in addition to deciding the limits of enrollment in the teacher education program, must also begin to take a close look at the relevancy of the academic fields in relation to teaching demands:

> Unfortunately, time is beginning to run out on teacher education institutions. . . teacher needs which have previously been measured almost solely in quantitative terms--the numbers of teachers required--will begin to be determined in qualitative terms: How desirable was the prospective teacher's preparation? . . . In order to furnish trainees who can compete on the open market, teacher educators will have to sharpen up their programs and, in the majority of cases, undertake major modifications (1:485).

The question now remains as to what kind of modifications should be made in the teacher education program.

II. RATIONALE FOR CHANGE

Any attempt to modify the teacher education program must begin with an analyses of what is currently taking place. Allen and Mackin believe that educators are deluding themselves, and the public, when they say that innovations are occurring (1:485). Hertzberg maintains that the problem of teacher preparation programs is that they are not relevant to the students, and offers the following reason why this is so:

> When a significant portion of the population spends several decades in educational institutions, when they are largely insulated both from the "real" world of men and the underlying world of nature, when they deal in words and ideas but not in their effects, and when their senses other than visual and auditory are almost entirely neglected, it is not surprising that they cry out for "relevance" and "experience" (14:276).

Goodlad believes that colleges should stop equating education with schooling and instead, look to the task of "humanizing" education. Education's first question, he says, is "what kinds of human beings do we seek?" But even before looking toward modifications in the program, he warns that we must ask fundamental questions about where

we are. Goodlad's research has shown that while the advent of Sputnik in 1957 brought revitalization to the schools and colleges, the 70's are showing that educators are as confused as ever when asked to identify educational goals and objectives. Sociological factors including student unrest, technological advancements, and world political situations have reinforced the apprehension that schools in many respects, have become or are fast becoming obsolete. He said that "they appear to have been designed for a different culture, a different conception of learning and teaching, and a different clientele" (11:82).

An adequate supply of certified teachers may allow educators to concentrate on the obsolescence of certain educational techniques and programs, and provide approaches to teacher training which are based on the quality of pre-service rather than the quantity of coursework accomplished. The rationale for emphasizing the "qualitative" aspect of teacher training was reinforced by Hertzberg. She spoke to the issue of subject matter and method and said that the "new" math, science, languages, and social studies involve a redefinition and updating of traditional disciplines. The preparation program, Hertzberg stressed, should place the emphasis on teaching through inquiry and discovery, the provision of suitable materials for accomplishing these ends, and prepare teachers to use these new materials and new apparatus (14:271).

Dykstra also stressed the "quality" over the "content" of the educational program, and pointed out that modifications of traditional approaches should not include a lowering of standards, but "more relevant standards." He warned against the creation of "artificial

scarcities" and said that the current philosophy in higher education requirements involves the taking of more and more courses that have "no perceivable vocational pertinence, but which ostensibly contribute to the creation of the 'educated' man." The premise in education, Dykstra said, has been that the more credit hours collected, the more effectively one can fulfill his professional responsibilities (5:98).

The current availability of certified personnel may result in a redefinition of the teacher preparation program based upon research which has shown that teacher effectiveness has little to do with content knowledge gained in pre-service training. Grannis reported that a number of studies over the years have shown that the competency of the teachers investigated had no positive correlation with the amount of courses a teacher has taken in a given area, or the teacher's achievement on standardized tests. Instead, Grannis remarked, it is the processes involved in the learning of the subject matter, rather than a teacher's knowledge of the curricular content which is the significant factor. He explained that studies in all subject areas showed the relationship between teachers' knowledge and pupils' achievement was proven to have little correlation, except at the secondary level in the case of bright pupils in advanced mathematics, chemistry, and physics. His report, which investigated studies done over the past thirty years, concluded by stating:

> This finding is alleged to hold whether tested achievement or the number of courses in the major subject is the criterion of knowledge for the teacher, and when either pupil achievement on tests or a supervisor's or principals' judgment is the criterion of teacher effectiveness (12:292).

Henderson stated that rather than a training program which stresses the learning of facts and known answers to the student, teacher educators should concentrate upon the "problem-solving" approach during pre-service training. He explained the difference between the two approaches:

> . . . In the professional school, this means the difference between graduating the student who has memorized formuli, handbook solutions, court decisions, and so forth, or an inquiring, analyzing, synthesizing, thinking student. There are obvious implications for the quality of thinking on the part of the future practitioner and for his ability to avoid obsolescence and keep on the forefront of knowledge in his profession (13:93).

Using the problem-solving approach, Henderson believes that professional coursework can be based upon the following criterion: (1) students determine alternatives for solutions; (2) process the alternatives in the effort to discover the best solution; and (3) subject the solution to critical discussion and evaluation. This, said Henderson, utilizes an important principle of education, that is that the solutions to problems should become the basis of generalizations which can be applied to novel situations (13:93).

Like Henderson, Hertzberg believes that students in the program should be offered the opportunity to become responsible for making decisions concerning their course of study. She criticized conventional teacher preparation programs and said that most programs are so structured that they denied prospective teachers experiences in practical situations. She explained:

> Each institution must, in turn, expect the student to be a critic of his own education and a full partner in planning his course of study. . . neither the state nor the profession should continue to set standards for the preparation of teachers in those familiar measures of credit. . . (14:284).

Whether or not students should be allowed to become involved in planning a course of study which deviates from the conventional requirements, is a question which must be answered by teacher educators. The "analysis" of the 1968-69 First Year Teacher Visitations report of Central Washington State College referred to this controversial issue. In the section entitled, "Recommendations," the following rationale was presented, which appears to question the validity of beliefs such as Hertzberg's urge for student involvement, and offers limitations to this involvement:

> It has recently been proposed that college students now in school be given an opportunity to evaluate college courses and programs in teacher education. From the point of policy, such a procedure can be supported and should be implemented. However, there are some limitations. First of all, it appears to take on the aspect of a pressure tactic, the assumption being that only by such a procedure can change be brought about. It is also somewhat questionable from the point of view of validity. To paraphrase a time-worn argument, how can those who have never taught know what should constitute the program of pre-service preparation for teaching?
>
> From a professional point of view, there can be little question about who should initiate evaluation and change: those professionals who are charged with the responsibility for administering the program! (2:26).

The analysis to the First Year Teacher Visitations report gave teacher educators insight into how first year teachers evaluated their undergraduate preparation at Central. This information, given in a supplemental paper to the August 18, 1969, report, analyzed data from the 425 first year teachers visited. Of these 425 first year teachers, 181, or 43.5 per cent felt they had "too little" preparation in teaching methods appropriate to their subject field. One-hundred thirty, or 32.3 per cent indicated they had "too little" preparation in understanding

the scope and sequence of curriculum in their subject field. According to the analysis, a considerable proportion of the first year teachers visited, "more than one in four," were evaluating several areas of their undergraduate preparation in teacher education as "inadequate." These included:

> . . . Methods of Measurement and Evaluation (26.6%), Basic Methods of Instruction (27.3%), Use of Audio-visual and Other Media (25.8%), Classroom Management (28.5%), and Curriculum Organization and Planning (30.1%) (2:13).

Regarding these same teacher's suggestions for improvement of the Central teacher education program, 141, or 36.7 per cent suggested that the institution provide more direct participation in teaching situations, and 135, or 31 per cent of these suggested longer and/or earlier field experience and observation. One-hundred three of the first year teachers (26.5 per cent) surveyed recommended improvements in "methods" courses. Some suggestions included more instruction on classroom management and discipline, more time given to teaching of reading, classroom planning, and instruction on how to "cope" with individual differences and methods of evaluation. Eighty-seven, or 22.6 per cent of the respondents suggested improvements in the education sequence courses. Almost half of these teachers indicated they felt a need for "less theory, more practical application" in the educational sequence (2:20).

The analysis of the report stated that there were a total of 386 suggestions for improvement in the teacher education program, but pointed out that conceivably, many suggestions were made by the

same teachers and that possibly there was a considerable number of "silent" respondents. However, the data did show that of the 425 respondents, there were 386 suggestions for improvement in the teacher education program, and these suggestions were given by at least 141 teachers (the highest frequency number under the category, "Provide More Direct Participation in Teaching Situations). At the same time, the report did show that 43.5 per cent of the 425 teachers felt they had too little preparation in teaching methods appropriate to their subject field.

A conclusion reached through an analyses of the data of the evaluation report stated that:

> . . . the fact that many suggestions for improving the pre-service program. . . confirms the conclusion that attempts should be made to examine the present program in light of first year teachers problems and suggestions (2:25).

The results of the analyses of first year teacher visitations made during 1968-69 at Central, confirm the results of other studies done across the nation. Fuller reports on similar investigations and states:

> . . . As it is reported by these investigations, what we know is that beginning teachers are concerned about class control, about their own content adequacy, about the situations in which they teach and about evaluations by their supervisors, by their pupils and of their pupils by themselves (9:294).

Fuller concluded that the consistency of these findings is "remarkable" considering the different populations surveyed by numerous cross-country samplings (9:294).

Teacher educators, relieved of the pressures of turning out an abundant supply of certified persons to meet hiring demands, may now

have the opportunity of providing training which offers more practical experience to the prospective teacher. Furthermore, since subject matter knowledge is not necessarily the criterion of teacher effectiveness, the training program may now allow for a focusing upon the development of those personal characteristics of an effective teacher. Educators tend to agree that pupil learning is more likely to occur when the teacher exhibits those techniques and attitudes which encourage divergent, creative thinking on the part of the individual students. Hertzberg offers the suggestion that perhaps the development of those good teaching techniques is determined largely by the behavior of the instructional staff at the undergraduate level. In fact, according to Hertzberg, it is the instructor which gives the student teacher more "tools for teaching" than the content of the academic course. She believes that teacher educators are reluctant to recognize the uniqueness of their responsibilities as "models" to prospective teachers:

> The teachers of teachers become, whether they will it or not, models whom he [prospective teacher] watches with a new eye. How his instructors teach, their relationships with their students, their view of society, their own commitment to their craft, their respect for themselves, their understanding and knowledge of the transition which the student teacher is undergoing--all these and many more factors assume an immediate personal importance for him (14:279).

Along with a general over-supply of certified teachers, there remains a critical shortage in certain areas. These areas of shortage have occurred because of the many innovative programs undertaken at the federal level, and directed mainly to minority group, handicapped, and disadvantaged children. Ragan and Henderson are convinced that

the biggest problem facing public school systems as they attempt both to implement the new curricula developed by projects at the national level and to adopt innovations in organization is the lack of teachers who are prepared for these new approaches. They concluded that "a new type of teacher education is the most needed reform in public education today" (19:186). Agreeing with Hertzberg, Ragan and Henderson also emphasized the importance of technique and behavior on the part of teacher educators as a prime factor in preparing teachers for contemporary school needs. They said that experiences as students in pre-service training should give the prospective teacher first-hand knowledge of team-teaching, a non-graded approach, and other innovative techniques. The new teacher education should allow for careful selection of candidates for the profession. The authors stressed the importance of the selection process, and said that selection is "perhaps as important as the courses the students take." They continued their concern by stating that if a student has a firm desire to teach, if he has a positive image of self, if he has a genuine interest in people, he is quite likely to become a successful teacher, as long as he has had thorough preparation. "If he lacks these basic qualities, rarely will he become a successful teacher, no matter how thorough the curriculum to which he has been subjected" (19:186).

In essence, authorities tend to agree that traditional teacher preparation programs are not relevant to contemporary social and technological circumstances. Teacher educators are being directed to

re-evaluate training programs in light of the trends in teacher supply and demand which will enable hiring school districts to be quite selective in their choice of personnel. The training program, no longer concerned with the quantity of candidates available, can concentrate on the quality of the teachers produced, and the type of training new teachers will need to provide the expertise required in certain areas of the curriculum.

III. INNOVATIVE APPROACHES TO TEACHER EDUCATION

A review of current literature showed that there are innovative teacher preparation programs taking place which attempt to offer candidates a practicable, longer training period. Many of these programs are concerned with the processes of learning rather than academic content knowledge.

One such attempt to offer practical experience to prospective teachers beginning with their freshman year in college has been undertaken by educators at the University of Illinois. For years, teacher trainees at Illinois have been complaining that "plunging into a semester of practice teaching after seven semesters of classes is like being thrown into the lion's den" (3:3-4). Following is a breakdown of the early experiential program being instigated at that university:

1. In a special program, teacher-trainees get classroom experience from the beginning of their college careers. Local teachers volunteer to take freshmen on as helpers.

2. The student teachers sometimes tutor children in math or reading; sometimes they prepare and teach actual lessons.

3. Classroom participation time is carefully integrated with the student teachers' lecture-discussion classes. Concepts learned in History and Philosophy of Education, for example, can be applied in an actual classroom the following week. Problems encountered in the school-room can be aired immediately at the University (3:3-4).

According to W. L. Shoemaker, director of Illinois' alternate teacher education program, all area schools that participated in the initial program (1968-69 school year) asked to be included again for the coming year (3:4).

Stanford University will initiate an "Interdisciplinary" approach to education in Human Biology, starting Fall Quarter, 1970. This program combines medical, biological, and behavioral sciences as a "first step toward a new intellectual discipline that will seek solutions to problems of human adaptation to the environment." The program will not include courses designed to teach about specific facts regarding issues such as birth control or pollution, rather instructors will "inculcate into the student the awareness of social and biological problems and a desire to learn enough to be capable of doing something about them" (15:6). Brameld also proposes a "cross-cutting" integrative curriculum not only for prospective educators, but at the secondary school level as well. Such a program approach would require a minimum of one-half of the entire student's time devoted to the course curriculum outside the classroom. He believes that education today must be geared to the interfusing and evolving character of nature, "including human nature," which compels

educators to recognize the invalidity of mere text-book learning. Briefly, his model includes one-half time devoted to practical experience in the "laboratory" of direct participation with people and institutions. He affirms that this phase must always be with the close support of teacher-consultants who are equipped to deal with whatever situations or issues that are jointly selected for analysis and prognosis. Experiences should be varied, and Brameld offers travel, work in a community, contact among anthropologists, sociologists, natural and social resource agencies, etc., as examples of the learning experiences which could be planned for an individual's work-study course outline (4:346-348).

Brameld's training proposal concurs with the suggestions of those previously mentioned authorities who advocate a training program based upon the processes of learning and the use of problem-solving techniques. Foshay warns that the concept of field-oriented learning will more than likely be rejected by many in education. He went on to say that "the idea that the function of instruction is to develop in the student's mind several modes of inquiry is one of the very rare new ideas to have taken root in instruction" (8:349).

However, there are examples of some field-oriented teacher training programs which have been underway for some period of time, and that are, apparently, very successful in terms of teacher training and institutional acceptance. Central Washington State College has undertaken such a training program in an attempt to prepare teachers

to work effectively with children in the rural and urban poverty areas. Taking place in the agricultural area of the Yakima Indian Reservation, and the central urban area of Seattle, the teacher training programs have been in effect for the past two years. For a period of thirty-two weeks, prospective teachers are involved in work experiences within the community, and interfuse academic coursework in psychology, sociology, and education with practical first-hand knowledge of students and families within the communities. The purpose of the two programs is to prepare teachers to work with disadvantaged and minority groups of the country and city. The Urban program is located in an area wherein presently, social upheavel is exhibited by the high turnover of teachers in the central area schools, student demonstrations, and the emergence of "power" groups such as the Black Panthers. Prospective teachers who train in the midst of these circumstances have the experience of identifying the needs of the community and become actively aware of some of the problems facing educators. The rural program, through the Center for the Study of Migrant and Indian Education at Toppenish, prepares students for teaching in classrooms having high concentrations of Mexican-American, Indian, and children of migratory farm workers.

Both projects begin the thirty-two week program with a three-day communications workshop. At this time, participants begin to meet one another and develop those skills necessary for communicating with children and adults of diverse ethnic backgrounds. During the month of August, students meet either in Seattle for the Urban

program, or Toppenish if they are enrolled in the rural program. At that time, participants spend one month working in the community. Such work experience may involve serving as aides in Head Start or day care centers, working in industry (business or agriculture), or in the case of the rural program, working as laborers in the fields or elsewhere on the reservation. During September, students observe and serve as aides in the classroom. Fall quarter, courses in the educational sequence take place at the centers, while students continue to serve actively in classrooms as aides. Student teaching for one quarter culminates the thirty-two week process.

Directors of both programs believe that student, teacher, and administrative personnel involved overwhelmingly endorse these student teaching programs as being "more" effective in the preparation of teachers, than traditional programs. However, documented evaluations of the programs were not available at the time of this writing.

An innovative teacher preparation program, which emphasized the processes of teaching and learning rather than the quantity of undergraduate coursework, was instigated at Indiana University in 1963. The "Insite" -- Instructional Systems in Teacher Education -- project was financed primarily by a grant from the Ford Foundation. Arthur Rice, former executive coordinator of the program said one main purpose of the project was to prove that Insite methods and procedures could prepare better classroom teachers in less time and with less cost to the student than traditional methods. Both

elementary and secondary majors completed undergraduate certification and their master's degree requirements in the continuing program which lasted four years and three summers (20:47).

After entering the program, students took a battery of tests that gave information regarding their personalities, intelligence, abilities, and other personal characteristics. Personnel in the project believe that the findings from these tests will prove valuable if further follow-up studies are made on the continuing achievement of Insite graduates once employed as teachers. The project contained the following five major features:

1. Seminars that gave broad overviews of the natural sciences, the social sciences, and the humanities.
2. The Acroclinical Semester, a professional semester, in which students took course work in the psychology of learning and methods of teaching and also had actual practice in teaching.
3. A semester of resident teaching (internship) in which participants received full salaries as beginning teachers and earned credits toward their master's degrees.
4. A return to the campus after a semester of resident teaching, for an experimental pattern of graduate studies related to and building upon the intern's actual experiences as a beginning teacher.
5. The Creative Arts Workshop, for prospective elementary teachers only, in which students learned about music, art, and games and how to use this knowledge to create learning situations for elementary school children (20:47).

Personnel in the project reported that the Acroclinical Semester proved to be one of the most innovative parts of the Insite activities. The university laboratory schools provided the setting for both the elementary and secondary groups. In the large building complex, those participants in the teacher preparation program were able to observe

children and then to be with them in teaching situations. During this phase of the program, elementary and secondary divisions had the services of faculty from the School of Education, including full professors, teaching associates, graduate assistants, and consultants. Classroom teachers at the schools also worked with the Insite students who observed or taught in their classes. During this time, students took methods courses, received training in audiovisual techniques and began to have student teaching experiences. They also had experience in the use of micro-teaching as well as the constant observation and evaluation of their work by the entire faculty at all times. Although students visited schools in their communities before starting the Acroclinical Semester, they still need the experience of learning about the great variety of programs and problems connected with public schools. In an effort to counteract this, the project re-created actual school situations that offered Insite students vicarious experience. Local public school systems worked with Insite personnel to develop a simulation program. They used motion pictures, slides, and tape recordings of events in the schools to enable Insite students to relive the experiences of students and teachers in these locales. To supplement this learning, prospective teachers were given examples of school work done by students from the classrooms of the public schools. They were also given copies of case histories and records of students enrolled for purposes of analyses. Caution was taken to protect the identity of all public school subjects used (20:47).

Through these simulated sessions, the prospective teachers hypothesized teaching situations for low-income or minority groups "with whom they otherwise would not have come into contact." Activities included extensive role-playing, particularly in areas involving professional ethics, community relations, and problems of discipline and classroom management (20:47).

An aspect particularly rewarding, according to participants and personnel, involved the close association students found with other prospective teachers during the Acroclinical Semester. Rice noted:

> . . . They could help each other in role playing, in planning, and in sharing each other's successes. In truth, Insite became somewhat of a school within the school in which friendships developed among the students and the participating faculty members. "Togetherness" was the word that students used most often to express their feelings about the entire Insite project--and especially the Acroclinical Semester (20:48).

More than 150 prospective teachers were involved in the experiment. Upon graduating, these people received their master's along with B/A certification. The 150 teachers taught their first year in five different states, and 23 school districts. Evaluations from the districts were received indicating that all graduates received ratings of "superior" or "far above average" from school administrators. Evaluations showed that Insite graduates:

1. Showed a high degree of innovative and creative ability
2. Demonstrated a capacity for self-analysis, continually attempting to assess how their efforts were succeeding with particular groups of children
3. Showed an openness to criticism and suggestions
4. Appeared secure about their role and responsibilities as teachers (20:48).

Insite received a 1969 Distinguished Achievement Award from the American Association of Colleges for Teacher Education, and the presentation noted that the "real impact of the program is evident in the number of new projects it has generated and continues to generate among the faculty" (20:48).

More and more professional organizations are joining individual attempts such as that of Insite, to develop guidelines and procedures which will generate new concepts and new projects in teacher training. The current focus upon teacher performance and "accountability" is leading to reforms in teacher preparation programs which stress teacher competencies in specific areas rather than graduating sheer numbers of certified personnel. In this light, the Washington State Department of Public Instruction, in conjunction with Washington Education Associations and other professional agencies are initiating teacher education reform through the standards presented in the Fourth Draft (Statement of Standards for Preparation of School Professional Personnel Leading to Certification). This document is an attempt to provide a framework wherein certification will be closely related to competency on the part of the individual teacher. Basically, the Fourth Draft defines the following processes and procedures for the preparation of school professional personnel:

1. Professional preparation should continue throughout the career of the practitioner.
2. School organizations and professional associations, as well as colleges and universities, should be recognized as preparation agencies.

3. Discussions about preparation should be based upon performance; performance in relation to stated objectives and the world of the practitioner.

4. Preparation and career development programs should be individualized (25:2).

The fourth Draft identifies three general types of certification: (1) Teacher Certification -- for the primary role of teaching school administration; (2) Educational Staff Associate Certification -- for the primary role of specialized assistance to the educational program, such as counseling, nursing, etc.; and (3) Administrator Certification -- for the primary role of general school administration (25:2).

The specific forms of these three general kinds of certification are:

1. Preparatory certificate: A certificate to authorize preparatory experiences with children, youth, and adults in school or school-related settings which lead to "initial" certification.

2. Initial Certificate: A certificate which authorizes initial school service in a particular role as a staff intern, when the person is ready to begin assuming some independent responsibility for clients.

3. Continuing Certificate: A certificate which authorizes school service on a continuing or career basis.

4. Consultant Certificate: A certificate for those who qualify for roles which contribute to professional preparation and to the improvement of instruction. This certificate is optional; that is, available to persons who hold a 'continuing' certificate and desire to qualify (25:2).

These new state standards govern the development of preparation programs rather than stipulate their content or extent of the programs. One unique aspect of the new standards is that they are "process-oriented rather than content-oriented;" that the standards themselves

are performance standards for the agencies and agents which must establish behavioral criteria for preparation programs; emphasize and encourage change in teacher preparation programs; and place evaluation in a proper perspective as "an integral part of self-assessment, self-development, and self-improvement" (25:3).

The Education Professions Development Act (EPDA), Public Law 90-35, has allowed Washington educators to explore and initiate some pilot projects for training teachers. Washington's grant for Part B(2) programs of the EPDA Act to provide for specialized areas of local teacher and aide shortages by bringing into teaching, persons from the community who have not previously been in education, resulted in seven B-2 projects during the 1969-70 school year. Teacher trainees, for the most part, were college graduates who did not complete any education courses, but who feel they want to become teachers. Briefly, these seven projects included: (1) preparing nine instructional aides to work in libraries of rural schools; (2) prepare five teachers to work in middle schools; (3) prepare nine teachers to work in differentiated staff arrangements--secondary and elementary: music, math, science, and social studies; (4) prepare twelve teachers for instruction in schools in the Central Area of Seattle; (5) prepare ten teachers and ten aides to work in schools designed around individualized instruction, continuous progress, and team teaching--elementary; (6) prepare twenty teachers and five aides to work in schools with high populations of children from culturally different backgrounds--elementary; and (7) prepare eight teachers and four aides to meet shortages in remote, rural schools--elementary and junior high (25:4).

The State of Washington is also participating in the Triple-T Project of the U. S. Office of Education. Triple-T denotes the "Training of Teacher Trainers" and in effect, it means that teachers in training, supervisors and principals, and college professors in graduate schools should work together to develop common and practical programs of teacher preparation. The Office of the State Superintendent of Public Instruction submitted a proposal to support the funding of several pilot programs which would (1) try out the concepts of the Fourth Draft; (2) develop expertise in using performance objectives with staff development; (3) provide liaison among colleges, school organizations and professional associations; and (4) bring about a means of communicating the rationale for changing certification procedures to the citizens of the state (25:5). A limited amount of federal funding provided by the 1969 Congress resulted in a reduction of the original Washington TTT proposal; however, some activities have received financial support. These include two projects dealing with the preparation of counselor educators who will subsequently staff programs in schools for preparatory, initial and continuing certificate holders. A project was also funded to select and train three staff development coordinators--field representatives of the Office of Public Instruction who help coordinate collegiate-school organization-professional association collaborative enterprises. Included in the funding of the innovative projects are two one-week seminars on writing performance objectives; six two-day seminars on teacher education; the support of two advanced graduate students in

education to work with educational institutions and agencies as they begin to develop performance-based programs; and the support of a project administrator in the state office (25:5).

Cooperative, inter-agency directions in teacher preparation in the State of Washington include a program at Seattle University's School of Education. A "tri-partite" model has been evolved which includes participation in the project between the University and employing schools--and professional associations. Basic components of the project involve:

1. . . . preparation of Head Start instructional and supervisory personnel. This is a "ladder" design which provides orderly and sequential development of early childhood personnel. The program starts with aides who have less than high school degrees and continues through to instructional supervisors who possess the master's degree.

2. "New Careers Program" which prepares paraprofessionals in a number of fields, including education. Aides in this program can continue their preparation toward a bachelor's degree and full teacher certification.

3. Implementation of a new professional sequence in both elementary and secondary teacher preparation. This sequence makes possible an earlier and more extensive involvement of the prospective teacher with the experienced, practicing teachers, schools, students, and professional associations.

4. The "application and practice"--centered program of graduate studies. This program encompasses guidance, administration, vocational counseling, curriculum and adult education, and will be kept current and relevant through the establishment of performance criteria evolved from the internships conducted in many Washington schools. An intensive study of objectives and criteria will be conducted cooperatively with local school districts (25:7).

At the University of Washington, educators are taking advantage of the present teacher supply market to initiate a training program

which emphasizes candidate selectivity and field-oriented pre-service activities. The Dean's Task Force on Teacher Education recently completed a study of the existing teacher preparation program and issued a position paper that suggests priorities for program development, as well as a system to facilitate proposals for change. Planned for implementation in the near future, the recommendations consist of:

1. An admissions program based on well-defined criteria.
2. A predetermined enrollment geared to available collegiate, human, and physical resources.
3. A specified time module to which the student commits himself on a full-time basis.
4. A multiple-track system to accommodate persons with diverse backgrounds and to prepare persons for differentiated roles and conditions.
5. A performance based, field-centered approach that provides for the integration of theory and practice.
6. A close working relationship of the enterprise concerned, which includes students, faculty, field and community representation (25:7).

The basic purpose of the new approach to teacher preparation, according to Fred Giles, Dean of the University's School of Education, is to "move away from what has been a closed system to an open system that provides several programs to accommodate a range of student needs and interests" (25:7).

George Brain, Dean of the College of Education at Washington State University, reported that faculty members are re-assessing goals of the education program, and examining whether or not the traditional curriculum base can adequately prepare prospective teachers

for contemporary roles. He stated:

> Consideration is being given to the development of new curriculum alternatives--for example, curriculum organized around aesthetics, technology, human relations and communications.
>
> The differentiated staffing concept is being carefully analyzed for implications pertinent to the preparation of educational specialists. This entails an investigation of the new and specialized educational roles that are emerging and the development of preparation programs to prepare educational specialists for these new roles (25:8).

Brain explained another innovative approach being examined for potential implementation at Washington State University--the development of "learning resource managers." Prospective teachers are being "systematically" instructed in the utilization of technology and the impact that educational technology will have on changing their functions as teachers in the classroom. The emphasis is on having teachers and other educational specialists assume greater roles in the development and improvement of "soft ware" instructional materials. Presently, these innovative approaches are in the planning stages at Washington State University (25:8).

As pointed out earlier, increased federal funding to schools with high populations of disadvantaged children, has resulted in teacher training programs designed to equip teachers with the knowledge and skills to work with these children. The Department of Education at Eastern Washington State College is presently involved in a project designed for the "Improvement of Competencies of Teachers in Rural Areas." This project, with sixteen sub-projects, is competency based, field-centered, and behaviorally oriented. A summary of the total project includes the following:

1. A program to serve Indian, Eskimo, and rural youth to improve student educational experiences through special preparation programs designed to meet the unique needs of these minority groups.

2. Objectives include field experiences for prospective beginning teachers in rural settings, on Indian reservations and in Eskimo villages.

3. To re-train teachers, presently employed, to work more effectively with students coming from diverse ethnic and economic backgrounds (24:9).

The project at Eastern also includes the preparation of teacher aides indigenous to the rural areas. Eastern has a cooperative agreement with Central Washington State College, and during the 1969-70 school year, prospective teachers from Eastern participated in Central's student teaching program at the Migrant and Indian Center in Toppenish (25:9).

A redefinition of the training program based upon quality performance has enabled prospective teachers at Seattle Pacific to enroll in field-centered, undergraduate curriculum to begin practical experiences in a classroom during the sophomore year. The training sequence involves a professional quarter at each of the sophomore, junior and senior years of college. Students are assigned to public schools for laboratory experiences during this professional quarter. This program allows, among other basic objectives, the student to assess his own characteristics through "self-study" and actual experiences with children in order to reach a preference in regard to age levels to teach, and preferred subject matter. A similar program wherein students begin practical experiences in the classroom during their sophomore year and continuing on through certification, is also

underway at the University of Puget Sound.

Apparently, many colleges and universities in Washington State are utilizing the conditions of the teacher employment market to concentrate training on earlier and longer practice in a classroom, behaviorally-based performance techniques, and specialized competencies, now that the general demand for mere quantities of staffing is over.

IV. STRATEGY FOR CHANGE

While many authorities have spoken out for the need for educational change in teacher preparation programs based upon implications of supply and demand, as well as current sociological and technological advances, little strategy to accomplish change has been delineated in literature. Complex situations arise even if agreement for change is reached by teacher educators, as pointed out by Allen and Mackin:

> . . . If there was agreement in a college of education that certain methods courses were no longer necessary, how would the change be made, i.e., how could you pry them loose from the other variable involved--certification requirements, credits needed, and the like? Or consider the objections against introducing differentiated staffs: The schools argue that they cannot implement a differentiated staff without the specially trained personnel, while the teacher education institutions insist that it is futile to train such personnel if positions do not exist in the schools for them to fill (1:486).

In an effort to expedite changes in teacher education, the Commission on Education for the Teaching Profession of the National Association of State Universities and Land-Grant Colleges (NASULGC) undertook a study in 1969 to determine the extent of change advocated by deans of education, and to develop a strategy for implementation.

Institutions presently belonging to NASULGC graduate approximately 28 per cent of the certified teachers in the nation. Representatives of the teacher education programs composed the commission study, entitled "The Requirements of Teacher Education in the Next Decade." The requirements were based upon responses from personnel and examinations of teacher preparation programs acorss the country, in light of the impact of technology on teaching and advocacy for change. As a result of the study, a "resounding" mandate for change has been issued for collective consensus of goals and activities of member institutions. A nation-wide Seven Year Teacher Education Study is underway, with 1976, the 200th anniversary of the nation's independence, serving as the terminal date (20:487).

The basic components of the plan call for "fundamental and systematic revisions in major programs of teacher education" through a gradual, yearly system for restructuring. The proposal asks participating institutions to undergo the following phases of revision:

1. Effective September, 1970, 10 per cent of the resources contributing to the education of teachers, both personnel and support monies, be set aside for use by teacher education study groups to be established on each campus.

2. These resources would be used to conceptualize experimental programs and to develop implementation mechanisms.

3. During this initial developmental phase, lasting two years, no students would be enrolled in the emerging programs.

4. Beginning September, 1972, 10 per cent of the prospective teachers would be selected to participate in the new pilot models.

5. During this and subsequent years, additional resources would be added to the teacher education study in direct proportion to the percentage of students enrolled, i.e., 10 per cent added to the planning reserve for the academic year 1972.

6. In each succeeding year, a minimum of 10 per cent of the teacher population would be added until half of the teachers being prepared on each campus would be under new programs by September, 1976 (20:487).

A major aspect of the Seven Year Plan is the development of "policy" groups charged with the responsibility of directing the development of alternative programs on each campus. The commission recommended that students and personnel outside the school of education, but involved in the teacher education process, be active members of the policy groups. Representatives from these campus policy groups will help comprise a National Study Group which would coordinate all experimental efforts and encourage institutions to collaborate on the refinement of proposed new models. This National Study Group would also serve to facilitate the dissemination of results of pilot programs and alternative projects. To accomplish this, campus policy groups are encouraged to allocate one-tenth of the initial ten per cent of funds for use by the National Policy Group (20:487).

Recent ratification of the above plan for modifying teacher education programs was given by representatives of member institutions. Washington was represented by George Brain, Washington State University, who voted to ratify the Seven Year Plan (20:488). The Seven Year Plan is an endeavor on a nation-wide scale to undertake changes in teacher education that will enable individual institutions to accomplish modifications by a unified process, rather than independently.

V. SUMMARY OF THE CHAPTER

Research has indicated that while the supply of certified teachers is increasing, the demand appears to be decreasing. However, there will continue to be a need for teachers trained in specialized areas and there is a definite shortage of qualified teachers in mathematics, natural and physical sciences, industrial arts, special education, vocational-technical subjects, women's physical education, elementary school librarian, elementary school guidance counselor, and other assignment areas such as remedial reading and speech therapy.

Authorities in education, sociology, and various other disciplines provided a rationale for changing teacher preparation programs from the traditional methodology, and the reoccurring theme of "relevancy" characterized such rationale.

A review of literature showed that innovations and variations to traditional teacher training programs were taking place in an effort to meet the special needs of diverse ethnic groups, competency-based program objectives, and teacher accountability and selectivity.

Special emphasis was given to those training programs currently taking place in the State of Washington. A report of a national cooperative plan for revising teacher education programs was presented which explained the strategies for change as outlined in the Seven Year Plan model.

CHAPTER III

METHODS AND PROCEDURES

The purpose of the study was to determine whether or not 1969 education graduates from Central Washington State College found employable positions for which they had trained. The study attempted to discover if their major academic field of preparation was relevant to the open market, as indicated by their job placement assignment.

Records from the office of the Director of Placement Activities and the office of the Registrar, were used to compile the data. A listing of 1969 graduates from the office of the Registrar was used to cross-check with the "Disposition of Teacher Candidates" list from the college placement service. It was discovered that first-year evaluations of Central graduates were made from the Disposition list, rather than the Registrar's list of 1969 graduates. The reason for this was that the Disposition list included the type and geographical locale of job placements of any graduate who desired the services of the office. This record enabled the first-year evaluations of beginning teachers to take place. Since not all students who gained certification and graduated in 1969 utilized the services of the Placement Office, these students were not included on the Disposition list. Furthermore, the Disposition list of graduates seeking employment through the Placement Office also included the names of the total number of applicant teachers, whether first-year graduates or not, who used the services of the Placement Office to find employment.

Since in some cases, the person seeking employment through the Placement Office was shown on the Disposition list in a field area other than his undergraduate major, it was decided to use the student's academic major as recorded by the Registrar's Office, rather than the major listed on the Disposition list. These instances were very few and did not occur often.

In all, there were 879 Central Washington State College graduates obtaining a B/A Degree in Education during 1969. The graduating year 1969, included those graduating Fall, 1968; Winter, 1969; Spring, 1969; and Summer, 1969.

An examination of the records showed that there were graduates of whom the college had no record of job placement. Obviously, these graduates did not use the services of the college Placement Office, and if they found employment, found it by other means. Every effort was made to ascertain the teaching positions of these graduates outside of writing to their home addresses as listed when former students. The Office of the State Superintendent of Public Instruction, Teacher Certification and Placement, was contacted in an effort to locate the teaching positions of these graduates. Many of these graduates were listed with the state office, and consequently, all but 130 of the 879 graduates were accounted for in the final analysis. The graduates for whom there were no records of job placement were included in the compilation of data under their academic major field, level of certification, etc., and listed under the category, "No Information."

The 879 graduates were charted and categorized under the major academic field, indicating their area of placement, sex, certification levels, and other data relevant to their 1970 employment status. Those graduates who were found to be teaching in an area outside their major or recommended minor, were designated as "Misplaced." Caution was given to not arbitrarily assign a graduate in this category unless the teaching area was obviously completely unrelated to his undergraduate fields of preparation and/or certification level.

Since available records showed inconsistency in designating students as graduating in certain major fields, i.e., listing Music-Broad Area graduates as Music graduates, it was decided to combine these particular majors where inconsistencies were frequently found. Those fields affected by this categorization included: Music-Broad Area, Music; Business Education-Broad Area, Business Education, Plan I, Business Education, Plan II; and Art, and Art-Broad Area.

Individual tables for each of the twenty-nine major academic fields chosen by 1969 graduates for undergraduate teacher training were used to summarize information. Data from the twenty-nine tables were used to analyze and draw conclusions, implications, and offer recommendations for further study.

CHAPTER IV

PRESENTATION OF THE DATA

To determine the employment status of the 1969 Central Washington State College education graduates, and their positions within or outside their major academic areas, data was compiled for each graduate and listed in Tables by academic major. The 879 graduates undertook teaching preparation in twenty-nine undergraduate fields. These tables are shown in the Appendix, page 62.

Table III summarizes the status of the 1969 graduates. As shown, of those graduating, complete follow-up on their 1969-70 employment status was accomplished for all but 130 students. There was no record of these graduates teaching in Washington during the 1969-70 school year, according to Teaching Certification and Placement personnel in Olympia, or at Central. Therefore, 14 per cent of the graduates were assumed not to be teaching in this state, or in the case of female graduates who married after graduation, not under their recorded maiden names.

Of the graduates, 71 per cent were placed in teaching their first year. Forty-seven per cent of the graduates in education were men, and 53 per cent were women. Elementary certification was given to 43 per cent of the graduates, with the remaining 57 per cent certified at the secondary level. Only 20 per cent of the men elected to become certified for elementary school, with 80 per cent receiving secondary certification. Of the women graduates, 57 per cent were

TABLE III

SUMMARY OF TOTAL 1969 EDUCATION GRADUATES: LEVELS OF CERTIFICATION, PLACED IN TEACHING, AND POSITIONS IN MAJOR FIELD

STATUS	TOTALS Number of Graduates	Per Cent of Graduates
Graduates Men - 359 (47%) Women - 520 (53%)	879	100
Elementary Certification Men - 82 (22%) Women - 296 (78%)	378	43
Secondary Certification Men - 277 (55%) Women - 224 (45%)	501	57
Placed in Teaching	624	71
In Recommended Major	300	34
In Recommended Minor	302	34
Misplaced	22	3
Placed in Washington	573	65
Out of State	51	6
Unplaced	56	6
Graduate School	23	3
Military Service	11	1
Homemaking	3	-*
Other Employment	32	4
No Information	130	14

* less than 1 per cent

certified at the elementary grade level, and 43 per cent at the secondary level.

Table IV describes the total number of graduates from each of the twenty-nine major academic fields. As shown, six major academic areas comprised 50 per cent of the graduating students. These major fields were: Social Science (112), English (70), History (68), Men's Physical Education (68), Art (64), and Language Arts (56). Less than 1 per cent of the graduates majored in nine academic areas. These areas included Special Education, Geography, Chemistry, Economics, Political Science, Early Childhood Education, Physics, Earth Science, and Technology and Industrial Education - Broad Area.

Table V denotes those graduates who are teaching as ranked by highest per cent teaching per academic area. Except for the one graduate in Technology and Industrial Education who is apparently not teaching, the table shows that in twenty-five major fields, at least 58 per cent of the 1969 graduates went into teaching their first year.

Table VI shows the per cent of graduates who found employment assignments in their major academic fields. As indicated, 100 per cent of the Industrial Arts, Physics, and Political Science majors were employed in positions for which they had major preparation. At least 80 per cent of the teaching graduates were placed in their academic majors in Special Education, Women's Physical Education, Business Education, Home-Economics (Broad Area), and Foreign Languages.

TABLE IV

GRADUATES RANKED BY ACADEMIC MAJOR

ACADEMIC FIELD	NUMBER OF GRADUATES	PER CENT OF GRADUATES	
Social Science	112	13	
English	70	8	
History	68	8	
P. E. - Men	68	8	
Art	64	7	
Language Arts	56	6	50
Psychology	51	6	
Home Economics	51	6	
Home Economics - Broad Area	41	5	
P. E. - Women	40	5	
Business Education	34	4	
Music	34	4	80
Mathematics	30	3	
Sociology	28	3	
Industrial Arts	21	2	
Biological Science	20	2	
Science	19	2	
Foreign Language	14	1	
Speech Therapy	13	1	
Speech & Drama	12	1	95
Special Education	7	-*	
Geography	6	-*	
Chemistry	4	-*	
Economics	4	-*	
Political Science	4	-*	
Early Childhood Education	3	-*	
Physics	3	-*	
Earth Science	1	-*	
Technology & Industrial Education	1	-*	100

* less than 1 per cent

TABLE V

GRADUATES WHO TAUGHT DURING 1969-70

ACADEMIC MAJOR	GRADUATES: N = 879 NUMBER TEACHING	PER CENT TEACHING
Earth Science	1	100
Music	31	90
Language Arts	49	88
Speech Therapy	11	85
Science	16	84
Speech & Drama	10	83
Mathematics	25	83
Social Science	88	78
Industrial Arts	16	75
Chemistry	3	75
P. E. - Men	50	74
P. E. - Women	29	72
Special Education	5	71
English	50	71
Foreign Language	10	71
Biological Science	14	70
Psychology	35	68
Sociology	19	68
Business Education	23	67
Early Childhood Education	2	67
Geography	4	67
Physics	2	67
History	43	63
Home Economics	32	63
Art	37	58
Home Economics - Broad Area	17	41
Economics	1	25
Political Science	1	25
Totals	(624)	(71)

TABLE VI

1969 EDUCATION GRADUATES RANKED BY HIGHEST PER CENT TEACHING IN MAJOR FIELD

ACADEMIC MAJOR	NUMBER OF GRADUATES	IN TEACHING NO.	IN TEACHING %	% OF NO. TEACHING IN MAJOR	% OF NO. TEACHING IN MINOR	% MISPLACED
Industrial Arts	21	16	75	100		
Physics	3	2	67	100		
Political Science	4	1	25	100		
Foreign Language	14	10	71	90	10	
Home Ec. (Broad)	41	17	41	88		12
Business Education	34	23	67	87	4	9
P. E. - Women	40	29	72	83	17	
Special Ed.	7	5	71	80	20	
P. E. - Men	68	50	74	75	22	3
Music	34	31	90	73	26	1
Mathematics	30	25	83	68	32	
English	70	50	71	66	32	2
Bio. Science	20	14	70	64	14	22
Speech Therapy	13	11	85	55	45	
Science	19	16	84	50	50	
Early Child. Ed.	3	2	67	50	50	
Art	64	37	58	46	49	5
History	68	43	63	45	53	2
Home Economics	51	32	63	37	57	6
Chemistry	4	3	75	25	75	
Geography	6	4	67	25	75	
Speech & Drama	12	10	83	20	80	
* Social Science	112	88	78	19	76	5
* Language Arts	56	49	88	17	83	
Sociology	28	19	68	5	95	
Earth Science	1	1	100	0	100	
Economics	4	1	25	0	100	
Tech. & Indus. Ed.	1	0	0			
Psychology	51	35	68	0	100	
TOTALS	879	624	71	48	48	4

*Language Arts and Social Science are majors for teaching at the elementary school. The majority of students electing these fields were certified and taught during 1969-70 at the elementary level. See Tables XXI and XXX in the Appendix.

Table VI also gives a breakdown of the number of those teaching who were placed in major and minor fields. As can be seen, 48 per cent of those teaching were placed in their major fields, 48 per cent were placed in their recommended minor, and only 4 per cent were misplaced.

Follow-up on the employment status of 130, or 14 per cent of the graduates was not accomplished. However, an analysis of the data showed that the great majority (71 per cent) of the 1969 graduates in education did find employment as teachers their first year, with all but a very few teaching in their undergraduate major or recommended minor.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

I. SUMMARY

The purpose of the study was to determine whether or not 1969 graduates in education from Central Washington State College found employment in teaching, and whether or not this employment was in their major academic fields.

A review of literature pointed out the trends in teacher supply and demand at state and national levels. It was explained by authorities from the Washington Education Association, and the National Education Association that for the first time in years, the supply of teachers may exceed the demand by school districts. Authorities also provided research which showed that there were still teachers needed in certain areas. These positions included: Industrial Arts; Special Education; Mathematics; Trade, industrial, vocational; Natural and Physical Science; Physical Education (Women); Instruction of educationally disadvantaged; Remedial reading, speech, etc.; Librarians; and Elementary--regular instruction.

Literature was also presented which provided rationale for the need to revise teacher preparation programs to meet contemporary social problems and technological innovations.

A review of current innovative approaches to teacher preparation was given, outlining programs taking place in Washington and elsewhere

in the nation.

The methods used for gathering and compiling the data on the 879 graduates in education during 1969 were described. It was explained that the Registrar's Office, Office of Teacher Advisement and Certification, and the Director of Placement Activities at Central were utilized to obtain necessary information regarding the graduates. The Office of the State Superintendent of Public Instruction--Teacher Certification and Placement--was contacted in an effort to locate the employment of graduates unaccounted for at Central. There were 130 graduates who were not teaching in Washington, and for whom "No Information" was recorded--other than their undergraduate academic major and their level of certification for teaching.

An analysis of the data showed that 71 per cent of the graduates found employment in teaching during their first year. Of these, 48 per cent were teaching in their academic majors, 48 per cent were teaching in their recommended minors, and 4 per cent were misplaced.

Of the twenty-nine major areas under which graduates had done their preparation for teaching, 50 per cent of the graduates majored in only six fields. Eighty per cent majored in one of twelve areas, while less than 5 per cent of the graduates majored in Special Education, Geography, Chemistry, Economics, Political Science, Early Childhood Education, Physics, Earth Science, or Technology and Industrial Education.

Women out-numbered the men three-to-one in the elementary certification area. Only 20 per cent of the men elected to teach at

the elementary school level.

II. CONCLUSIONS

As a result of the study, the following conclusions were evident:

1. 1969 Central graduates did find employable positions for which they had trained during undergraduate preparation.

2. The majority of students were placed in either their major academic field, or recommended minor field. Only 4 per cent of those teaching were misplaced.

3. Three times as many women as men chose to prepare for teaching assignments at the elementary level.

4. The majority of graduates followed national trends (See Figure 1) and majored in fields wherein there is an over-supply of teachers.

5. Of the nine academic majors wherein less than 5 per cent of the graduates specialized, six are listed by the National Education Association as being areas of critical teacher shortage (See Table II, page 14).

Implications

Literature pointed out the need for men to enter the elementary levels of teaching; however, an analysis of the data showed that the majority (80 per cent) of male graduates were certified at the secondary level. While the data showed that most Central graduates found positions for which they had been trained, there were critical areas in teaching wherein only a total of 5 per cent of the graduates majored. These same areas: Special Education, Natural and Physical Sciences, Early Childhood Education, and Industrial Technology are listed by the National Education Association as being the areas of

critical teacher shortages across the country. It is apparent that Central graduates are continuing to major in areas for which there is an over-supply of teachers. This is shown in Tables IV and VI, which indicate that the overwhelming majority of graduating seniors in 1969 elected to major in the Social Sciences, English, History, and Men's Physical Education.

These facts may imply a lack of counseling on the part of the faculty advising students, or a lack of concern regarding the status of the employment market on the part of prospective teachers.

The fact that Social Science and the Language Arts fields are directed mainly to elementary school teachers does not qualify the significance of these two majors. Particularly since the course outlines indicate that participants in these programs receive very little opportunity for practical application of teaching methods and techniques. This is especially apparent in the Social Science (Elementary) major where of the 46-47 required course credits, only one 3-hour course directed to teachers is offered ("Methods and Materials in the Social Sciences-Elementary"). Obviously, although students majoring in these fields may be certified for elementary school teaching, the fields themselves are directed to specific academic assignment areas, rather than "Elementary--regular instruction." The instigation of a broad, elementary teaching major could possibly offer trainees the experience needed in the processes and techniques of teaching which are being

denied them in many fields of specialization.

III. RECOMMENDATIONS

This study indicated that the current supply of teachers will allow educators to begin to concentrate upon those qualitative factors that are so vital to teaching effectiveness and student learning in the classroom. In light of this, the following recommendations are offered for consideration:

1. An attempt should be made to inform candidates in education as to the trends in teacher supply and demand.

2. Students should be encouraged to major in academic areas where there are teacher shortages.

3. Field-oriented programs which offer prospective teachers earlier entry into the classroom should be encouraged.

4. Programs such as the Urban and Rural Student Teaching Programs should be supported and continued in an effort to offer prospective teachers experience working with children from minority group backgrounds.

5. A broad area elementary education major should be offered to incorporate and expand upon an inter-disciplinary approach to education which emphasizes the processes of learning and teaching rather than mere subject content.

6. Simulated actual classroom situations, utilizing role-playing as well as audio-visual aids, should be used extensively in the teacher preparation program.

7. Consideration should be given to the instigation of an "Education Candidate Screening Process" based upon counseling and testing to discover individual interests, talents, and personal commitment to education and the profession.

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APPENDIX

DISPOSITION OF 1969 EDUCATION GRADUATES BY ACADEMIC MAJOR

TABLE VII

ART

N = 64	MALE	FEMALE	TOTALS
GRADUATES	17	47	64
ELEMENTARY CERTIFICATION	1	26	27
SECONDARY CERTIFICATION	16	21	37
PLACED IN TEACHING	8	29	37
IN RECOMMENDED MAJOR	7	10	17
IN RECOMMENDED MINOR	1	17	18
MISPLACED		2	2
PLACED IN WASHINGTON	8	26	34
OUT OF STATE		3	3
UNPLACED	1	4	5
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING		1	1
OTHER EMPLOYMENT	3	2	5
NO INFORMATION	5	11	16

TABLE VIII

BIOLOGICAL SCIENCE

N = 20	MALE	FEMALE	TOTALS
GRADUATES	14	6	20
ELEMENTARY CERTIFICATION		2	2
SECONDARY CERTIFICATION	14	4	18
PLACED IN TEACHING	9	5	14
IN RECOMMENDED MAJOR	8	1	9
IN RECOMMENDED MINOR	1	1	2
MISPLACED		3	3
PLACED IN WASHINGTON	9	5	14
OUT OF STATE			
UNPLACED	3		3
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION	2	;	3

TABLE IX

BUSINESS EDUCATION

N = 34	MALE	FEMALE	TOTALS
GRADUATES	16	18	34
ELEMENTARY CERTIFICATION		3	3
SECONDARY CERTIFICATION	16	15	31
PLACED IN TEACHING	13	10	23
IN RECOMMENDED MAJOR	12	8	20
IN RECOMMENDED MINOR		1	1
MISPLACED	1	1	2
PLACED IN WASHINGTON	11	9	20
OUT OF STATE	2	11	3
UNPLACED	1	3	4
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT	1	2	3
NO INFORMATION	1	3	4

TABLE X

CHEMISTRY

N = 4	MALE	FEMALE	TOTALS
GRADUATES	3	1	4
ELEMENTARY CERTIFICATION			
SECONDARY CERTIFICATION	3	1	4
PLACED IN TEACHING	3		3
IN RECOMMENDED MAJOR	1		1
IN RECOMMENDED MINOR	2		2
MISPLACED			
PLACED IN WASHINGTON	3		3
OUT OF STATE			
UNPLACED		1	1
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION			

TABLE XI

EARLY CHILDHOOD EDUCATION

N = 3	MALE	FEMALE	TOTALS
GRADUATES		3	3
ELEMENTARY CERTIFICATION		3	3
SECONDARY CERTIFICATION			
PLACED IN TEACHING		2	2
IN RECOMMENDED MAJOR		1	1
IN RECOMMENDED MINOR		1	1
MISPLACED			
PLACED IN WASHINGTON		2	2
OUT OF STATE			
UNPLACED		1	1
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION			

TABLE XII

EARTH SCIENCE

N = 1	MALE	FEMALE	TOTALS
GRADUATES	1		1
ELEMENTARY CERTIFICATION	1		1
SECONDARY CERTIFICATION			
PLACED IN TEACHING	1		1
IN RECOMMENDED MAJOR			
IN RECOMMENDED MINOR	1		1
MISPLACED			
PLACED IN WASHINGTON	1		1
OUT OF STATE			
UNPLACED			
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION			

TABLE XIII

ECONOMICS

N = 4	MALE	FEMALE	TOTALS
GRADUATES	4		4
ELEMENTARY CERTIFICATION	1		1
SECONDARY CERTIFICATION	3		3
PLACED IN TEACHING	1		1
IN RECOMMENDED MAJOR			
IN RECOMMENDED MINOR	1		1
MISPLACED			
PLACED IN WASHINGTON	1		1
OUT OF STATE			
UNPLACED			
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION	3		3

TABLE XIV

ENGLISH

N = 70	MALE	FEMALE	TOTALS
GRADUATES	22	48	70
ELEMENTARY CERTIFICATION	1	16	17
SECONDARY CERTIFICATION	21	32	53
PLACED IN TEACHING	17	33	50
IN RECOMMENDED MAJOR	15	18	33
IN RECOMMENDED MINOR	1	15	16
MISPLACED	1		1
PLACED IN WASHINGTON	17	31	48
OUT OF STATE		2	2
UNPLACED	2	3	5
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT	1	2	3
NO INFORMATION	2	10	12

TABLE XV

FOREIGN LANGUAGE

N - 14	MALE	FEMALE	TOTALS
GRADUATES	4	10	14
ELEMENTARY CERTIFICATION		3	3
SECONDARY CERTIFICATION	4	7	11
PLACED IN TEACHING	4	6	10
IN RECOMMENDED MAJOR	4	5	9
IN RECOMMENDED MINOR		1	1
MISPLACED			
PLACED IN WASHINGTON	4	5	9
OUT OF STATE			
UNPLACED			
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION		4	4

TABLE XVI

GEOGRAPHY

N = 6	MALE	FEMALE	TOTALS
GRADUATES	5	1	6
ELEMENTARY CERTIFICATION	3		3
SECONDARY CERTIFICATION	2	1	3
PLACED IN TEACHING	3	1	4
IN RECOMMENDED MAJOR		1	1
IN RECOMMENDED MINOR	3		3
MISPLACED			
PLACED IN WASHINGTON	2	1	3
OUT OF STATE	1		1
UNPLACED			
GRADUATE SCHOOL	1		1
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION	1		1

TABLE XVII

HISTORY

N = 68	MALE	FEMALE	TOTALS
GRADUATES	44	24	68
ELEMENTARY CERTIFICATION	6	20	26
SECONDARY CERTIFICATION	38	4	42
PLACED IN TEACHING	26	17	43
IN RECOMMENDED MAJOR	16	2	18
IN RECOMMENDED MINOR	9	15	24
MISPLACED	1		1
PLACED IN WASHINGTON	23	16	39
OUT OF STATE	3	1	4
UNPLACED	6	2	8
GRADUATE SCHOOL	2		2
MILITARY SERVICE	3		3
HOMEMAKING			
OTHER EMPLOYMENT	4	1	5
NO INFORMATION	3	4	7

TABLE XVIII

HOME ECONOMICS

N = 51	MALE	FEMALE	TOTALS
GRADUATES		51	51
ELEMENTARY CERTIFICATION		24	24
SECONDARY CERTIFICATION		27	27
PLACED IN TEACHING		3]	32
IN RECOMMENDED MAJOR		12	12
IN RECOMMENDED MINOR		18	18
MISPLACED		2	2
PLACED IN WASHINGTON		29	29
OUT OF STATE		3	3
UNPLACED		5	5
GRADUATE SCHOOL		2	2
MILITARY SERVICE			
HOMEMAKING		1	1
OTHER EMPLOYMENT		2	2
NO INFORMATION		9	9

TABLE XIX

HOME ECONOMICS - BROAD AREA

N = 41	MALE	FEMALE	TOTALS
GRADUATES		41	41
ELEMENTARY CERTIFICATION			
SECONDARY CERTIFICATION		41	41
PLACED IN TEACHING		17	17
IN RECOMMENDED MAJOR		15	15
IN RECOMMENDED MINOR			
MISPLACED		2	2
PLACED IN WASHINGTON		16	16
OUT OF STATE		1	1
UNPLACED		8	8
GRADUATE SCHOOL		2	2
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT		4	4
NO INFORMATION		10	10

TABLE XX

INDUSTRIAL ARTS

N = 21	MALE	FEMALE	TOTALS
GRADUATES	21		21
ELEMENTARY CERTIFICATION			
SECONDARY CERTIFICATION	21		21
PLACED IN TEACHING	16		16
IN RECOMMENDED MAJOR	16		16
IN RECOMMENDED MINOR			
MISPLACED			
PLACED IN WASHINGTON	14		14
OUT OF STATE	2		2
UNPLACED			
GRADUATE SCHOOL	1		1
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT	2		2
NO INFORMATION	2		2

TABLE XXI

LANGUAGE ARTS

N = 56	MALE	FEMALE	TOTALS
GRADUATES		56	56
ELEMENTARY CERTIFICATION		53	53
SECONDARY CERTIFICATION		3	3
PLACED IN TEACHING		49	49
IN RECOMMENDED MAJOR		8	8
IN RECOMMENDED MINOR		41	41
MISPLACED			
PLACED IN WASHINGTON		42	42
OUT OF STATE		7	7
UNPLACED		3	3
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT		1	1
NO INFORMATION		3	3

TABLE XXII

MATHEMATICS

N = 30	MALE	FEMALE	TOTALS
GRADUATES	22	8	30
ELEMENTARY CERTIFICATION	5	3	8
SECONDARY CERTIFICATION	17	5	22
PLACED IN TEACHING	18	7	25
IN RECOMMENDED MAJOR	13	4	17
IN RECOMMENDED MINOR	5	3	8
MISPLACED			
PLACED IN WASHINGTON	18	6	24
OUT OF STATE		1	1
UNPLACED			
GRADUATE SCHOOL	1		1
MILITARY SERVICE	1		1
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION	2	1	3

TABLE XXIII

MUSIC

N = 34	MALE	FEMALE	TOTALS
GRADUATES	20	14	34
ELEMENTARY CERTIFICATION	2	7	9
SECONDARY CERTIFICATION	18	7	25
PLACED IN TEACHING	18	13	31
IN RECOMMENDED MAJOR	15	7	22
IN RECOMMENDED MINOR	2	6	8
MISPLACED	1		1
PLACED IN WASHINGTON	15	13	28
OUT OF STATE	3		3
UNPLACED			
GRADUATE SCHOOL			
MILITARY SERVICE	2		2
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION		1	1

TABLE XXIV

PHYSICAL EDUCATION - MEN

N = 68	MALE	FEMALE	TOTALS
GRADUATES	68		68
ELEMENTARY CERTIFICATION	9		9
SECONDARY CERTIFICATION	59		59
PLACED IN TEACHING	50		50
IN RECOMMENDED MAJOR	35		35
IN RECOMMENDED MINOR	11		11
MISPLACED	4		4
PLACED IN WASHINGTON	50		50
OUT OF STATE			
UNPLACED	2		2
GRADUATE SCHOOL	5		5
MILITARY SERVICE	3		3
HOMEMAKING			
OTHER EMPLOYMENT	2		2
NO INFORMATION	6		6

TABLE XXV

PHYSICAL EDUCATION - WOMEN

N = 40	MALE	FEMALE	TOTALS
GRADUATES		40	40
ELEMENTARY CERTIFICATION		6	6
SECONDARY CERTIFICATION		34	34
PLACED IN TEACHING		29	29
IN RECOMMENDED MAJOR		24	24
IN RECOMMENDED MINOR		5	5
MISPLACED			
PLACED IN WASHINGTON		26	26
OUT OF STATE		3	3
UNPLACED		2	2
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING		1	1
OTHER EMPLOYMENT		1	1
NO INFORMATION		7	7

TABLE XXVI

PHYSICS

N = 3	MALE	FEMALE	TOTALS
GRADUATES	3		3
ELEMENTARY CERTIFICATION			
SECONDARY CERTIFICATION	3		3
PLACED IN TEACHING	2		2
IN RECOMMENDED MAJOR	2		2
IN RECOMMENDED MINOR			
MISPLACED			
PLACED IN WASHINGTON	2		2
OUT OF STATE			
UNPLACED			
GRADUATE SCHOOL			
MILITARY SERVICE	1		1
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION			

TABLE XXVII

POLITICAL SCIENCE

N = 4	MALE	FEMALE	TOTALS
GRADUATES	3	1	4
ELEMENTARY CERTIFICATION			
SECONDARY CERTIFICATION	3	1	4
PLACED IN TEACHING	1		1
IN RECOMMENDED MAJOR	1		1
IN RECOMMENDED MINOR			
MISPLACED			
PLACED IN WASHINGTON	1		1
OUT OF STATE			
UNPLACED	1		1
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION	1	1	2

TABLE XXVIII

PSYCHOLOGY

N = 51	MALE	FEMALE	TOTALS
GRADUATES	18	33	51
ELEMENTARY CERTIFICATION	13	30	43
SECONDARY CERTIFICATION	5	3	8
PLACED IN TEACHING	13	22	35
IN RECOMMENDED MAJOR			
IN RECOMMENDED MINOR	13	22	35
MISPLACED			
PLACED IN WASHINGTON	13	21	34
OUT OF STATE		1	1
UNPLACED	1	1	2
GRADUATE SCHOOL	1	1	2
MILITARY SERVICE	1		1
HOMEMAKING			
OTHER EMPLOYMENT		1	1
NO INFORMATION	2	8	10

TABLE XXIX

SCIENCE

N = 19	MALE	FEMALE	TOTALS
GRADUATES	14	5	19
ELEMENTARY CERTIFICATION	7	4	11
SECONDARY CERTIFICATION	7	1	8
PLACED IN TEACHING	14	2	16
IN RECOMMENDED MAJOR	7	1	8
IN RECOMMENDED MINOR	7	1	8
MISPLACED			
PLACED IN WASHINGTON	11	1	12
OUT OF STATE	3	1	4
UNPLACED			
GRADUATE SCHOOL		1	1
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION		2	2

TABLE XXX

SOCIAL SCIENCE

N = 112	MALE	FEMALE	TOTALS
GRADUATES	49	63	112
ELEMENTARY CERTIFICATION	30	55	85
SECONDARY CERTIFICATION	19	8	27
PLACED IN TEACHING	42	46	88
IN RECOMMENDED MAJOR	15	3	18
IN RECOMMENDED MINOR	24	42	66
MISPLACED	3	1	4
PLACED IN WASHINGTON	38	43	81
OUT OF STATE	4	3	7
UNPLACED	2	4	6
GRADUATE SCHOOL		3	3
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT		3	3
NO INFORMATION	5	7	12

TABLE XXXI

SOCIOLOGY

N = 28	MALE	FEMALE	TOTALS
GRADUATES	4	24	28
ELEMENTARY CERTIFICATION	2	24	26
SECONDARY CERTIFICATION	2		2
PLACED IN TEACHING	4	15	19
IN RECOMMENDED MAJOR	1		1
IN RECOMMENDED MINOR	3	15	18
MISPLACED			
PLACED IN WASHINGTON	4	13	17
OUT OF STATE		2	2
UNPLACED			
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION		9	9

TABLE XXXII

SPECIAL EDUCATION

N = 7	MALE	FEMALE	TOTALS
GRADUATES	1	6	7
ELEMENTARY CERTIFICATION		6	6
SECONDARY CERTIFICATION	1		1
PLACED IN TEACHING	1	4	5
IN RECOMMENDED MAJOR	1	3	4
IN RECOMMENDED MINOR		1	1
MISPLACED			
PLACED IN WASHINGTON		4	4
OUT OF STATE	1		1
UNPLACED			
GRADUATE SCHOOL		1	1
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION		1	1

TABLE XXXIII

SPEECH & DRAMA

N = 12	MALE	FEMALE	TOTALS
GRADUATES	4	8	12
ELEMENTARY CERTIFICATION	1	5	6
SECONDARY CERTIFICATION	3	3	6
PLACED IN TEACHING	3	7	10
IN RECOMMENDED MAJOR	1	1	2
IN RECOMMENDED MINOR	2	6	8
MISPLACED			
PLACED IN WASHINGTON	3	5	8
OUT OF STATE		2	2
UNPLACED			
GRADUATE SCHOOL	1		1
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION		1	1

TABLE XXXIV

SPEECH THERAPY

N = 13	MALE	FEMALE	TOTALS
GRADUATES	1	12	13
ELEMENTARY CERTIFICATION		6	6
SECONDARY CERTIFICATION	1	6	7
PLACED IN TEACHING	1	10	11
IN RECOMMENDED MAJOR	1	5	6
IN RECOMMENDED MINOR		5	5
MISPLACED			
PLACED IN WASHINGTON	1	10	11
OUT OF STATE			
UNPLACED			
GRADUATE SCHOOL		1	1
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION		1	1

TABLE XXXV

TECHNOLOGY & INDUSTRIAL EDUCATION - BROAD AREA

N = 1	MALE	FEMALE	TOTALS
GRADUATES	1		1
ELEMENTARY CERTIFICATION			
SECONDARY CERTIFICATION	1		1
PLACED IN TEACHING			
IN RECOMMENDED MAJOR			
IN RECOMMENDED MINOR			
MISPLACED			
PLACED IN WASHINGTON			
OUT OF STATE			
UNPLACED			
GRADUATE SCHOOL			
MILITARY SERVICE			
HOMEMAKING			
OTHER EMPLOYMENT			
NO INFORMATION	1		1