This paper reports results of a study of former students' perception of the strengths and weaknesses of their teacher preparation program and the consistency of these perceptions over time. Data, gathered from 594 former students who were recommended for state teacher certification, were of two types. The first was demographic data, including age at time of certification, college enrollment patterns, undergraduate majors and minors, teaching status, level of teaching, number of years taught, and facts about the schools. The second data type was the teachers' perceptions of the strengths and weaknesses of the teacher preparation they received. The goal was to determine if there was a difference in the perceptions of teachers based on the number of years they had been teaching. Data analysis revealed that teachers had positive feelings about their teaching position with 43 percent of the teachers surveyed reporting that their present feelings about teaching were very positive. Almost all, 98.5 percent of respondents, indicated that they planned to continue teaching; almost 80 percent of the teachers who were not currently teaching planned to return to teaching. First and sixth year teachers were most positive about their teacher preparation. Fifth year teachers were the least positive; a possible explanation is that fifth year teachers may begin to question their profession. (Contains 18 references.) (ND)
THE CHANGE IN TEACHERS' PERCEPTIONS OVER TIME

Paper Presented at American Education Research Association
San Francisco, April 22, 1995

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THE CHANGE IN TEACHERS' PERCEPTIONS OVER TIME

by

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The purpose of this paper is to report the results of a study of former students' perceptions of the strengths and weaknesses of his/her teacher preparation program and if teachers' perceptions of their teacher preparation remain consistent over time. The self-report data were gathered from former students who were recommended for state teacher certification. The self-report data was of two types. The first was demographic data about the teacher, including age at time of certification, college enrollment pattern, undergraduate major and minor, teaching status, level of teaching, number of years taught, and facts about the schools. The second was the teachers' perceptions of the strengths and weaknesses of the teacher preparation program which they received. The goal was to determine if there was a difference in the perceptions of teachers based on the number of years they have been teaching.

Introduction

There are four reasons why teacher education programs may undergo an evaluation: meeting the accountability demands of external agencies; stimulating a conversation of program improvement; fostering greater understanding of teachers, teaching, and the preparation of teachers; and knowledge production. Stufflebeam (1982) defines evaluation as
the process of delineating, obtaining, and applying descriptive and judgmental information concerning the worth and merit of some program's goals, design, implementation, and impacts in order to promote improvement, serve needs for accountability, and foster understanding. (p. 138)

The first purpose of program evaluation is accountability. Schools, colleges, and departments of education (SCDE) are accountable to the public. The public, through tax dollars, supports SCDEs. It is through accreditation that SCDEs indicate they have complied to a standard, and they are accountable.

Accreditation is only a part of evaluation (Ayers, GePhart, & Clark, 1983; Kunkel, 1988). Accreditation is a check to be sure that the institution meets the minimum standards set forth by the accrediting agency, in the instance of teacher education, the professional standards of the National Council for Accreditation of Teacher Education (NCATE). If and only if, the institution meets all of the minimum standards is the institution given the agency's seal of approval and granted accreditation.

Accreditation is approval by a judgment of peers who objectively represent the external accrediting agency. NCATE is the accrediting agency for SCDEs. NCATE establishes standards that must be met and maintained by the institution to secure its seal of approval. NCATE accreditation ensures that the program is "designed to establish and uphold national standards of excellence" (NCATE, 1987, p. 1) in education.

In addition to NCATE, some state legislatures are mandating competency assessment of teachers prior to certification. According to Sandefur (1982), states took this action because the lawmakers believed that the institutions of higher education were failing to produce quality teachers. Lawmakers speculate that the quality of teachers has diminished because institutions have failed to establish and maintain high quality of entrance and exit standards.
In some instances, states are undertaking the responsibility of assessing teacher competencies under the pretense of protecting the public from poor teachers. It is assumed that the public wants an assurance of the quality of teachers and the teaching they do (Roth, 1982). In addition, some states hope that teacher assessment will help SCDEs "to design a program that is simple, functional, and inexpensive (Sandefur, 1982, p. 16)".

In contrast, evaluation is much broader than accreditation. Evaluation takes into consideration all aspects of the program from varying points of view; therefore, it is more holistic.

Program improvement is the second purpose of program evaluation (Galluzzo, 1982; Roth, 1982; Stufflebeam, 1971, 1982). The data derived from evaluation studies should delineate both the strengths and the weaknesses of the program (Galluzzo, 1982; Kirk, 1982). It is these data that will have relevance to the program and lead to improvement of the program.

An evaluation should give the SCDE information about the teachers who are recommended for state certification. The information obtained should help the planners of the educational program better meet the needs of those teachers. Information about the community, school, and programs in which these teachers teach enables the program planners to facilitate the diverse needs of those certification candidates.

The third purpose of program evaluation is to develop an understanding of teachers, teaching, and teacher education. Quality programs are planned by teacher educators who focus on defining, identifying, and developing a program which prepares quality teachers (Martin, 1987). Many teacher education programs have been and continue to be redesigned to meet the ever changing roles of the teacher. Teachers of the past were hired to teach children, who wanted to be in school. Parents expected their children to behave themselves.
and learn. Today's children are very different from those of ten years or even five years ago. Children of today live in a technical world. Computers have made calculations simple and quick. Information that was inaccessible to many people or took much time to locate is now a moment away. Children and society are changing; therefore, the education system must meet these unique needs. Productive program evaluation should communicate the need to improve the quality of the teacher education program (Galluzzo, 1982; Roth, 1982; Stufflebeam, 1982). Evaluation should look to future program revisions and improvements in order to meet the future needs of children.

Effective evaluation assesses outcomes (Hord & Hall, 1978). Outcomes are assessed most often by follow-up studies of graduates. The demographic data gathered provides information about the schools, children, and the community in which teachers are teaching. This data gives program planners information to help them prepare teachers to facilitate learning and to meet the diverse needs of children.

A successful evaluation responds to the unique needs of the persons delivering the program (Raths, 1988). As program evaluations respond to the needs of the particular program, the evaluation stimulates discussions about the program goals and objectives (Galluzzo, 1982).

Carefully designed program evaluations provide knowledge and understanding about the program graduate and the children they teach. It is through an understanding of teachers, teaching, and teacher education that quality programs are developed and refined to meet the needs of program stakeholders.

The fourth purpose of program evaluation is knowledge production. Many institutions conduct program evaluations but few are published (Adams & Craig, 1983; Galluzzo & Craig, 1990). Published articles on program evaluation are
few and far between. The results of program evaluations are institution specific; therefore, they are not generalizable (Craig, 1989; Galluzzo, 1986).

Methods

The research was conducted as a follow-up study of program graduates. The study was limited by the honest completion of the survey by all respondents. Only those surveys returned by graduates who were teaching or who had taught were analyzed.

The instrument was developed and the self-report data gathered were of two types. The first were demographic data about the teachers. Teachers were asked to respond to items about themselves, their schools, and their students. The second were the teachers' perceptions of the strengths and weaknesses of the teacher preparation program (Kochmann, 1993).

The demographic data were analyzed using a frequency count. The mean and percent were calculated on each of the demographic items using Statistical Analysis System (SAS).

The Statistical Package for the Social Sciences (SPSS) was used to analyze the perceptions of teachers'. The first statistical analysis was a factor analysis using SPSS. The factored data were further analyzed using an Analysis of Variance (ANOVA). The ANOVA was used to determine if there was a significant difference (p = .05) among groups. If the results of the ANOVA showed there was a significant difference in the data, a Scheffé was used to determine where the difference occurred.

A survey booklet, a letter explaining the purpose and importance of the study, a letter from the Dean of the College of Education endorsing the importance of the study, a postcard with the message, "I have returned my survey", a pressure seal, and a crisp
new one dollar bill attached to the front of the survey was sent to each teacher via first class mail.

The address labels were consecutively numbered to keep a record of those who had returned the survey. Each survey was assigned a number as it was returned. The purpose of this number was to identify the data as it was input into the computer. The number was necessary to recheck data, the metaphor, and comments. The identification number on the survey was different from and not related to the number on the address label and the postcard.

Population

The population of this study were all teachers who were recommended for state certification from January 1985 through December 1990. The teachers were students from a four year public institution in a western state. Each teacher received a survey to determine his/her perceptions of his/her teacher preparation.

Results

There were 1,444 persons recommended for state certification between January 1985 and December 1990. A total of 1,345 survey packets were sent. Some of the packets were undeliverable and 9 were not usable leaving a final N of 1,174. There were 634 usable surveys returned equating to a return rate of 54%. Only the 594 respondents who were currently teaching or who had taught were included in the data analysis.

The data were analyzed using SPSS. The first analysis of the data involved a factor analysis. A factor analysis was performed to reduce the 83 individual items on the survey to a more manageable number of items for the
purpose of comparison. The factor analysis yielded twelve factors. The twelve factors are referred to as follows:

- **Factor 1**: Observation and practice of effective instruction in field experiences
- **Factor 2**: Managing and organizing a classroom
- **Factor 3**: Instructional techniques
- **Factor 4**: Becoming a proficient professional
- **Factor 5**: Instructional planning for student diversity
- **Factor 6**: Interacting with other professionals and parents
- **Factor 7**: Assessing student learning
- **Factor 8**: Field-based experiences with various learners
- **Factor 9**: Becoming a professional in change and improvement
- **Factor 10**: Problem solving in curriculum and instruction
- **Factor 11**: Motivating children
- **Factor 12**: Critical use of instructional techniques

The factors were named by the type of question within each category. The first factor, observation and practice of effective instruction in field experiences, asked the respondents to circle one response that best indicated how helpful their field experiences were in the practice, study, and analysis of effective models of classroom management. There were questions related to teaching in an interdisciplinary manner, and critically analyzing and adapting existing materials, technology, and other resources. Respondents were also asked how helpful their experiences were in various teaching roles, philosophical models, and school organizational patterns.

**Factor 2** is called managing and organizing a classroom. Respondents were asked how well the university prepared them to manage and organize a classroom. Areas included managing and organizing a classroom to have a positive, effective learning environment with students on task and to develop management plans based on student behavior.
Instructional techniques is the third factor. Respondents were asked how helpful the university was in encouraging them to develop, adapt, and use various instructional models, approaches, strategies, and materials to meet the needs and interests of the students.

In Factor 4, becoming a proficient professional, respondents were surveyed to determine how well the university prepared them to become a professional. The students were asked if the university provided them with a realistic understanding of their role as a teacher and encouraged them to become involved in their profession. Did the university encourage them to use research findings in their teaching and become life-long learners?

Factor 5, instructional planning for student diversity, respondents were asked if the university prepared them to develop a learning environment that encourages and values students of diverse backgrounds. Did the university provide an understanding of the special needs of students with diverse backgrounds and were they prepared to work with and meet the needs of a variety of children?

Interacting with other professionals and parents is Factor 6. The students were asked if they were prepared to work with colleagues, other school personnel and professionals, parents, and community members.

Assessing student learning is Factor 7. Respondents were asked if the university prepared them to select methods of assessment appropriate for their students. Were they prepared to adapt the assessment methods to meet the individual needs of children? Were they prepared to interpret and communicate assessment results accurately?
In Factor 8, field-based experiences with various learners, respondents were asked how helpful these experiences were. Were the field experiences well-planned to include students of different ages, cultures, linguistics, and exceptionalities?

With the questions in Factor 9, becoming a professional in change and improvement, teachers were asked how prepared they were in their role as a teacher in school improvement and curriculum change.

Problem solving in the areas of curriculum and instruction is the focus of Factor 10. How well did the university prepare teachers to become critical thinkers and reflective practitioners? Were they prepared to integrate the curriculum? As a teacher, are they able to stop a lesson and reteach because the lesson is not appropriate for the learner, or can they reflect on a lesson and redesign the lesson to be more effective?

Motivating children is the focus of Factor 11. How well did the university prepare the respondent to adapt their teaching strategies to the conceptual development of the child?

How well did the university prepare the respondent in using materials, resources, and technology appropriate for the learner is the focus of the questions in Factor 12, critical use of instructional techniques.

From the group of 594 teachers, the typical respondent was a single, white female between 21 and 25 years of age at the time of her initial certification. At the time of this survey most of the teachers were married. The typical respondent entered college for the first time immediately following high school and over half of the teachers began their college education at the institution who recommended certification.

Enrollment patterns of students who entered as freshmen were stable. Most of the teachers who responded to this survey started their teacher preparation and
maintained continuous enrollment until graduation and teacher certification. Slightly over 80% of the students who were enrolled as freshmen remained until graduation and certification. Sixty-eight percent (68%) of all the teachers who responded to this study were full-time elementary teachers. Over 40% of the teachers (40.8%) were teaching within 100 miles of the high school from which they graduated. Over 90% of all of the teachers responding to the survey were teaching in public schools. About 40% of all the teachers responding to the survey were teaching in schools with a school population from 301-599 students, and only 9% of all teachers taught in schools with more than 900 children. Over 71% of the teachers' classrooms had 25% or less minority children, and less than 7% of the teachers had classrooms with more than 75% minority children.

Indications from the analysis of the data revealed that teachers had positive feelings about their teaching position. Forty-three percent (43%) of the teachers surveyed reported that their present feelings about teaching were very positive.

Indications from the analysis of the data suggest that teachers were happy with the present situation. The majority, 98.5%, of the teachers responding planned to continue teaching. Almost 80% of the teachers who were not currently teaching planned to return to teaching. Perhaps, those students with negative feelings did not pursue a teaching position.

Respondents were asked to estimate the number of years they plan to continue teaching. More teachers (53.1%) planned to teach for more than 11 years.
There were 481 teachers who had between one and six years of teaching experience as shown below.

Table 1

Teachers and Years of Experience

<table>
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<th>Year of Experience</th>
<th>n</th>
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<tr>
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<tr>
<td>2</td>
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<td>50</td>
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<td>Total</td>
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</table>

There were fewer sixth year teachers than first, second, third, fourth, or fifth year teachers. The data included 100 first year, 97 second year, 85 third year, 86 fourth year, 63 fifth year, and 50 sixth year teachers.

The means in Table 2 were calculated by taking the total mean for each factor and dividing by the number of questions in the factor. An example: the total mean of first year teachers for Factor I was 44.1600000. There were 13 questions in Factor I. The total mean, 44.1600000, was divided by 13 which resulted in 3.396923. The 3.396923 was rounded to 3.40. The 3.40 was related to the one (1) to five (5) Likert scale that teachers responded to on the survey.
Table 2

Means of Factors by Years Of Teaching Experience

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<td>3.22</td>
<td>3.13</td>
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<td>2.96</td>
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<td>3.17</td>
<td>.37</td>
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</tbody>
</table>

* A significant difference

The factored data were analyzed using an ANOVA. The ANOVA on the twelve factors indicated there was only one significant difference based on years of experience. Factor 10, Problem solving in curriculum and instruction, yielded a significant difference with a $p = .01$. There was no significant difference in the remaining factors. It seems that regardless of the number of years these respondents have been teaching, they were generally satisfied with their preparation at the university.
Teachers who were recommended for certification were positive about their teacher preparation. No mean was less than 2.5 on a five (5) point scale (Table 2). First year and sixth year teachers were more positive about their teacher preparation than second, third, fourth, or fifth year teachers. Experience as a classroom teacher, as evidenced by the scores of second year teachers, had a negative effect on teachers' perceptions of their preparation until the sixth year of teaching.

A Scheffé was used as a post hoc analysis to determine where the difference occurred. On Factor 10 there was a significant difference between teachers who have one year of teaching and those who have five years of teaching.

There was a significant difference between first year teachers and fifth year teachers in the area of problem solving in curriculum and instruction (Factor 10) (p = .01). Although first year teachers were more positive about their teacher preparation in the area of problem solving than each of the other years, the significant difference was between first and fifth year teachers. First year teachers had a mean of 3.46 and fifth year teachers had a mean of 2.97 on this factor.

First year and sixth year teachers were most positive about their teacher preparation. First year teachers had a mean of 3.14 on the combined factors, and sixth year teachers had a combined mean of 3.07. First year teachers, right out of their teacher education programs, seem most likely to believe that they could make a difference. They were ready to teach using the methods and materials they had studied over the past four or more years. Second through fifth year teachers weren't as positive in their perceptions of their teacher preparation. In contrast, the sixth year teacher is more mature. Sixth year teachers may be more comfortable with their teaching and confident in their abilities. They may believe they can make a difference in the classroom, therefore, the sixth year teacher is positive about their teacher preparation.
First year teachers felt better prepared than second, third, or fourth year teachers on all factors, except instructional planning for student diversity (Factor 5). In instructional planning for student diversity, fourth year teachers perceived their teacher preparation to be more positive than first year teachers. Fourth year teachers had a mean around 3.0, suggesting that experience had a positive effect on teaching students from diverse backgrounds. If teachers believe they were more competent to teach students from diverse backgrounds after experience, then it would seem that well-planned field experiences with children of diversity would be important. If first year teachers had a series of field experiences working with students from diverse backgrounds perhaps they would feel prepared in this area.

Second year teachers were not as positive about their teacher preparation as first year teachers. First year teachers have spent four or more years learning how to teach and they felt prepared to teach children. Most were eager to incorporate all that they had learned into their classroom. The second year teacher had completed one year of teaching and teaching had become a reality. After looking back at their first year they may have realized they don't know all that they thought they knew. Some of their expectations about teaching and learning may not have been accurate and they may have begun to question their teacher preparation.

In general, third year teachers were more positive about their teacher preparation than second year teachers in all areas except interacting with other professionals and parents (Factor 6), and problem solving in curriculum and instruction (Factor 10). Third year teachers were becoming more confident in their teaching. They were comfortable with the curriculum and confident in their ability to teach. At this time, they had the time and energy to become involved with parents and professionals. They desired to improve their teaching by expanding the curriculum. They were ready to look beyond what was provided for them.
Fourth year teachers were more positive than third year teachers in all areas except: instructional techniques (Factor 3); becoming a proficient professional (Factor 4); field-based experiences with various learners (Factor 8); and becoming a professional in change and improvement (Factor 9).

Fourth year teachers were a little more positive than third year teachers. A possible explanation could be that fourth year teachers are confident and secure in their jobs. They begin to look beyond themselves and their classrooms and begin to look for different methods and materials to improve their teaching.

Fifth year teachers are less positive about their teacher preparation than fourth year teachers. A possible explanation is that fifth year teachers begin to question the profession. The fifth year may be another reality check. All of the changes they thought were possible will take time before they happen. Before change can occur, items have to go through the proper channels. This may take more time, and time may mean frustration. The fifth year teacher may begin to question his/her career in teaching; therefore, fifth year teachers were less positive than the fourth year teacher.

Sixth year teachers were more positive than fifth year teachers in all areas. Sixth year teachers may believe that they can't make the big changes in the school or district, but they can make a difference in their own classrooms. They begin to look at their teacher preparation as being positive. Another possibility, the teachers who were negative about their teacher preparation in the fifth year may have left teaching.
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