AN ABSTRACT OF THE THESIS OF

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Title: A Comparison of Effective Teaching Characteristics of Teachers Who Participated in a Mentor-Teacher Program With Teachers Who Did Not.

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The purpose of this study was to identify the effective teaching characteristics of teachers who participated in the Mentor-Teacher Program and teachers who did not, and then determine if there were any significant differences between the three groups of teachers: (1) Mentor-Teacher Program interns (G.T.A.'s), (2) outstanding O.S.U. graduates, and (3) beginning Beaverton teachers. A survey instrument was utilized to rate teachers in each group by the degree to which they employed each of twenty-three effective teaching characteristics.

The one-way analysis of variance (ANOVA) was used at the .05 level of significance to determine whether to accept or reject the null hypothesis that there was no significant difference between the effective teaching characteristics of the three treatment groups of teachers in this study.

Based on the findings of this study, there was one major conclusion: there was no significant difference between the teachers who participated in the Mentor-Teacher Program and those teachers who did not.
The following recommendations were made:

1. Because there was no significant differences between the groups, the practice of mentoring may best benefit teachers who were not outstanding. Further studies comparing teachers who have participated in the Mentor-Teacher Program with "typical" beginning teachers from various teacher training institutions and mentoring programs might show significant differences between these groups of beginning teachers.

2. Inservice programs aimed at new teachers and their problems might be more effective if they were offered during the first months of teaching, and continued throughout the school year focusing on the problems and needs of first-year teachers.

3. Due to a relatively significant number of outstanding teachers not teaching by the fourth or fifth year, the problem of teacher attrition should be addressed by those teacher training institutions and school districts affected by the loss of so many talented and experienced teachers.
A COMPARISON OF EFFECTIVE TEACHING CHARACTERISTICS
OF TEACHERS WHO PARTICIPATED IN A MENTOR-TEACHER PROGRAM
WITH TEACHERS WHO DID NOT

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TABLE OF CONTENTS

CHAPTER

1. INTRODUCTION TO THE PROBLEM

Statement of the Problem 5
Significance of the Study 6

2. REVIEW OF LITERATURE

Introduction 7
The Practice of Mentoring 7
Mentoring in Educational Settings 11
Internship Programs in Teacher Education 12
The Five-Year Programs 17
Mandated Internship Programs 20
Internship Programs in Oregon 22
The Mentor-Teacher Program 22
Reform Movement in Teacher Education 25
Effective Teaching Characteristics 35
Relationship Between Teaching Characteristics and Student Learning Gain 37
Methods of Measuring Teacher Effectiveness 45
Summary 49

3. METHODOLOGY

Design of the Study 51
Population Description and Sampling Procedures 52
Design of the Instrument 54
Validity and Reliability of the Instrument 55
The Rating Scale 55
Data Collection 56
Analysis of Data 58

4. PRESENTATION OF THE FINDINGS

The Population 60
One-Way Analysis of Variance 65
Summary of the Findings 66
Discussion 66
The Context Complexity Scale 72
Discussion 73
Limitations 75
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-1</td>
<td>The G.T.A. Teachers' Scatterplot has an $r = 0.344$</td>
<td>73</td>
</tr>
<tr>
<td>4-2</td>
<td>The O.S.U. Teachers' Scatterplot has an $r = 0.016$</td>
<td>74</td>
</tr>
<tr>
<td>4-3</td>
<td>The Beaverton Teachers' Scatterplot has an $r = -0.050$</td>
<td>74</td>
</tr>
</tbody>
</table>
**LIST OF TABLES**

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-1. The Population of the Three Treatment Groups of Subjects</td>
<td>54</td>
</tr>
<tr>
<td>4-1. Part I, the Demographic Profile of Teachers in the Three Treatment Groups</td>
<td>62</td>
</tr>
<tr>
<td>4-2. The Relationship of Effective Teaching Characteristics Where the Null Hypothesis Was Rejected and/or Had a High Level of Significance</td>
<td>67</td>
</tr>
<tr>
<td>4-3. The Results of the One-Way Analysis of Variance</td>
<td>69</td>
</tr>
<tr>
<td>4-4. The Correlation Coefficients of the Three Groups of Teachers</td>
<td>72</td>
</tr>
</tbody>
</table>
Beginning teachers have concerns which are unique to their particular developmental stage of teaching. If these concerns were identified and resolved during this beginning teaching stage, the beginning teacher would have a greater opportunity of becoming an effective teacher. Dunbar (1981) noted that first-year teachers from the usual four-year teacher preparation programs are on their own when they start teaching. Alone, they face the launching of their teaching career buoyed only with the specialized methods courses and experiences from student teaching.

Lortie (1975) states that one of the striking features of teaching is the abruptness of which full responsibility is assumed. A young man or woman is a student in June and a teacher in September.

Fully responsible for the instruction of his students from the first working day, the beginning teacher performs the same tasks as the twenty-five year veteran. Tasks are not added sequentially to allow for gradual increase in skill and knowledge; the beginner learns while performing the full complement of teaching duties. It is no accident that some refer to this as the sink-or-swim approach (1975, p. 72).

The first few years are typically a time of great stress, anxiety, frustration, and isolation. Ryan (1980) described the frustrations, fears, anxiety, and dilemmas that new teachers face. His findings point out the frustrations of new teachers, the difficulties associated with accommodating personal and professional lifestyles, the enormous
time and energy demands made upon new teachers, the feelings of being on the "low end of the totem pole," and the general powerlessness that new teachers associate with their roles in the classrooms and schools. Also, there is evidence that the first years of teaching lead to increasing negativism and rigidity in the attributes of many neophytes (Hoy, 1968). In fact, many neophytes, lacking adequate support, decide to leave the profession during this period.

Based on studies conducted in North Carolina, they estimated that first-year teachers leave at an annual rate of 15%, second-year teachers at approximately the same rate, and third-year teachers at a rate of approximately 10% (Schlecty and Vance, 1981, p. 106).

Lortie also states that the beginning months of teaching can be somewhat of an ordeal. It is important to observe, he continues, that the ordeal is private — it is not an experience shared by a cadre of teachers.

Since the beginning teacher spends so much of his time away from other adults, it falls upon him to discern problems, consider alternative solutions, make a selection, and, after acting, assess the outcome. The probability is low that an experienced colleague will be present during anything but a small fraction of the beginner's decision-making (1975, p. 72).

A shared ordeal seems to contribute to the solidarity and collegial feeling found in established professions. Teaching, however, is largely a private ordeal, the effects are not likely to build the common bonds which construct occupational subculture, but which, instead, reinforce the individualism (1975, p. 74).

Fuller (1969) conceptualized a three-phase developmental theory of teachers' concerns. Fuller postulated a pre-teaching phase of non-concern with the specifics of teaching, an early teaching phase of concern with self and survival, and a later phase of concern about the degree of
impact on students. Fuller and Bown (1975) later refined this initial conceptualization, citing three stages of concern clusters. The first stage focused on survival: on one's adequacy and survival as a teacher; about class control; about being liked by pupils; about superiors' opinions; about being observed, evaluated, and praised; and about fear of failure. The second stage was described as the mastery stage and deals with concerns about mastering the teaching tasks - working with too many students, time pressures, and lack of instructional materials. The focus of the third stage was impact: concerns regarding recognizing social and emotional needs of pupils, fairness, and tailoring content to individual students.

As Fuller suggested that teachers go through a number of stages in their development, beginning in pre-service education and continuing throughout the professional career, it may be most important to determine which programs are appropriate and beneficial for teachers at specific times during their careers.

When a new teacher becomes frustrated, anxiety-ridden, and exhausted, the students and the entire profession suffer. New teachers must be inducted into the profession humanely, in ways that engender pride, openness, and increased professional competence and stature.

One aspect of teacher education is the provision of assistance for the beginning teacher, that person who is making the transition from student of teaching in college or university to fulltime teacher in an elementary or secondary classroom. This current catchword for the period during which this transition occurs is induction (Griffin, 1985, p. 42).

Good defined induction as "the process of gradual introduction of teachers into the school situation with a view to assisting them in making successfully the adjustments that are involved later in their work (1973, p. 298)." The purpose of induction was to develop in new
members of an occupation those skills, forms of knowledge, attitudes, and values that were necessary to effectively carry out their occupational roles.

Gehrke and Kay (1984) pointed out the need for a mentor during this induction period. The mentoring relationship during the induction period might provide some direction to the development of teacher education programs that would, by their example, lead aspiring teachers toward a teaching personality that emphasized warmth, personal commitment and professional excellence.

Pataniczek and Isaacson (1981) stated the influence of a few select colleagues for support and assistance by most beginning teachers in the task of learning to teach. This collegial support seemed to be the reduction of uncertainty in the complexities of the job. The "little things," the tricks of the trade which make tasks manageable can only be learned "by doing" or from those who also share a similar experience.

In his summary of research findings regarding teacher induction programs Griffin emphasized that new teachers were strongly influenced by people in the new school settings. "This specificity allows us to conjecture that linking new teachers with the best professional in the settings may result in recreating quality performance in the new teachers" (1985, p. 43).

Binko and Neubert noted that:

Classroom teachers . . . can function effectively to teach one another and to improve the quality of teaching. The method is clear: Identify successful teachers, establish the co-equal relationship, train these teachers to be effective presenters, and use them for models for other teachers. It is a concept we call the essentiality of the classroom teacher, a concept of inservice education that fosters a collegiality among peers in the practice and practicing arms of the profession (1984, p. 17).
Levinson, Darro, Kline, Levinson, and McKee spoke of mentors, but in the male gender. "This reflects the current reality: the men in our study had almost exclusively male mentors. One of the great problems of women is that female mentors are scarce, especially in the world of work (1978, p. 98)." The following are functions of the mentor. He may act as the teacher to enhance the young man's skills and intellectual development. Serving as sponsor, he may use his influence to facilitate the young man's entry and advancement. He may be host and guide, welcoming the initiate into a new occupational and social world and acquainting him with its values, customs, resources, and cast of characters. Through his own virtues, achievements and way of living, the mentor may be an exemplar that the protegé can admire and seek to emulate. He may provide counsel and moral support in time of stress.

Levinson et al. (1978) also believe that the mentor has another function, and this is developmentally the most crucial one: to support and facilitate the realization of the Dream. The mentor fosters the young adult's development by believing in him, sharing the youthful Dream and giving it his blessing, helping to define the newly emerging self in its newly discovered world, and creating a space in which the young man can work on a reasonably satisfactory life structure that contains the Dream.

Statement of the Problem

The problem of this study was to compare the effective teaching characteristics of teachers who have participated in the Mentor-Teacher Program with teachers who have not, but were judged to have comparable teaching potential.
Significance of the Study

The Oregon State University Elementary Education Department and the Beaverton, Oregon School District #48 joined together to provide the Mentor-Teacher Program. The Mentor-Teacher Program was a new induction pattern into teaching for recent Oregon State University elementary education graduates. This program used mentors with beginning teachers and has been in effect since the 1982-83 school year.

This writer examined the effective teaching characteristics of beginning teachers who have participated in the Mentor-Teacher Program. The writer also examined the effective teaching characteristics of teachers who have not participated in the Mentor-Teacher Program, but who were judged by the Elementary Education faculty of Oregon State University to have comparable teaching potential. The effective teaching characteristics of beginning teachers initially hired by the Beaverton, Oregon School District #48 were also examined.

The writer then compared the effective teaching characteristics of the teachers who participated in the Mentor-Teacher Program with those teachers who did not to determine if there was a difference between the groups.

Research questions explored in this study were:

1. What does the literature indicate are the effective teaching characteristics exhibited by master teachers?

2. To what degree are these effective teaching characteristics exhibited by teachers who participated in the Mentor-Teacher Program?

3. To what degree are these effective teaching characteristics exhibited by teachers who did not participate in the Mentor-Teacher Program, but who were judged to have comparable potential?

4. What is the difference in effective teaching characteristics between these groups and is it significant?
Chapter 2

REVIEW OF LITERATURE

In order to determine if mentoring was a program appropriate and beneficial for teachers during the induction or beginning stage of teaching the writer first reviewed the literature pertaining to the practice of mentoring and intern programs, the implementation and use of intern programs in school districts, the development of the Mentor-Teacher Program, and the future considerations of intern programs in school districts. It was also necessary to review the literature identifying and describing the effective teaching characteristics of master teachers. These effective teaching characteristics would then be incorporated as essential elements of mentor and internship programs for beginning teachers.

The Practice of Mentoring

Mentoring was an ancient practice that made a lot of sense. Ever since the Greek poet Homer's 'faithful and wise' Mentor first advised Odysseus, or Merlin the young King Arthur, wise men have counseled, taught, coached, and sponsored the young. There have been mentors and protégés in philosophy, the arts and letters, the military, and even in professional sports (Roche, 1979, p. 14).

The mentor relationship was one of the most complex, and developmentally important, a person had in early adulthood. The mentor was ordinarily several years older, a person of greater experience and seniority in the world the tyro was entering. The term mentor was generally used to mean teacher, advisor or sponsor.
The mentoring relationship was often situated in a work setting, and the mentoring functions were taken by a teacher, boss, editor, or senior colleague. Mentoring was defined not in terms of formal roles but in terms of the character of the relationship and the functions it serves.

Professions such as medicine, law, business, pharmacy, the military, sports, and the clergy have long recognized the importance of mentoring practices. Other professions such as nursing and law enforcement have included mentoring in the educating of their profession.

The mentor concept seemed particularly applicable to "the helping professions." Atwood (1979) described a mentoring project at the Children's Hospital in San Francisco. A mentor nurse served as role model for team members. The mentor taught, coached, inspired, and supported the development and growth of the team members, which included staff nurses and at least one newly graduated nurse who needed a docent to guide her through the transitional period from student learner to practicing nurse.

Police departments in Houston, Fresno, and Miami have applied the practice of mentoring. These cities have developed the Field Training Officer (FTO) programs (Fresno Police Department, 1979; Dade County Public Safety, 1977). In a typical FTO program a young officer who graduated from the training academy and was assigned to a veteran police officer (his FTO) for a probationary period, usually three to six months. The FTO guided and trained the novice in the official and unofficial aspects of police work.
J.C. Penney & Co. has used the mentoring approach to train store managers since 1901 (Roche, 1979). Penney and his backers evolved a system in which the manager-partner of each dry goods store in the chain selected and trained a man who could then be sent out to found another store. They believed that the manager who trained good men would profit commercially from the protégé’s success and spiritually by guiding others to a good and useful life.

Roche, (1979) found that in a management consultant firm that the mentor-protégé relationship was fairly extensive among the elite of the business world. Mentor relationships have become more prevalent during the last twenty years. Executives who have had a mentor earned more money at an early age, were better educated, and were more likely to follow a career plan, and, in turn, sponsor more protégés than executives who did not have a mentor.

While apparently destined for a mediocre career, people who form important one-to-one relationships were able to accelerate and intensify their development through an apprenticeship. The background for such apprenticeships, or the psychological readiness of an individual to benefit from an intensive relationship, depended upon some experiences in life that forces the individual to turn inward. A case example from the life of Dwight David Eisenhower illustrated the transformation of a career from competent to outstanding.

Shortly after World War I, Eisenhower, then a young officer somewhat pessimistic about his career changes, asked for a transfer to Panama to work under General Fox Connor, a senior officer whom Eisenhower admired. The army turned down Eisenhower’s request. This setback was very much on Eisenhower’s mind when Ikey, his first-born son, succumbed to influenza. By some sense of responsibility for its own, the army transferred Eisenhower to Panama, where he took up duties under General Connor with the shadow of his lost son very much upon him.
In a relationship with the kind of father he would have wanted to be, Eisenhower reverted to being the son he lost. In this highly charged situation, Eisenhower began to learn from his mentor. General Connor offered, and Eisenhower gladly took, a magnificent tutorial on the military. Eisenhower wrote later that life with General Connor was sort of a graduate school in military affairs and the humanities, leavened by a man who was experienced in his knowledge of men and their conduct (Zaleznik, 1977, p. 76).

The Jewel Companies, Inc. enjoyed a reputation for developing talented people. The chairman and chief executive officer, Donald S. Perkins, was a good example of a person brought along through the mentor approach (Lunding, 1978). Franklin J. Lunding, who was Perkins' mentor, expressed the philosophy of taking risks with young people. Lunding attracted Perkins to Jewel at a time when business graduates had little interest in retailing in general, and food distribution in particular. Not only did Perkins become president at age 37, but assigned each recruit to a vice-president who acted as a sponsor, Jewel evidently built a structure around the mentor approach to develop leaders.

The Center for Creative Leadership in Greensboro, North Carolina, asked successful managers to talk about their best teachers. The following were the most frequently mentioned characteristics of these managers-as-teachers:

1. They counseled. They gave younger managers constructive advice and feedback. They used younger managers as sounding boards.

2. They excelled. Whether in finance, production, or marketing, these managers were the best in some aspect of their business.

3. They gave exposure. They made sure that the work and accomplishments of young managers were seen. They opened doors for them.

4. They provided latitude. They gave the young managers the freedom to try, the courage to fail. They involved them in important tasks.
5. They were *tough taskmasters*. They challenged; they demanded excellence. (Peters and Austin, 1985, p. 327)

Mentors took risks with people. They bet initially on talent they perceive in younger people. Mentors also risked emotional involvement in working with their juniors. The risks did not always pay off, but the willingness to take them appeared crucial in developing leaders.

**Mentoring in Educational Settings**

In a limited way, colleges and universities rely on mentoring. Students in education programs are assigned to a faculty mentor who supports and monitors students' progress. Graduate schools traditionally have used a quasi-mentoring approach for guiding students through their thesis or dissertation.

Educators used mentors to improve professional development in either one of two ways: they encouraged informal mentoring; or they developed formal mentoring programs.

At Kennesaw College in Georgia the faculty developed the aspect of mentoring in an unusual way. Students with a 3.7 or higher G.P.A. and who proved outstanding in their field of study were asked to participate in the Student Assistance for Leadership (SALT) program. Students were paired with faculty members to assist with research projects. SALT students assisted faculty to prepare research for papers and presentations, to conduct surveys, to edit textbooks, to prepare syllabi, and to edit and revise scholarly works by faculty. Thus faculty members were able to pursue personal and professional development through scholarship and study of the profession, and
students benefited from the close intellectual exchange with a faculty member. Betty Siegel, president of Kennesaw College states:

We believe that teaching is the facilitation of learning, and administration must be the facilitation of teaching. We want to encourage our teachers to care enough to be true mentors to their students. Gordon Klopf describes the mentor as an enabling, caring person who draws from the talents of his students, helps to shape them, enhances their growth, and enriches their lives (1987, p. 38).

**Internship Programs in Teacher Education**

Three distinct phases have been commonly identified in the education of a teacher: (1) **Pre-service** - the four or five year period preceding provisional certification; (2) **Induction** - the first few (probationary) years of teaching following completion of pre-service training and provisional certification, but preceding permanent certification; and (3) **Inservice** - the period following permanent certification and continuing throughout a teacher's career (Grant and Zeichner, 1981, p. 99).

The concept of the internship was not new as a means of providing realistic experiences for prospective teachers. Professions other than teaching have long followed the practice of placing prospective members in practical situations where, through supervised experience, they developed essential professional proficiency prior to the attainment of full profession status. Teacher education programs have engaged in the practice of placing teachers in the public schools. There they acquired practical experience in teaching for which the student received both academic credit from a teacher education institution and possibly some financial compensation from the school district (Stiles, 1946; Cartwright, 1961; Shaplin and Powell, 1964).
As early as 1895, a program at Brown University included practice teaching at the graduate level after undergraduate courses in professional education. A few of the graduates were placed as salaried half-time teachers in the Providence schools. Another program was developed in 1919 at the University of Cincinnati in cooperation with the Cincinnati public schools. Graduates of a four-year curriculum, which included courses in education, spent the fifth year as paid half-time teachers in secondary and elementary schools, remained under the supervision of the university, and continued course work.

Because of the desperate shortage of teachers, the low level of training in the two-year normal schools, and the difficult conditions of teaching in the schools, early efforts to create internships at the elementary school level were widespread and influential. In addition, the rule in many urban school systems that teachers must have experience before they could be employed meant a rise in the use of internships.

In 1904, the Fitchburg Normal School developed a program which extended the two-year normal course for an additional two years. During the third year the students worked as regular public elementary school teachers in selected schools, were paid, and received continued supervision and instruction from the normal school staff. This type of program had a substantial influence upon many large city school systems (Minneapolis, Cleveland, Boston, Seattle, Gary, and Buffalo) (Shaplin and Powell, 1964).

An economic climate more favorable to the development of the internship came with the Great Depression. Suddenly there was a surplus of teachers, not jobs. Some school districts hired unemployed beginning teachers as "assistants," "cadets," or "interns" at no salary,
contending that they provided training rather than employment.

The internships of the thirties sought to make better beginning teachers of already certified college graduates. Conceived at a time of teacher oversupply, the internship was often used as a probationary period to restrict access to teaching by the underprepared and to weed out those who proved inept (Shaplin and Powell, 1964).

There was considerable consensus on the nature of the program. Internship usually referred to a fifth-year program following graduation from a teacher's college or university. The intern possessed an extensive background in professional education and student teaching and qualified for state certification. The program was a full year on a full-time basis in the school. The induction into teaching was gradual; the intern's role was that of an assistant teacher, with stages of progression through observation, participation, and finally complete control. The intern received a small salary in most cases, though many felt that room and board were sufficient and a few programs paid no salary and charged tuition.

Many colleges and universities sponsored internships at this time (Wayne University, Chicago Teacher's College, Northwestern, Stanford, Columbia, University of Pennsylvania).

During the forties a new meaning for the term "internships" was used which confused the idea for over a decade. The practice of labeling undergraduate practice teaching as "internship" such as Florida's state-wide program of "internships" began in 1940.

A review of literature done in the early sixties (Shaplin and Powell, 1964) found only five systematic five-year internship programs (Central Michigan University, Northeastern University, George Peabody
Only one of them, that of Hawaii, traced continuity back to the thirties; the others were all initiated in the late fifties or early sixties, three with the support from the Ford Foundation.

Other programs were developed especially to prepare liberal-arts graduates for teaching. In 1936 the Harvard Master of Arts in Teaching Program was established. Another of the early programs was the Carnegie Graduate Fellowship Program, established in 1951 at George Peabody College for Teachers. This program admitted twenty superior liberal-arts graduates each year for teacher training. The Ford Foundation Fund for the Advancement of Education, established in 1951, gave its support to the rapid development of fifth-year programs, which started with the Harvard Twenty-nine College Plan. These master's degree internships were called Ford Foundation internships because so many had been supported by the Ford Foundation (Cartwright, 1961).

Another variation of a type of internship was developed in California in the early sixties. The intern served as a regular teacher for a full year at full pay under a pilot program credential. Prior to the internship, the student took a special summer program which included practice teaching and course work on curriculum and methodology. During the internship, the student was supervised by both the school and college staff and also enrolled in a seminar which dealt with problems that arose in the teaching. The intern took additional course work to complete the requirements for the general state teaching credential in the summer following the internship, since the pilot program credential could not be renewed. Course credits accumulated during the program counted toward a master's, but usually additional work was needed to
complete degree requirements. In 1960, twenty-five such programs were offered in sixteen colleges and universities.

In 1965 President Lyndon Johnson presented a proposal before the National Education Association to establish a program called the Teacher Corps. This program was funded under Title V of the Higher Education Act of 1965 and was designed to improve the quality of teachers for schools in low-income urban and rural areas. There was a shortage of qualified teachers for the inner city. "Teacher Corps projects were designed to demonstrate alternative educational models and training programs adaptable to the needs of universities and schools" (Frieberg, 1981, p. 232). The key to the Teacher Corps was the intern. Each project throughout the United States consisted of neophyte teachers who were given about eight weeks of training on teaching disadvantaged children followed by internships in local schools and service on instructional teams with regular teachers in the classroom. At the end of two years of study, in addition to a basic undergraduate program and ten hours a week community experience, the intern received his/her teaching certificate and bachelor's degree in education.

Julius (1976) reported on an induction program for probationary British teachers. Distinctive features of the plan included "newly employed teachers were to be released for one day a week and were to carry three-fourths of a normal teaching load and professional tutors were to be designated and trained to give practical individualized help with the problems of beginning teachers" (1981, p. 351).

The idea that the formal education of a teacher should extend beyond the completion of a pre-service preparation program and continue
into the induction phase and throughout a teacher's career has a long history in Americans teacher education. Various forms of graduate teacher internship programs for the support of beginning teachers have been proposed and/or implemented since the latter part of the Nineteenth Century.

Teacher education has again become a major concern of school reform. Believing that the traditional four-year curriculum does not effectively prepare beginning teachers for today's schools, teacher education institutions have been improving the quality of their programs. Recognizing that preparing effective teachers required an increasingly rigorous and diverse curriculum, the recommendation was to replace the undergraduate education degree with an arts or science major and add a graduate education degree. Also included in this fifth year program was an extended practicum or internship in the schools. At the end of the fifth year the student received a second degree and was recommended to teach.

The Five-Year Programs

Based on the belief that pre-service training or student teaching did not provide the time needed nor the adequate preparation of teacher candidates to "go from practicum to praxis" (Gallegos, 1981, p.4) several colleges and universities developed the five-year model for their teacher preparation program, the five-year extended program (Scannell and Guenther, 1981; Andrew, 1981; Andrew, 1983; Dunbar, 1981).

A five year teacher education program, began in the undergraduate years and continued through a post-baccalaureate graduate year, had been in effect at the University of New Hampshire since 1974. The first phase
of the pre-service teacher education program consisted of a year-long,
post-baccalaureate internship and further graduate study. Interns were
placed in selected sites with teachers serving as resident supervisors
and aided by University intern coordinators. The five year program's
philosophy stressed identification of classroom teachers who can become
committed and effective teacher educators as well as effective teaching

The University of Kansas School of Education, under the leadership
of Dean Dale P. Scannell, has adopted a five-year extended program,
which began during the 1981-82 school year. The belief was that this
program should be designed to facilitate a guided induction into
professional practice through a series of field experiences articulated
throughout the five years, beginning with observation and proceeding
through a series of short- and long-term aiding experiences, culminating
with two, distinct student teaching experiences (Scannell and Guenther,

The Allegheny College Five Year Teacher Education Program combined
undergraduate liberal arts courses with teacher methods courses. Also,
students reserved a ten-week term of their senior year for their
teaching practicum. After summer graduate courses which required one
curriculum research project that was considered the equivalent of a
master's thesis, the candidates became certified to teach. The fifth
year of this program — their first year of teaching — combined with five
additional approved graduate courses completed within five years of
application to the graduate program resulted in a master's degree.
During the fifth year of this program the teacher candidates (1) were
required to live independently in apartments at the center's location,
and to find their own jobs in the Cleveland area, (2) attended workshops that were led by adjunct staff from the Cleveland area brought in by the center's coordinator, and (3) committed themselves to a rigorous teacher preparation experience in an urban environment (Dunbar, 1981).

In 1978 Doane College (Nebraska) initiated a major program renewal. The first-year teacher was assigned to one member of the education staff who served as the college support staff member. This staff support member, who was the same person who served as the college supervisor during the teacher's student teaching experience, visited the teacher's classroom a minimum of two times during the first nine weeks of school and discussed areas of potential concern, and arranged for the provision of specific information and/or materials in areas of concern to the college support staff or the beginning teacher. The second step was the identification of a "master teacher" who provided three full days of supervision and assistance to the beginning teacher. The master teacher reinforced positive elements within the beginning teacher's classroom, pointed out potential areas of concern, provided suggestions for alleviating the areas of potential concern, and provided Doane College with a program evaluation (not an evaluation of the beginning teacher) based on a specified set of teacher competencies taught in Doane's teacher education program. If there were weaknesses which became obvious in the graduate's first year of teaching, the college remediated them through inservice. This was an on-going process throughout the entire first year of the graduate's (Dudley and Hegler, 1983).

These five-year extended programs embodied Schlechty's (1985) list of the characteristics of effective induction systems:
1. Effective induction systems were based on and oriented toward clearly stated, well-articulated, and generally understood expectations and norms.

2. Effective induction systems explicitly and implicitly used the process of recruitment and selection as an integral part of the induction system.

3. In effective induction systems, entry into the occupation was marked by distinct stages and statuses.

4. Effective induction systems had mechanisms that encourage mutual support among status equals.

5. Effective induction systems usually called upon neophytes to undergo elaborate vocabulary-building activities.

6. Effective induction systems usually assumed that those who were admitted to training were likely to become full-fledged members of the occupation.

7. Occupations with the most effective induction systems relied greatly on intensive, clinical supervision, demonstration, coaching, and constant corrective feedback by real practitioners in real situations (1985, p.37).

Murray (1982) suggested, however, there may have been a hidden reason for the current popularity of five-year programs.

The five-year program may also be seen as a necessary element in winning recognition of professional status for the practicing teacher - and professional school status for the beleaguered education college. The professions of law, medicine, dentistry, and pharmacy have all expanded beyond an undergraduate education of four years. By superficial analogy, the length of teacher education must rise to the training level customarily found among other learned groups in order for teaching to be considered a true profession (1982, p. 4).

**Mandated Internship Programs**

Entry-level internship periods have been mandated or are being considered in many states (Oregon Educational Coordinating Commission, 1984; Benderson, 1984; Barnes 1983). In Oklahoma the new teacher does
not receive a certificate to teach until the entry-year assistantship program has been successfully completed. After the entry-level teacher has been observed three times by a local committee comprised of a teacher consultant, a district administrator, and a faculty member of a college of education, the committee recommends to the State Department of Education the entry-level teacher be certified, refused certification, or continued for a second year in the entry-level program. A professional development plan for each new teacher was required in Florida's legislatively-mandated beginning teacher program. In some states state-mandated programs have led to "the institutionalization of the process of inducting new teachers in the profession with emphasis on verifying their teaching competence" (Griffin and Hukill, 1983, p. 106).

Individual school districts also have intern programs. The Toledo, Ohio Intern Program was "designed to offer the first year (intern) teacher the support, advice, and guidance necessary to make the first year's experiences as successful as possible" (The Toledo Plan, 1985, p. v). This support was provided by a peer (consulting teacher) who had been identified as an excellent teacher. The consultant was released from regular classroom duties in order to "direct and enhance the progress of the intern . . . by allowing the consulting teacher the time to conduct a complete and proper evaluation of the intern's progress and ultimate success (and/or lack thereof) in meeting the criteria of Toledo Public Schools" (The Toledo Plan, 1985, p. v).
Internship Programs in Oregon

Although Oregon has not mandated entry-level induction programs, individual school districts have developed their own beginning teacher programs. New teachers in the West Linn, Oregon School District "undergo extensive observation, coaching, and formative evaluation by their peers and summative evaluation by the school principal during the 3-year induction period" (Ward, 1985, p. 55). The Tigard, Oregon School District has "an intensive, yearlong program with beginning teachers and experienced teachers new to the Tigard School District. Services provided to those teachers are classroom observation and coaching" (Harrington, 1985, p. 2MW).

Oregon has placed teachers in training in the public schools where they received pay for the service rendered and were credited with the supervised teaching required for certification since the 1930's and extending into the 1940's. In the 1950's a number of teaching internship programs resulted from the Ford Foundation to the Oregon State Board of Education (Ward and Gubser, 1964). As of 1963, nine colleges and universities had Board-approved internship programs. Since the 1982-83 school year, the Oregon State University Elementary Education Department and the Beaverton, Oregon School District #48 have joined together to provide the Mentor-Teacher Program.

The Mentor-Teacher Program

The Mentor-Teacher Program, used mentors with beginning teachers, was a new induction pattern into teaching for recent Oregon State University elementary education graduates. The mission of this program
was "to induct fifth year teacher-preparation candidates into the profession such that they achieve their maximum instructional potential as reflected in pupil achievement in reading, writing, and arithmetic" (The Mentor-Teacher Program Agreement, 1982, p. 1).

However, the focus of the Mentor-Teacher Program has been augmented to help maximize the novice's teaching potential in the many subject areas of teaching. The focus was no longer just improvement of reading, writing, and arithmetic; it was on the development of each teacher's capabilities in all aspects of teaching.

The Mentor-Teacher Program capitalized on a mentor relationship with selected Beaverton teachers to provide outstanding models of reading, writing, and arithmetic instruction for fifth-year teachers-in-training. The Beaverton mentor provided support, modeled excellence, and directed the development of each OSU fifth-year intern teacher. Interns assumed paid instructional responsibilities for a particular school but worked less than a full teaching day.

Each of the four member participants of the Mentor-Teacher Program (the Beaverton School District, Oregon State University, the Intern (G.T.A.'s), and the Mentor) had a specific role.

The role of the Beaverton School District was to:

1. Share responsibilities with O.S.U. for the selection of interns and mentors.

2. Provide a paid position for six interns ($8,000 annually for each intern).

3. Provide principal leadership (probably three schools; two interns per school).

4. Provide tuition reimbursement for mentor teachers attending two graduate courses (Advanced Strategies Language Arts and Advanced Strategies Mathematics).

5. Provide a three- to five-day in-service for interns and mentors prior to the start of school.
6. Release interns for selected training experiences.

7. Provide a budget for mentor/intern special instructional materials ($1,200).

8. Share responsibility with O.S.U. for program and intern evaluation.

The role of Oregon State University was to:

1. Share responsibilities with Beaverton for the selection of interns and mentors.

2. Provide an intern supervisor.

3. Reduce fee structure to "staff rates" for Beaverton teachers in courses taught on-site.

4. Provide faculty for on-site coursework plus one day per week supervising, modeling, and teaching.

5. Provide secretarial program support.

6. Compensate one Beaverton teacher for shared teaching responsibilities for each on-site course.

7. Share responsibility with Beaverton for program and intern evaluation.

8. Compensate mentor-teachers at the same level as cooperating teachers for student teachers.

9. Develop appropriate termination procedures.

The role of the Intern was to:

1. Work five hours per day as directed by mentor and principal.

2. (Fall) Teach reading to selected groups of children. These may be remedial, gifted, or other special needs.

3. (Winter) Continue reading responsibilities one hour per day. Develop four hours of mathematics instruction per day. These may be remedial, introductory, or enrichment.

4. (Spring) Continue mathematics responsibilities one hour per day. Develop four hours of language arts instruction per day. This may include drop-in writing centers, young authors' conferences, school newspaper, children's book publications, etc.

5. Undertake such other normal teaching responsibilities as faculty meetings, P.T.A., and other routine assignments.
6. Relieve mentor teachers on occasion from teaching duties.

The role of the Mentor was to:

1. Direct the day-to-day teaching of the intern as assigned by the principal.

2. Model specific instructional approaches in one of the basic instructional areas (reading, writing, or arithmetic).

3. Become a support person for the intern.


5. Co-instruct in one of the Advanced Strategies courses (Ed 567/Ed 568).

6. Undertake special assignments as directed by the principal when released through intern teaching.

At the program completion the interns completed Standard Certification requirements and earned a Master's Degree in Education. Interns were eligible to apply for normal openings in Beaverton (or elsewhere) with the understanding that the district was not obliged to employ or re-employ any program participant (OSU - Beaverton Mentor Teacher Program Agreement, 1982).

Reform Movement in Teacher Education

Since the publication of A Nation At Risk: The Imperative For Educational Reform (1983) there has been an increase in the reform movement in teacher education. In a paper on teacher education programs Barr stated, "The field of teacher education is currently experiencing the most profound scrutiny and criticism that has ever occurred in the history of this traditionally troubled area of higher education" (1984, p. 1). This was especially true with the preparation and induction of beginning teachers.
What, then, are some recommendations and proposals of educators, the Oregon Legislature, the Oregon Educational Coordinating Commission (OECC), the Teacher Standards and Practices Commission (TSPC), the State Board of Higher Education (OSSHE), universities, school districts, and teachers to provide "sufficient support and training for the beginning teacher?" (Barr, 1984, p. 2).

The internship program has been proposed and implemented as an essential element in the improvement of the preparation of teachers. A recommendation for the improvement of the teachers cited in A Nation At Risk stated "Master teachers should be involved in designing teacher preparation programs and in supervising teachers during their probationary years" (1983, p. 25).

Adler, Goodlad, and Honig each recommend that beginning teachers be interned with teachers of outstanding ability. Adler (1982) suggested specialized training for teachers after they completed a general college education - comparable to an internship in medicine. Goodlad (1984) proposed teachers serve an internship for two years before resident status was attained. Honig (1985) proposed that during the probationary period lasting two years, beginning teachers be teamed with the best teachers in the school who regularly observed their classes, gave tips on what needs work, and served as resources. Upon completion of this period, each apprentice was tenured and had the option of pursuing the next level of attainment (senior teacher status).

Twenty-seven scholars, educators, and policy makers developed the Thanksgiving Day Statement, a presentation on the state of teaching in America. The Statement contained many comprehensive recommendations
about improving teaching. One recommendation for the strengthening of teachers and the teaching profession was:

States should transform formal teacher education into a graduate level professional program featuring solid course work in education, psychology, clinical experience, and a paid part-time internship in the schools prior to the first year of teaching. Students enrolling in such programs should possess university degrees in standard academic majors (A Group of 27 Americans, 1984, p.18).

The Carnegie Foundation for the Advancement of Teaching conducted a three-year study of 16,000 public high schools. Its report, High School: A Report on Secondary Education in America (Boyer, 1983) dealt with the high school curriculum but also called for the improvement in teacher education. The report recommended that:

Pre-service teachers should have a fifth year of combined instructional and apprenticeship experiences that include a core of four courses to meet the special needs of teachers. The proposed courses are Schooling in America, Learning Theory and Research, Teaching of Writing, and Use of Technology. The crucial apprenticeship experience would be with a team of master teachers. The report also calls for a series of one-day Common Learning Seminars to be held during the fifth year, in which the pre-service teachers would meet outstanding scholars-teachers in the arts and sciences, who would relate the knowledge of their fields to contemporary political and social events (p. 175).

Two major reports were published in 1986 examining and recommending reform of teacher education and of the teaching profession. A Nation Prepared: Teachers of the 21st Century and Tomorrow's Teachers both were the results of a consortium of distinguished leaders interested in improving teacher education and the teaching profession. Both groups suggested phasing out the undergraduate education major and to develop in its place a graduate professional program in teacher education. They
recommended a strong liberal arts education in the preparation of teachers followed by the development of a Master's in Teaching degree. This program emphasized systematic study of teaching and clinical experience, including internships and residencies in the schools during the induction year of teaching.

In the 1987 Phi Delta Kappa/Gallup Poll of the Public's Attitudes Toward the Public Schools the question was asked, "Do you favor or oppose the recommendation that anyone that wants to be a public school teacher must first have a four-year liberal arts degree with a major in some subject before he or she can enter any teacher training program" (p. 27). Seventy-two percent of the national total was in favor of such a recommendation, seventeen percent opposed it, and eleven didn't know. When asked of parents of public school children the yes vote rose to seventy-six percent with nineteen percent opposed and five percent who didn't know. Seventy percent of people with no children in school were in favor of such a recommendation, sixteen were opposed, and fourteen percent didn't know.

An educational reform bill, House Bill 2466, included a proposal for teacher internships was introduced in the 1985 Oregon Legislature by the OECC. Section 5 of this proposed bill read:

1. School districts shall provide entry-year assistance programs. Such programs shall comply with standards established by rule by the commission.

2. Each school district's entry year assistance program shall involve approved teacher education programs to the maximum extent practical.

3. Any school district employing teachers in their entry year of teaching but not providing an entry year assistance program which complies with the rules of the commission shall forfeit in basic school support funds due
the district an amount to be determined by the commission but not to exceed $100 a day for each teacher in the entry year of teaching.

4. Subject to ORS 291.232 to 291.260, the (state) superintendent shall distribute grants-in-aid to eligible school districts to offset the costs of entry year assistance programs. The amount of the grant shall be based on the number of full-time equivalent teachers employed during the entry year of teaching by the school district. The employing district may count a teacher working part-time during the entry year of teaching to make up a full equivalency in a future year.

5. The superintendent shall distribute at least three-fourths of the allocation due to each eligible district no later than February 1 of each fiscal year and the remainder prior to June 30 of each fiscal year. If underpayments or overpayments result, adjustments shall be made in the following year.

6. The state board shall adopt rules for the distribution of grants-in-aid under subsection (4) of this section.

7. Districts failing to comply with the rules adopted under subsection (6) of this section shall not receive their grants-in-aid until they are in compliance.

8. Funds appropriated which exceed the amount necessary to meet the approved reimbursement rate in the first year of a biennium may be applied to meet the approved rate in the second year of the biennium, if necessary. Funds appropriated in excess of those needed to meet the approved reimbursement rate shall revert to the General Fund (A-Engrossed House Bill 2466, 1985, p. 2).

However, this bill failed to be reported out of committee.

A second bill, House Joint Resolution 16, was introduced in this same legislature. Section (2) proposed:

The Teacher Standards and Practices Commission shall consider requiring teachers who are in their first year of teaching in public school, hold their initial basic teaching certificates, and are regular employees of school districts to participate in entry level assistance programs (1985, p.1).
The House Education Committee recommended adoption of this bill and sent it to the floor where it failed to pass.

Arthur E. Wise, Director of the Rand Corporation's Center for the Study of the Teaching Profession, recommended in 1985 to the Joint Legislative Committee on Education that "Oregon consider requiring all new teachers to complete a five-year college program and a one-year internship" (Durbin, 1986, p. D5). This suggestion was similar to a plan proposed by a Connecticut commission on education reform. Under such a plan, designated "cooperating teachers" would be responsible for training, supervising, and evaluating student teachers, and beginning teachers would receive extra help from mentor teachers during their first-year internships.

Oregon's TSPC recommended that the existing certification system based upon formal credentials be replaced with a system of certification based upon demonstrated teacher competencies. One part of a competency-based certification system was the installation of a one-year teaching residency prior to receiving basic certification.

1. The first objective of a residence is to provide more counseling, advice, and support to beginning teachers than currently is available without reducing them to the status of a trainee or intern. The additional support provided through the residency is meant to reduce teacher anxiety and get them on the right track sooner than can be achieved through the trial and error process currently in practice.

2. The second objective is to provide a more thorough evaluation system for beginning teachers than is currently available. Under this proposal, the residency is an opportunity for the school district to assess the teaching skills of a beginning teacher and work with the teacher for better mastery of those skills. The end result is a formal evaluation of the teacher to TSPC along with a recommendation for awarding the basic certificate (OECC, 1984, P.12).
To guide reform in teacher education during the planning period 1987-1993, the State Board of Higher Education proposed the five-year teacher preparation.

Believing that the following curricular sequence cannot be covered effectively in the traditional four-year curriculum, State System institutions should redesign their teacher preparation programs to cover these areas in a five-year program sequence: General Education, Major, Education 'Core,' Testing, Field Component, and Post-baccalaureate tracks.

The internship, in addition to a successful student teaching experience, is the major portion of the field component sequence. The extended field component should be designed as an opportunity for trainee-teachers to practice competencies required for success in the profession. Students should be evaluated in the internship by college supervisors and school district personnel and should be required to demonstrate proficiency in the areas required for successful teaching (Oregon State System of Higher Education, 1986, p. 5).

In order to assist colleges and universities in locating sites for internships, the Board of Higher Education also proposed that the state should offer financial or other incentives to school districts that cooperate with higher education in providing internship sites.

In 1989 The Oregon State System of Higher Education allowed state colleges and universities to choose whether to maintain the traditional four-year undergraduate teacher training program or implement the five-year graduate teacher training program. The University of Oregon already had an extended, five-year teacher program. Eastern Oregon State College decided to have both a four-year teacher training program and a five-year plan. Portland State University utilized a fifth-year program with the four-year program optional. Western State College continued their four-year undergraduate teacher training. Oregon State University will begin their fifth-year program in 1991.
However, this change in programs has been met with public outcry regarding the expense of a fifth-year program. The problems discussed include: undergraduate financial aid - only available until a baccalaureate degree was obtained; honoring program requirements now in place; and the conflict with beginning teachers who are being mentored under the auspices of House Bill 2020.

In 1987 two new educational reforms were adopted in the state of Oregon. During the 1987 regular session of the Oregon Legislative Assembly House Bill 2020 was passed. Also, the Oregon State System of Higher Education approved the Extended Teacher Education Program.

House Bill 2020 approved $3 million for the two-year program. This money from the General Fund was given to school districts to formally assign mentor teachers to beginning teachers during their first full year of teaching. Districts received about $3000 to provide support for each beginning teacher. In its first year about one hundred veteran teachers were mentors to approximately two hundred beginning teachers in twenty-two counties around the state.

Oregon's State System of Higher Education set new guidelines for a new extended teacher program:

1. Teacher preparation programs in the State System should be extended to five years to ensure that future teachers are well-educated, possess superior knowledge of the subject(s) they teach, have strong professional educations, and have adequate practice teaching in school settings.

2. All students should be required to complete a baccalaureate degree in a major outside of education. Institutions may offer interdisciplinary or liberal studies degrees especially designed for students working to become elementary school teachers. The undergraduate major in education should be eliminated.
3. Schools of education may offer education minors, concentrations, and courses for students desiring to begin their professional education courses before completing the baccalaureate degree in part of the extended five-year program.

4. Schools of education should provide early exposure to classroom situations for undergraduates considering careers in teaching. These field experiences should be available to all undergraduate regardless of whether they intend to enter the extended five-year program or the post-baccalaureate program.

5. Students entering the extended teacher education program as undergraduates should receive a baccalaureate degree when they complete their undergraduate majors, typically after the fourth year. During the fifth year of the program, students should be considered graduate students and a significant proportion of the coursework (a minimum of 50 percent) should apply toward a Master's degree. Students should complete all academic requirements for standard certification at the end of the fifth year (Office of Academic Affairs, 1987, p. 2).

Colleges and universities have initiated their own programs for the improvement of teacher education. In addition to the Mentor-Teacher Program, the Oregon State University - Western Oregon State College (OSU-WOSC) School of Education initiated the Beginning Teacher Clinic in 1986. The purpose of this clinic was to "supplement the Warranty Program and to provide some modest assistance to teachers during their first year in the classroom" (1986, p. 2). One of the three major ideas that the clinic participants felt would be of great help during the first year of teaching was "a mentor teacher."

The University of Oregon developed an extended, five-year teacher program which included an additional internship or residency in a public school. The Resident Teacher Master's Degree Program was an outgrowth of a program funded by Ford Foundation grants in Oregon in the early 1960's. The goals of the program were:
1. To bring educational theory and classroom practice into a closer functional relationship.

2. To provide for the development of professional skill through sustained practice under the guidance and supervision of competent school and university supervisors.

3. To make the transition into teaching smoother and more effective.

4. To assume joint responsibility for teacher education among public schools and institutions of higher education (The Resident Teacher Master's Degree Program, undated, p. 2).

The Cooperative Professional Education Program (CPEP), developed in 1982 by Portland State University and the Beaverton and Portland Public Schools, was "an alternative education experience providing an opportunity for a full year of on-the-job professional education and learning" (Cooperative Professional Education Experience - CPEP - An Alternative Education Experience, undated, p. 1). Credit for professional education courses were met during a one-year placement in a field-based learning experience carefully supervised and assisted by a mentor (a model classroom teacher) and a university supervisor. Elementary participants gained the theory and the practice of educational excellence while completing certification requirement.

Individual school districts have proposed and adopted measures to improve the quality of teachers within their own districts. For example, The Professional Enhancement Program, a program that was expected to "improve instruction of students; attract, retain, and motivate outstanding teachers; and provide additional compensation for teachers" (Beaverton Schools Board Clips, 1986) was unanimously adopted by the Beaverton, Oregon School Board. One of the seven components of this teaching enhancement plan, the career component, prepared teachers
for roles as mentors to those in need or assistance, either because a teacher was new or teaching an unfamiliar subject. Mentors will also worked with student teachers and university students who were completing a fifth-year education experience.

In 1985 the Metropolitan Life Insurance Company conducted a survey of elementary and secondary public school classroom teachers in each state. As part of the survey teachers were asked to state those steps which they thought would help most to produce good teachers in the future. Sixty-two percent felt requiring new teachers to serve a supervised apprenticeship or internship before being certified was one of those steps (Metropolitan Life Insurance Company, 1985, p. 11).

Mentoring and internships, practices which have been used successfully in medicine, law, business, pharmacy, the military, sports, clergy, law enforcement, and nursing, have also been proposed and employed in educational settings. All levels of the educational hierarchy have recommended and utilized mentoring and internship programs for the improvement of teacher education. In addition to coursework, modeling, and practica, mentoring and internships have been included as another method of improvement in the preparation of beginning teachers including their induction year of teaching.

**Effective Teaching Characteristics**

What is an effective teacher? Dr. Ernest L. Boyer, president of the Carnegie Foundation, defined a good teacher as "a person who loved the subject matter and knows it inside out, who believes in the potential of every student to learn and won't take 'no' for an answer, and who has the human ability - the warmth, the caring, the integrity - to reach
children and make them come alive as students" (Honig, 1985, p. 152).

Arthur Combs, a noted educator, defined the effective teacher as "a unique human being who has learned to use himself effectively and efficiently to carry out his own and society's purposes in the education of others. The good teacher has found ways of using himself, his talents, and his surroundings in a fashion that aids both his students and himself to achieve satisfaction" (1965, p.9).

Carter V. Good, in his Dictionary of Education (1973), defined teacher effectiveness as "the ability of a teacher to create a meeting and an interaction between the physical, intellectual, and psychological interests of the student and some given subject-matter content; and the ability of the teacher to relate the learning activities to the developmental process of the learners and to their current and immediate interests and needs" (p. 586). He defined teaching effectiveness as "the use of a plan for instruction or presentation which causes a desired change in the learner's behavior" (p.589).

New Jersey's Governor Thomas Kean appointed a panel of ten distinguished leaders in teacher education to determine (1) what things beginning teachers must know and (2) how effective teachers teach. The panel defined an effective teacher as "one who has clear goals and who delivers instruction in small increments but at an appropriate pace, interspersing questions to check on comprehension and providing many examples and clear directions. An effective teacher provides sufficient successful practice for all students, sees to it that all students are involved in learning, provides opportunities for independent work, and evaluates the progress of each student. An effective teacher must also be able to stimulate creative thought, help students evaluate what they
have learned, and prepare students to use their knowledge wisely" (Cooperman and Klagholz, 1985, p. 694).

An operational definition of the effective teacher recently emerged from teacher effectiveness research. The effective teacher was "the teacher whose classes regularly score higher on standardized achievement tests than do other teachers of similar students after entering differences among classes are statistically removed" (Barnes, 1983, p. 44).

Relationship Between Teacher Characteristics and Student Learning Gain

The term teacher effectiveness has been explored and defined across several dimensions of teaching. Early attempts to specify effective teaching often dealt with supervisors' ratings and evaluations in areas such as discipline, promptness, personality, and techniques of instruction. In the 1960's more attention was given to students' learning as an indicator of effective teaching, but emphasis continued on describing effective teacher characteristics. Greater focus on learning outcomes as a measure of effective teaching received considerable support in the mid-1970's and into the 1980's. Much of the contemporary focus has been deemed process-product research, that is, primary attention was given to instruction (process) and its effect on students' learning (product). Research in teacher effectiveness, conducted in the early 1980's, has been expanded to include not only the process-product paradigm, but, also, teachers' covert behavior such as intentions, goals, judgment, and decision-making strategies.

Dunkin and Biddle (1974) have proposed categorizing knowledge of teaching into six classes for analyzing the study of teaching:
1. **Conceptualizing the processes of teaching.** Processes refers to the actual activities associated with teaching.

2. **Discovering the rate at which the conceptualized processes occur.** Having identified the aspect of the instructional process, one could study the degree of frequency with which the phenomenon occurs.

3. **Identifying the relationships between the context for instruction and the process of instruction.** Context refers to those features of the instructional environment about which the teacher can do little, such as sex, ethnicity, and socioeconomic status of students.

4. **Understanding of "presage" factors.** Presage factors are variables related to the influence of general teacher characteristics or experiences on the instructional process.

5. **Understanding the relationships between the processes.** Research in this area investigates how processes interact with one another, such as the way in which teachers affect pupil behavior and vice versa.

6. **Process-products relationships.** Studies which investigate process-product relationships attempt to explore the ways in which and the degree to which certain processes associated with teaching activity contribute to change in learning outcomes (products).

Rosenshine and Furst (1973) reviewed studies that had correlated teacher behaviors with students' learning gains. They concluded that instruction was better when the following teaching characteristics were present:

- **Clarity** (in teaching presentations, assignments, directions)
- **Variability** (used different instructional methods)
- **Enthusiasm** (teachers were involved; voice inflection, gesture)
- **Indirectness** (questioning rather than lecturing; use of student ideas)
- **Task orientation** (businesslike behavior (there is a purpose to activities and assignments)
- **Student opportunity to learn material** (Was it taught? How much time was spent on it?)
- **Teacher use of structuring comments** (Comments which provide an overview for what is about to happen or has happened)
- **Multiple levels of cognitive discourse or questions**
- **Absence of teacher criticism**
- **Appropriate level of difficulty of course material** (1973, p. 155)
Soar and Soar (1976) found evidence of a relationship between classroom emotional climate and student achievement (negative affect was related to negative gain). A second finding was that closely structured learning activities (greater teacher directness) were related to low cognitive level learning outcomes, while teacher indirectness was related to growth in higher level cognitive activities. A third finding related somewhat to the second in that more learning occurred when an intermediate amount of teacher directness was present. Soars' major conclusion was that it was important for teachers to recognize differences in the cognitive level of a learning objective being sought and to provide teacher directness or indirectness, whichever the objective called for, in the optimum amount.

A review of research on teacher effectiveness done by Cruickshank (1976) reported that although some effective teacher behaviors were alike across grade levels, others seemed to be different. For example, a highly effective pattern for teaching second grade reading included: (1) use of small-group instruction, (2) use of a variety of instructional materials, (3) constant teacher monitoring and provision of corrective feedback, and (4) ability of the teacher to maximize direct instructional time in a reading group while maintaining a high level of interaction with students not in the group. Whereas, effective teachers of fifth-grade reading (1) spent considerable time discussing, explaining, questioning, and generally stimulating cognitive processes, (2) provided considerable independent work, and (3) used a variety of instructional techniques.

One area of teacher effectiveness research which produced the most consistent findings has been on the learning environment. Some studies
(Emmer, Evertson, & Anderson, 1980; Good & Grouws, 1979; Brophy & Evertson, 1979; Stallings, Needels, & Stayrook, 1979) found positive relationships between classrooms broadly described as "work-", "task-", or "academically-oriented" and student achievement gains. These terms usually described classrooms where teachers expected and required students to pay attention, to work persistently toward completion of assignments, to exhibit cooperative attitudes, and, in general, to concentrate on academic activities rather than socializing. According to two studies (Evertson, Anderson, and Brophy, 1978; McDonald and Elias, 1976), the amount of time allocated to academic tasks has been significantly related to student achievement.

Another factor, "a warm, supportive environment," was also consistently found to be positively related to student achievement (Emmer, Evertson, & Anderson, 1980; Good & Grouws, 1979, Brophy & Evertson, 1974; Stallings, Needels, & Stayrook, 1979). To achieve this warm, supportive environment, teachers praised students frequently when praise was deserved, respected student contributions to class, and provided specific praise which was offered in an appropriate manner. A warm, supportive environment was apparently more beneficial for low socioeconomic status (SES) students who responded better to more individual, private contacts with the teacher, whereas students of higher abilities benefited from learning situations where the teacher allowed them some autonomy.

The findings related to management of behavior (Kounin, 1970) characterized effective teachers as those who actively sought to prevent misbehavior through anticipation of problems and planned how to avoid those problems, rather than to wait for misbehavior to occur and then to
discipline the students. This ability of a teacher to communicate to
students that he or she was totally aware of everything that happened in
the classroom was referred to as "withitness".

In the area of classroom management, the effective teacher was
described as being "well-organized" (Stallings, Needels, and Stayrook,
1979). Well-organized teachers were able to establish routines and
procedures to guide and regulate pupil behaviors while still maintaining
a desirable degree of flexibility in the classroom. Effective teachers
also treated time as a valuable resource by making smooth transitions,
maintaining an appropriate pace, and using variety when changes are
necessary (Charles, 1981). They avoided abrupt transitions, such as
announcing a new activity before gaining the students' attention or
starting a new activity, then going back to the old activity. Effective
teachers began by securing students' attention before proceeding with
the lesson (Brophy and Evertson, 1979). From this point teachers used
one of several strategies which included stating objectives of the
lesson clearly and explicitly for students (Emmer, Evertson, and
Anderson, 1980), gave a rationale (Anderson, Evertson, and Brophy, 1979;
Good and Grouws, 1979), or reviewed content of previous lessons needed
for the upcoming presentation (Good and Grouws, 1979).

One teaching approach that was related to improved student learning
was direct instruction. Rosenshine (1983) suggested the following
instructional techniques as representative of effective teaching and
direct instruction. Effective teachers (1) established a clear focus on
academic goals, (2) were careful and explicit in structuring activities
and directing students in how to accomplish assigned work, (3) promoted
high levels of student academic involvement and content coverage, (4)
furnished opportunities for controlled practice with feedback, (5) held students accountable for work, and (6) had expectations that they would be successful in helping students learn. Effective teachers were also active in explaining concepts and procedures, promoting meaning and purpose for academic work, and monitoring comprehension. They also were able to establish and maintain high quality opportunities for students to engage meaningfully with content in classrooms. Recent process-product research studies (Stalling and Hentzell, 1978; McDonald, 1976) concluded that higher achievement gains were associated with orderly classrooms, persistent application to academic tasks, teachers' active involvement with students, and with a well-organized and structured learning situation.

In the study by Brophy and Evertson (1975), they found that the more effective teachers ran smooth, well-paced lessons with few interruptions, and their students worked consistently on assignments. The smoothness of lessons were due primarily to good preparation. Lessons were interesting and well-paced, and teachers did not invite trouble by such things as pausing to get things that should have been prepared earlier, look something up, or find a prop. High student engagement in seatwork appeared to result from a combination of work which was appropriate to student ability levels and interesting enough to maintain student interest.

The more successful teachers also had "automatic" mechanisms to insure that students who needed help could get it with minimal difficulty and disruption. Usually teachers designated certain students as ones to whom others should go to for help when necessary. The teachers also had a system to insure that the students knew what to do
when they finished assignments. Activities had been prepared that students could go to voluntarily, and each one knew exactly what was and was not allowed. Thus, there was no disorder created by students who had finished assignments and were bored because they had nothing to do, and there was no continual harassment of the teacher with questions about whether a student could do something.

Sandefur and Adams (1976) discussed several relationships found between indirect and other desirable teaching behaviors. There was evidence that the teacher's use of praise and encouragement of students, acceptance and use of their ideas, recognition of the affective climate, and asked and responded to student questions showed emphatic relationships with students being alert, responsible, confident, and initiating. Indirect teaching behavior also correlated positively with teachers in terms of their democratic behavior, responsibleness, and the extent to which teachers were steady, poised, and confident.

Brophy and Evertson (1975) found consistence in expected directions on certain attitudinal and belief system variables. The successful teachers tended to have a more internal focus of control, which lead them to assume more personal responsibility for their students' learning gains and general school experience, to believe that they could and would succeed in meeting their stated goals, to respond to frustrations with redoubled efforts and a tendency to find another way to reach the goal.

Other factors associated with teacher success in producing student learning gains included confidence that children would learn if taught properly; willingness to supplement or even change the curriculum if it did not seem to be doing the job (particularly among low SES teachers);
systematic collection of information about how children were doing (but typically through observation of group responses and seatwork responses or through informal tests rather than through more formal tests); careful and complete demonstrations of new material and careful checking to see that children understood how to do assignments before releasing them to work on their own; and a tendency to spend much time with individual children carefully observing their responses, even during group lessons (Good and Brophy, 1980; Hukill and Hughes, 1983; Woolfolk and McCune-Nicolich, 1984).

A model for the longitudinal study of the teaching effectiveness of teacher education graduates of Western Kentucky University was developed by Sandefur and Adams (1976). The model formed thematic clusters of the characteristics of good teaching and good teachers. Three major generalizations of a thematic nature were found, each with a number of subgeneralizations:

1. **Good teaching utilizes the maximal involvement of the student in direct experiential situations.**
   
a. Good teachers attempt to foster problem-oriented, self-directed, actively inquiring patterns of learning behavior in their students.

b. Good teachers elicit pupil-initiated talk and allow more pupil-initiated exploration and trial solutions.

c. Good teachers elicit independent thinking from their students.

d. Good teachers involve students in decision-making processes in active, self-directing ways.

e. Teachers who are interested in student involvement are less prone to dominate the classroom with lecture and other teacher activities.
2. Good teaching encourages maximal "freedom" for the student.
   a. Good teachers use significantly more praise and encouragement for the student.
   b. They accept, use, and clarify students' ideas more often.
   c. They give fewer directions, less criticism, less justification of the teacher's authority, and less negative feedback.
   d. They use a relaxed, conversational teaching style.
   e. They use more divergent questions, do more probing, and are less procedural.
   f. They are more inclined to recognize the "affective climate" in the classroom and are responsive to student feelings.
   g. Teachers with low dogmatism scores are more likely to use indirect methods than those with more closed-minded attitudes.

3. Good teachers tend to exhibit identifiable personal traits broadly characterized by warmth, democratic attitude, affective awareness, and a personal concern for students.
   a. Good teachers exhibit characteristics of fairness and democratic behavior.
   b. They are responsive, understanding, and kindly.
   c. They are stimulating and original in their teaching.
   d. They are responsible and systematic.
   e. They are poised, confident, and emotionally self-controlled.
   f. They are adaptable and optimistic.
   g. They are well-versed in subject matter and give evidence of a broad cultural background (1976, p. 72).

Methods of Measuring Teacher Effectiveness

Methods of measuring and correlating teacher behavior generally fall into three broad areas: (1) student tests of achievement and behavior; (2) rating scales; and (3) observations.
Student Tests. Trained observers watched teachers and students in a variety of settings and recorded their behaviors. From these observational records, teacher behaviors which related to student learning as measured by standardized tests were then identified. The criteria used to determine the effectiveness of different teachers' behaviors are almost always limited to scores on standardized achievement tests.

Researchers, however, have been careful to point out the limitations of this type of research. They caution not to assume causal relationships between teaching behaviors and achievement. "Because the researchers were unable to control many variables that impact upon achievement, the finding cannot be used as recipes for successful teaching" (Barnes, 1983, p. 44). A teacher may be effective in normal circumstances but not obtain proper results because students lack ability or interest in learning or because the school is poorly organized. Possibly, the ability to obtain good (or bad) scores on posttests merely reflects guessing, coaching, or regression effects and do not genuinely result from good (or bad) teaching.

Rating Forms. Rating forms probably represent the most common technique for measuring teacher behavior. On a typical form, students, other teachers, supervisors or administrators, parents, or some outsiders rate the teacher's abilities or performance. Rating normally take the form of Likert-type scales by which teachers are judged on "how well" they perform.

Howsam (1960) reviewed measures which used various kinds of rating scales commonly found in research: (1) self-ratings, proved of little use because there is a consistent bias toward overrating; (2) peer
ratings by colleagues, which seems to be based on marginal evidence; (3) 
student ratings, which seem to be more consistently and favorably 
treated in the literature; and (4) supervisor or administrator ratings, 
which do not correlate either with ratings of other supervisors or with 
other external measures. Supervisors' ratings seem to be highly biased 
and subjective.

Types of errors often mentioned with reference to rating scales 
included those due to "halo effect" - ratings of specific traits being 
influenced by general impressions of the person rated; "logical error" - 
where similar ratings were given to traits which seemed logically 
related; and "proximity error" - similar ratings were given to adjacent 
traits on the rating scale. Other types of errors included "stereotype 
error" - all persons of a certain kind were believed to be generally 
superior or inferior by the rater, "leniency or generosity error" - a 
tendency of the rater to rate low or high, no matter the reason, and 
"error of central tendency" - where average ratings predominate when the 
rater is uncertain (Englehart, 1972).

Combs (1965) states the following regarding the need for subjective 
judgments:

Perceptual psychologists are beginning to find out how 
to explore the nature of perceptions, but we do not yet 
have simple measuring devices to get at these aspects of 
human personality. This is an area in which we need a 
great deal more research. Meantime, if we are to im-
prove our selective processes it will be necessary for 
us to accept human judgments, values, and feelings as 
valid data upon which to make decisions. It may be that 
in doing this we will make some mistakes. This need not 
worry us unduly. Men have always had to proceed on the 
basis of the very best judgments they could make when 
they did not have other measures to work with. We may 
not wish to make such judgments, but we cannot avoid 
doing so. A professional worker is a person whose judg-
ment can be relied upon. It is this quality of judgment that separates professional work from mechanical. Only the profession can judge the effectiveness of its members. Excluding human judgment and experience from decision-making only compounds the error of accepting objective data uncritically, especially when such data are not related to our problems. Every profession which deals with human beings must make its most important decisions on the basis of judgments which cannot be set in numerical order. Teaching is a profession dependent upon human values, and these must be accepted as valid data for our operations (1965, p. 75).

Observations. Three common observational techniques are: categorical checklists, specimen record techniques, and open-ended forms. With the categorical checklist, the observer emphasizes a number of specified teacher or student behaviors. Scoring occurs at intervals, within time units, or on a continuum suggesting "excellent" to "poor". In using the specimen record technique, the observer focuses upon a specific person (teacher or student) and records all things the person says or does. With the open-ended form, the observer may concentrate on whatever he wants to write about or describe (Ornstein, 1976).

Some observation systems were low inference. They focused on specific events (e.g. does the student have a raised hand when the teacher calls upon him or her?). Other systems were high inference because they called for evaluative judgments about general traits (e.g. was the teacher warm, enthusiastic, stimulating?). There were classroom behavior systems that focused upon teachers and others that have been developed mainly to study students (Good and Brophy, 1980, p. 459).

The limitation with the categorical checklist was that this process ignored the richness of the interaction process of teaching. The principal limitation of the specimen record technique was the observer ignored the rest of the classroom. Also, the descriptions of the
behavior of the person being observed usually avoided interpretative or explanatory remarks often essential in fully understanding the intent and effects of behavior. With the open-ended form, the observer entered the room with biases and preconceived attitudes about teaching and what constitutes a good teacher. Since no controls or checklists existed to focus on or use as a guide during the observation, the observer enjoyed more latitude to see what he wanted or expected to see. The observer tended to concentrate on favored items and bypass others.

Variables such as clarity, task orientation, and enthusiasm were high inference characteristics. It was, therefore, decided to implement a rating scale that rated or evaluated such specific teacher behaviors.

Summary

Soar and Soar (1978) suggested that teacher behavior, student characteristics, and instructional content and goals interacted in complex ways. Good and Grouws (1975) noted that the pattern of teaching behavior were more important than the presence or absence of any single behavior.

Teacher education programs based on the research findings focused on the skills, behaviors, and knowledge exhibited by effective, experienced teachers. In order to bridge the gap between preparation and practice, mentoring has been shown as an important element during the induction phase of teaching. The professional knowledge base gained through theoretical study was linked with actual situation in the classroom and in school. The learning of beginning teachers was more realistic and lasting when it took place in a regular school and community setting, alongside skilled, dedicated, and experienced school
teachers. Beginning and experienced teachers worked together in a problem-solving mode in a school setting provided an exciting environment for training.

Measurement techniques which identified these patterns of instruction and behavior helped in the analysis of what took place in the classroom. With these measurement techniques it may be possible to assist a teacher to develop and make use of particular patterns of teacher influence. These patterns can, in turn, be evaluated in terms of learning outcomes.
Chapter 3

METHODOLOGY

The focus of this study was to obtain data which accurately described the effective teaching characteristics — those behaviors of teachers that can be examined for their effects on the teaching process — and then compared the effective teaching characteristics to determine if there were any significant differences between teachers who participated in the Mentor-Teacher Program and teachers who had not, but were judged to have comparable teaching potential.

This chapter discusses the procedures that were followed in this investigation. The design of the study, the population description and sampling procedures, the design of the instrument, the method of collecting data, and the analysis of the data are discussed.

**Design of the Study**

This study utilized a 3 x 4 factorial design: three levels of treatments — the three populations of subjects, and the four levels of years of beginning teachers.

The attribute variables in the study were: (1) the type of the subject's first-year teaching experience: (a) a G.T.A. intern in the Mentor-Teacher Program, (b) a teacher who was an Oregon State University graduate initially hired by a school district other than the Beaverton School District, Beaverton, Oregon, and (c) a beginning teacher who graduated from any college or university except Oregon State University and was initially hired by the Beaverton School District; and (2) the year of the subject's first-year teaching experience: 1982-83, 1983-84, 1984-85, and 1985-86.
The dependent variable, the data which were used to compare the three treatment groups of teachers in this study, were the degree of employment of each effective teaching characteristic in the six domains of teaching. The degree of employment was scored on a five point Likert-type scale. Also used to compare the data were the subtotals of the effective teaching characteristics in these teaching domains. Finally, an overall comparison was obtained by adding the subtotals of all the effective teaching characteristics. In this way a comparison was made of each effective teaching characteristic, of each domain of teaching, and of the overall total of effective teaching characteristics of the teachers in this study.

Population Description and Sampling Procedures

Treatment A

Teachers who participated in the Mentor-Teacher Program

The Mentor-Teacher Program had placed twenty-five graduate intern teachers in the Beaverton, Oregon School District since the 1982-83 school year: six during the 1982-83 school year, six during the 1983-84 school year, six during the 1984-85 school year, and seven during the 1985-86 school year. Because the number of interns in the program were so small, it was decided to use all the interns from each year for the sample (N = 25).
Treatment B

Teachers who graduated from OSU and were judged to have comparable teaching potential

The writer gave lists of the graduates in elementary education for each of the past four years (1982-1985) to seven faculty members of the Elementary Education Department at Oregon State University, Corvallis, Oregon. Each faculty member was asked to select ten graduates who had exhibited at the time of their graduation the potential of becoming outstanding elementary school teachers. Opportunity was made for faculty members to add a name(s) to lists if it had been omitted.

The combined lists from the faculty were then tallied for each of the four years. Those teachers already chosen as interns were omitted from the tally as they were a separate sample to be studied. The number of subjects was to be equal to the number of interns from each respective graduation year (N = 25).

Treatment C

Beginning teachers in the Beaverton, Oregon School District

A list of beginning elementary teachers hired by the Beaverton School District, during the past four years (1982-1985) was obtained from that district. Intern teachers and outstanding OSU graduates were among the teachers hired by the Beaverton district, but omitted from the list as they were separate samples to be studied. The beginning teachers were placed into groups according to the year they were hired by the district. The number of subjects was to be equal to the number of interns from each respective graduation year (N = 25).
The sampling design used for this study was a $3 \times 4$ factorial design: three populations of subjects, and the four levels of years of beginning teachers. The data is presented in Table 3-1.

<table>
<thead>
<tr>
<th>First year of Teaching</th>
<th>Mentor-Teacher Program</th>
<th>OSU - Outstanding Potential</th>
<th>Beaverton Beginning Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>1983</td>
<td>6</td>
<td>6</td>
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</tr>
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<td>1984</td>
<td>6</td>
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<td>1985</td>
<td>7</td>
<td>7</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>$N = 25$</td>
<td>$N = 25$</td>
</tr>
</tbody>
</table>

Design of the Instrument

To determine which effective teaching characteristics differentiated the samples, an instrument was sought to measure the effective teaching characteristics. First, a review of literature and potential measures was initiated.

An instrument was sought to determine effective teaching characteristics which were reviewed in the literature. The Florida Performance Measurement System (FPMS) was selected and modified. The FPMS consisted of a rating system which included the six domains of teaching. The six domains were:

1. Planning
2. Management of Student Conduct
3. Lesson Organization and Development
4. Presentation of Subject Matter
5. Communication: Verbal and Nonverbal
6. Testing: Student Preparation, Administration, Feedback
Validity and Reliability of the Instrument

The six domains of teaching were scrutinized by practicing educators and were submitted to nationally recognized authorities in the field of teacher effectiveness research for content validity. Each of the behavioral indicators were traced from its source in research literature, to the summative instrument, which exemplified sound measurement practices that lead to content validity.

Internal consistency reliability estimates (coefficient Alpha) were computed separately for the two scales of the FPMS. The results (.79 and .71) indicated that the items within each scale were related to each other to a satisfactory degree.

Reliability estimates were computed separately for the two scales. Use of the scaling techniques derived from the norming study indicated to a satisfactory degree for preliminary use of the system that:

- the same observers coded the same behaviors in the same way over time (.92 and .85)
- different observers coded the same behaviors in the same way (.98 and .98)
- different observers on different lessons (occasions) coded the same teachers in the same way (.91 and .84)

The Rating Scale

Each effective teaching characteristic was rated on the Likert-type scale with values ranging from a low of 0 to a high of 4.

0 The teacher exhibited no competence in this effective teaching characteristic.

1 The teacher exhibited low competence in this effective teaching characteristic.
2 The teacher exhibited moderate competence in this effective teaching characteristic.

3 The teacher exhibited good competence in this effective teaching characteristic.

4 The teacher exhibited exceptional competence in this effective teaching characteristic.

Data Collection

A letter was sent to each subject in the three treatment groups which asked them to participate in this study. The letter explained that this study was attempting to identify the effective teaching characteristics of outstanding beginning teachers, and that having been identified as an outstanding beginning teacher, their role was to allow their principal to use this survey instrument to identify these teaching characteristics. Also, this letter answered potential questions regarding this study and the use of the information obtained, stated the confidentiality of the information gathered, and emphasized that this information would not be used for evaluative purposes. (See Appendix A and C). A letter written by Dr. Steven Lynch, Director of Beaverton's Elementary Schools, urged Beaverton teachers to participate in study was also enclosed with the solicitation letters. (See Appendix B).

If permission was granted to include the teacher as a subject in the study, the volunteer's principal was sent a packet of materials. (See Appendix E and F). The packet included (a) two cover letters re-explaining the purpose of this study and the procedures that were to be followed to complete it; one letter for the participant and the other for the principal doing the rating, (b) a page that was completed by the subject regarding demographic information - sex, age, year of college
graduation, years of teaching experience, number of schools taught in, overall college G.P.A., the G.P.A. for the last two years of college, post-graduate credit hours/degree(s), graduate work G.P.A., and involvement in any mentoring programs, (See Appendix H) and (c) one copy of the Context Complexity Scale, a scale developed by Gallagher and Fielder (1979) which assessed the complexity of the context of the teacher's setting in relation to (1) Organization of Instruction, (2) Instructional Support, (3) Physical Facilities, (4) Pupil Characteristics, and (5) School Administrator, and an overall rating scale of all five factors which best characterized the teacher's setting (See Appendix I) and (d) two copies of the survey instrument, one for the subject and one for the principal (See Appendix J).

The subject's principal was asked to respond to the survey instrument by circling the number, 0 to 4, on the Likert-type scale which best corresponded to the degree the subject employed each effective teaching characteristic. Although the principal may have discussed the teaching characteristics listed on the survey with the subject, the principal was asked to rate the subject without the subject's actual assistance. The principal could, however, use notes, observations, and any other methods to assist his/her rating of the subject.

When the rating was completed the principal obtained the demographic information section from the subject and returned it along with the completed survey instrument in the addressed envelope to The Department of Planning and Program Evaluation, Beaverton School District #48, P.O. Box 200, Beaverton, Oregon 97075.

A thank-you letter was sent to each subject and principal for their participation in this study.
Analysis of Data

For each effective teaching characteristic the hypothesis was:

\( H_0: \) There is no significant difference between the effective teaching characteristics, individually nor totally, of the three treatment groups of teachers.

One-way analysis of variance (ANOVA) was used to test the null hypothesis that there was no significant difference between each effective teaching characteristic of the three treatment groups of teachers. The F statistic with the .05 significance level was used to retain or reject the hypothesis.

ANOVA was used to compare each effective teaching characteristic on the instrument. The effective teaching characteristics were also clustered by domains and an ANOVA was used to compare the difference between the subtotals of the six domains of the three groups of teachers. A final ANOVA was used to compare the overall totals of effective teaching characteristics of the three groups of teachers.

To determine the potential effect of the teaching context of each subject's environment, a Pearson product-moment correlation was computed for each of the three groups. The Context Complexity Scale was correlated with the overall score of the effective teaching characteristics survey done by the principal.
Chapter 4

PRESENTATION OF THE FINDINGS

It was the purpose of this study to identify the effective teaching characteristics of teachers who have participated in the Mentor-Teacher Program and teachers who have not, but were judged to have comparable teaching potential, and then determine if there were any significant differences between these groups of teachers.

There was an attempt to answer the following research questions:

1. What does the literature indicate are the effective teaching characteristics exhibited by master teachers?

2. To what degree are these effective teaching characteristics exhibited by teachers who have participated in the Mentor-Teacher Program?

3. To what degree are these effective teaching characteristics exhibited by teachers who have not participated in the Mentor-Teacher Program, but who were judged to have comparable teaching potential?

4. What is the difference in effective teaching characteristics between these groups and is it significant?

A survey instrument was utilized for data gathering. It was designed with three parts. Part I was a demographic profile of the teachers involved in this study. Part II, the Context Complexity Scale, was used to allow teachers in this study to assess the context of the setting in which they taught. Teachers were asked to describe their teaching setting in relation to five factors: (1) Organization of Instruction, (2) Instructional Support, (3) Physical Facilities, (4) Pupil Characteristics, and (5) School Administrator. Part III was the Effective Teaching Characteristics Survey Questionnaire. Twenty-three effective teaching characteristics were grouped into six domains of teaching: (1) Planning, (2) Management of Student Conduct, (3) Lesson
Organization, (4) Presentation of Subject Matter, (5) Communication, and (6) Testing. Teachers were rated by the degree to which they employed each effective teaching characteristic.

The Population

The initial mailing asked eighty-two beginning teachers to volunteer for participation was sent May 1987. Due to the timing of this letter the response was small. A revised listing of the teachers' present addresses/school districts was made and a second letter asked for participation in this study was sent October 1987. In order to have closure, teachers who had elected to participate in this study but had not returned the survey questionnaire were sent a reminder by The Department of Planning and Program Evaluation, Beaverton School District, in January 1988.

Of the eighty-two letters initially sent to solicit teachers for this study sixty-eight were answered for an eighty-three percent return: twenty-nine "yes" responses (a thirty-five percent return), nineteen "no" responses (a twenty-three percent return), twenty "not teaching at this time" (a twenty-four percent return), and fourteen "no responses" (a seventeen percent return). The twenty-nine "yes" responses were distributed in this way: nine G.T.A. intern teachers, eight outstanding Oregon State University graduates, and twelve Beaverton School District teachers.

Though the number of teachers who volunteered to participate was disappointingly low, it was decided to use those twenty-nine responses in this study to see what results would occur between the three treatment groups of beginning teachers.
A composite descriptive profile of the "typical" teacher in this research sample was generated from Part I, the demographic data, and summarized the type(s) of teachers found in each of the three treatment groups. This demographic profile can be found in Table 4-1. To summarize each treatment group of teachers in this study is to present the "typical" teacher based on the demographic profile information.

The "typical" G.T.A. intern teacher was a twenty to twenty-four year old female who graduated from college (Oregon State University) in 1984 or 1985. She maintained a 3.0 to 4.0 grade point average (G.P.A.) throughout her college training and it rose to a 3.6 to 4.0 G.P.A. during the last two years in school. She earned at least forty-five graduate credits and most likely had her Master's degree. She had a 3.6 to 4.0 G.P.A. in her graduate work. She taught elementary school for two to three years in one or two schools since graduating from college. She had not been a substitute teacher. She participated in a formal mentoring program, the Mentor-Teacher Program.

The "typical" outstanding Oregon State University graduate was a twenty-five to thirty-four year old female who graduated from the university in 1984 or 1985. She had a 2.6 to 3.5 G.P.A. during her college work and it increased to 3.6 to 4.0 G.P.A. during her last two years of college. She earned less than twenty-four graduate credits since graduation. She had a 3.6 to 4.0 G.P.A. in her post-graduate studies. She taught elementary school for three years or less and taught in one or two schools. She might have substitute taught. She was not involved in any formal or informal mentoring/internship program.

The demographic profile shows the "typical" Beaverton School District teacher to be a female, twenty-five to twenty-nine years old.
She graduated from college in 1981 through 1984. She had a 3.6 to 4.0 G.P.A. throughout her college courses and maintained this average in her graduate work. She had either less than twenty-four graduate credits or over seventy-five credits and/or her Master's degree. She had four to six years experience as an elementary school teacher in one, two, or three schools. She may have experience as a substitute teacher. She had been involved in some kind of informal mentoring program, and if she had been in a formal mentoring program it was the Cooperative Professional Education Experience (CPEP) through Portland State University.

Table 4-1 is the demographic data used to compose the profile of each of three treatment groups of beginning teachers.

| Table 4-1. Part I, the Demographic Profile of Teachers in the Three Treatment Groups |
|---------------------------------|-------|--------|--------|
|                                 | G.T.A.'s | O.S.U. | BEAVERTON |
| Age                             |         |        |         |
| Younger than 20                 | 0       | 0      | 0       |
| 20 - 24                         | 5       | 1      | 0       |
| 25 - 29                         | 3       | 3      | 9       |
| 30 - 34                         | 1       | 3      | 2       |
| 35 - 39                         | 0       | 1      | 1       |
| Sex                             |         |        |         |
| Female                          | 7       | 7      | 10      |
| Male                            | 2       | 1      | 2       |
| Year Graduated From College     |         |        |         |
| 1981                            | 0       | 0      | 3       |
| 1982                            | 1       | 2      | 3       |
| 1983                            | 1       | 0      | 2       |
Table 4-1 (cont.)

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<thead>
<tr>
<th></th>
<th>GTA's</th>
<th>O.S.U.</th>
<th>Beaverton</th>
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</thead>
<tbody>
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<td>3</td>
<td>3</td>
<td>3</td>
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<td>4</td>
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<td>0</td>
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<tr>
<td>Other</td>
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Overall College G.P.A.

<table>
<thead>
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<td>1</td>
<td>7</td>
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<tr>
<td>3.0 - 3.5</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2.6 - 2.9</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2.0 - 2.5</td>
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Last Two-Year G.P.A.

<table>
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<th>GTA's</th>
<th>O.S.U.</th>
<th>Beaverton</th>
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<tbody>
<tr>
<td>3.6 - 4.0</td>
<td>8</td>
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<td>3.0 - 3.5</td>
<td>1</td>
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<td>2</td>
</tr>
<tr>
<td>2.6 - 2.9</td>
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<tr>
<td>2.0 - 2.5</td>
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</table>

Post Graduate Credit

Hours/Degrees

<table>
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<th>Credits Range</th>
<th>GTA's</th>
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<th>Beaverton</th>
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</thead>
<tbody>
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<td>0 - 23 credits</td>
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</tr>
<tr>
<td>24 - 44 credits</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>45 - 59 credits</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>60 - 74 credits</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>75 credits/Master's</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Post-Graduate G.P.A.

<table>
<thead>
<tr>
<th>Grade Range</th>
<th>GTA's</th>
<th>O.S.U.</th>
<th>Beaverton</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6 - 4.0</td>
<td>9</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>3.0 - 3.5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.6 - 2.9</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.0 - 2.4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Years of Teaching Experience

<table>
<thead>
<tr>
<th>Years</th>
<th>GTA's</th>
<th>O.S.U.</th>
<th>Beaverton</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 4-1 (cont.)

<table>
<thead>
<tr>
<th>G.T.A.'s</th>
<th>O.S.U.</th>
<th>BEAVERTON</th>
</tr>
</thead>
</table>

Number of Schools Taught
In Since College

| 0 schools | 0 | 0 | 0 |
| 1 | 3 | 3 | 5 |
| 2 | 4 | 4 | 4 |
| 3 | 2 | 0 | 3 |
| 4 | 0 | 0 | 0 |
| 5 | 0 | 1 | 0 |
| 6 | 0 | 0 | 0 |

Have Substituted

| Yes | 1 | 4 | 6 |
| If yes, for how long | 2 months | 2 months to 1 year | 2 months to 8 years |
| No | 8 | 4 | 6 |

Involvement In Any Mentoring/Internship Programs

| Yes, in a formal m/i program | 9 | 0 | 2 |
| Yes, in an informal program | 0 | 0 | 6 |
| Yes, other | 0 | 0 | 0 |
| No | 0 | 8 | 4 |

The most obvious similarities in the three samples were (a) each group of teachers was almost entirely female, (b) the teachers in all three samples earned a 3.6 to 4.0 G.P.A. for the last two years of college, (c) they all maintained this 3.6 to 4.0 G.P.A. in their postgraduate work, and (d) they taught in one or two elementary schools since college graduation.

There were more differences in the three samples of beginning teachers. (a) the G.T.A. teachers were younger than the other two groups, (b) more of the G.T.A. teachers were recent graduates from college, (c) the outstanding O.S.U. teachers earned the lowest overall college G.P.A. of the three groups, (d) the G.T.A. teachers and the
Beaverton teachers earned more graduate credits and/or a Master's degree, however, a Master's degree was an integral part of the Mentor-Teacher Program, (e) the Beaverton teachers had more years of teaching experience than did the other two groups, (f) more O.S.U. and Beaverton teachers had been substitute teachers, and (g) none of the O.S.U. teachers had been involved in any informal and/or formal mentoring/internship program, and those Beaverton teachers who had been involved were either in an informal mentoring program or the Cooperative Professional Educational Experience (CPEP) through Portland State University.

One-Way Analysis of Variance

The one-way analysis of variance test (ANOVA) was used to treat the data. The ANOVA compared the means of each of the three treatment groups with each of the others to determine if there was a significant difference between the groups of teachers. The .05 level of significance was used to determine whether to accept or reject the null hypothesis.

\[ H_0: \text{There is no significant difference between the effective teaching characteristics, individually nor totally, of the three treatment groups of teachers.} \]

If the computed value was less than the value indicated in the statistical value table at the .05 level of significance, the null hypothesis was retained. If the computed value was equal to or greater than the tabular value, the null hypothesis was rejected. In all, thirty hypotheses were tested: twenty-three for each effective teaching characteristic, one hypothesis for each of the six domains of teaching,
and one hypothesis for the overall total score of effective teaching characteristics.

**Summary of the Findings**

The following results were based on the analysis of the data. The computed F value was less than the tabular value of 3.34 at the .05 level of significance for all twenty-three effective teaching characteristics, for all six domains of teaching, and for the one overall total of effective teaching characteristics. Conversely, the computed F value was equal to or greater than the tabular value of 3.34 at the .05 level of significance for none of the thirty ANOVA tests: the twenty-three effective teaching characteristics, the six for the teaching domains, and for the one overall total score of the effective teaching characteristics. The results of the analysis of variance tests are shown in Appendix K.

**Discussion**

The null hypothesis was retained for all effective teaching characteristics. There were five effective teaching characteristics with F values close to the 3.34 level of significance: (a) effective praise (2.914), (b) management of seatwork/homework (2.467), (c) efficient use of time (2.325), (d) formative feedback (2.051), and (e) review of subject matter (2.033).

The above-mentioned effective teaching characteristics might be better explained if they were viewed in relation to the domain in which they were a part. Table 4-2 shows these relationships.
Table 4-2. The Relationship of Effective Teaching Characteristics Where the Null Hypothesis Was Rejected and/or Had a High Level of Significance

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>NULL REJECTED</th>
<th>SIGNIFICANCE LEVEL HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>II</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>III</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>IV</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VI</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>0</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

It now appears that the domain with the most F values above or near to the level of significance is Domain III - Instructional Organization and Development - with three scores. If there was any area(s) which might illustrate a difference between the three treatment groups of teachers it would be Domain III.

However, of the thirty analysis of variance tests, fifteen scored less than the 1.000 level of significance, indicating the low level of significant difference between the groups. Domains I - Planning, IV - Presentation of Subject Matter, and V - Communication had no hypothesis rejected and/or even with a high significance level. Domains II - Management of Student Conduct, and VI - Testing had only one characteristic rejected and/or of high significance level.

In order to further determine if a significant difference occurred between the three treatment groups of teachers the Tukey's Least Significant Difference Test (L.S.D. Test) was employed. The L.S.D. Test compared each individual mean with every other mean. This test was to separate out those individual means which were significantly different,
along with those which were not different. The Tukey's Test determined the critical difference between Group 1, the Mentor-Teachers' group means, with Group 2, the Outstanding OSU teachers' means, and Group 3, the Beaverton teachers' means. It also compared Group 2's means with Group 3's means. In this way any significant difference between any two of the groups of teachers was determined.

Because in each of the ANOVA tests for the twenty-three effective teaching characteristics, the six domains of teaching, and the one overall total score of effective teaching characteristics the null hypothesis was retained, a Tukey's L.S.D. Test was employed for all thirty ANOVA tests. There was no critical difference found between any of the means of the three treatment groups of teachers in any of the thirty ANOVA tests examined.
Table 4-3. The Results of the One-Way Analysis of Variance.

RESULTS OF THE ONE-WAY ANALYSIS OF VARIANCE

<table>
<thead>
<tr>
<th>EFFECTIVE TEACHING CHARACTERISTIC</th>
<th>G.T.A</th>
<th>O.S.U.</th>
<th>BEAVERTON</th>
<th>COMPUTED F</th>
<th>TABULAR F</th>
<th>HYPOTHESIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. PLANNING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content Coverage</td>
<td>13.56</td>
<td>14.13</td>
<td>13.67</td>
<td>.421</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Utilization of Instructional Materials</td>
<td>7.22</td>
<td>7.13</td>
<td>6.83</td>
<td>.468</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Activity Structure</td>
<td>7.00</td>
<td>7.50</td>
<td>7.33</td>
<td>.879</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Goal Focusing</td>
<td>6.78</td>
<td>6.63</td>
<td>6.75</td>
<td>.043</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>II. MANAGEMENT OF STUDENT CONDUCT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rule Explication and Monitoring</td>
<td>7.44</td>
<td>7.00</td>
<td>6.92</td>
<td>1.053</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Teacher Withitness</td>
<td>10.44</td>
<td>10.38</td>
<td>10.33</td>
<td>1.465</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Group Alert</td>
<td>3.11</td>
<td>3.38</td>
<td>2.92</td>
<td>1.708</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Movement</td>
<td>6.33</td>
<td>6.63</td>
<td>6.06</td>
<td>.742</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Effective Praise</td>
<td>6.78</td>
<td>7.75</td>
<td>7.50</td>
<td>2.914</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>III. INSTRUCTIONAL ORGANIZATION AND DEVELOPMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficient Use of Time</td>
<td>14.78</td>
<td>14.36</td>
<td>13.50</td>
<td>2.325</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Review of Subject Matter</td>
<td>3.22</td>
<td>3.63</td>
<td>3.17</td>
<td>2.033</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Lesson Development</td>
<td>10.44</td>
<td>11.00</td>
<td>10.17</td>
<td>1.367</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Teacher Treatment of Student Talk</td>
<td>7.22</td>
<td>7.13</td>
<td>7.06</td>
<td>.062</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
</tbody>
</table>
Table 4-3 (con't.)

RESULTS OF THE ONE-WAY ANALYSIS OF VARIANCE

<table>
<thead>
<tr>
<th>EFFECTIVE TEACHING CHARACTERISTIC</th>
<th>C.T.A.</th>
<th>O.S.U.</th>
<th>BEAVERTON</th>
<th>COMPUTED F</th>
<th>TABULAR F</th>
<th>HYPOTHESIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Academic Feedback</td>
<td>10.56</td>
<td>10.38</td>
<td>10.25</td>
<td>.097</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Management of Seatwork/Homework</td>
<td>14.22</td>
<td>14.63</td>
<td>13.50</td>
<td>2.467</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>IV. PRESENTATION OF SUBJECT MATTER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation of Conceptual Knowledge</td>
<td>10.11</td>
<td>9.63</td>
<td>9.50</td>
<td>.401</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>V. COMMUNICATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control of Discourse</td>
<td>7.22</td>
<td>6.63</td>
<td>6.83</td>
<td>.764</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Task Attraction and Challenge</td>
<td>7.36</td>
<td>7.25</td>
<td>7.30</td>
<td>.280</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Teacher's Speech</td>
<td>2.89</td>
<td>3.36</td>
<td>3.06</td>
<td>1.123</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Body Language</td>
<td>3.67</td>
<td>3.38</td>
<td>3.42</td>
<td>.665</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>VI. TESTING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation for Testing</td>
<td>10.00</td>
<td>10.00</td>
<td>9.5E</td>
<td>.206</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Test Administration</td>
<td>10.89</td>
<td>10.88</td>
<td>10.42</td>
<td>.744</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>Formative Feedback</td>
<td>10.78</td>
<td>10.38</td>
<td>9.75</td>
<td>2.051</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
</tbody>
</table>
Table 4-3 (con't.)

RESULTS OF THE ONE-WAY ANALYSIS OF VARIANCE

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>G.T.A.</th>
<th>G.S.U.</th>
<th>BEAVERTON</th>
<th>COMPUTED F</th>
<th>TABULAR F</th>
<th>HYPOTHESIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. PLANNING</td>
<td>34.56</td>
<td>35.38</td>
<td>34.58</td>
<td>.173</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>II. MANAGEMENT OF STUDENT CONDUCT</td>
<td>34.11</td>
<td>35.13</td>
<td>33.75</td>
<td>.499</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>III. INSTRUCTIONAL ORGANIZATION AND DEVELOPMENT</td>
<td>60.56</td>
<td>61.13</td>
<td>57.67</td>
<td>1.597</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>IV. PRESENTATION OF SUBJECT MATTER</td>
<td>10.11</td>
<td>9.63</td>
<td>9.50</td>
<td>.401</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>V. COMMUNICATION</td>
<td>21.33</td>
<td>20.63</td>
<td>20.67</td>
<td>.254</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
<tr>
<td>VI. TESTING</td>
<td>31.67</td>
<td>31.25</td>
<td>29.75</td>
<td>1.131</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EFFECTIVE TEACHING CHARACTERISTIC</th>
<th>G.T.A.</th>
<th>G.S.U.</th>
<th>BEAVERTON</th>
<th>COMPUTED F</th>
<th>TABULAR F</th>
<th>HYPOTHESIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERALL TOTAL</td>
<td>192.33</td>
<td>193.13</td>
<td>185.92</td>
<td>.767</td>
<td>3.34</td>
<td>RETAIN</td>
</tr>
</tbody>
</table>
The Context Complexity Scale

The Context Complexity Scale (CCS) was included to allow each teacher in this study to assess the complexity of context of the educational setting in which he/she taught. The CCS rated five factors of the teacher's school setting: (1) Organization of Instruction, (2) Instructional Support, (3) Physical Facilities, (4) Pupil Characteristics, and (5) School Administrator. The teacher was also asked to consider all five factors and rate the school's overall setting.

The CCS was correlated with the overall score of the effective teaching characteristics survey done by the principal using the Pearson product-moment correlation coefficient. This statistic was used because a low context rating might greatly affect the subject's rating of effective teaching characteristics. A teacher in a difficult teaching situation might not be rated as positively as he/she might have been in a more positive teaching situation. Conversely, high relationships between complexity and teaching are often related to teaching success.

The results of the Pearson product-moment correlation are found in Table 4-4.

<table>
<thead>
<tr>
<th></th>
<th>G.T.A. Teachers</th>
<th>O.S.U. Teachers</th>
<th>Beaverton Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.344</td>
<td>.016</td>
<td>-.050</td>
</tr>
</tbody>
</table>
Discussion

Based on analysis of the Pearson product-moment correlation coefficients, the G.T.A. intern teachers, with a .344 coefficient, had the highest correlation of the three groups. The value is interpreted as a small, positive correlation. The outstanding O.S.U. teachers had a correlation coefficient of .016, a slight, almost negligible positive relationship. The Beaverton teachers had a -.050 coefficient, a slight, almost negligible negative relationship.

The relationship between the Context Complexity Scale rating and the overall score of the effective teaching characteristics for each group of teachers is illustrated by the following three scatterplots, one for each of the groups of teachers in this study.

Figure 4-1. The G.T.A. Teachers' Scatterplot has an $r = .344$.  

![Scatterplot](image-url)
Figure 4-2. The O.S.U. Teachers' Scatterplot has an $r = .016$.

![Scatterplot for O.S.U. Teachers]

Figure 4-3. The Beaverton Teachers' Scatterplot has an $r = -.050$.

![Scatterplot for Beaverton Teachers]
It is important, however, to use caution in interpreting the correlation coefficients. The correlation coefficient "acts only as a descriptor of what may have happened, not what might have made a situation exist" (Courtney, 1984, p. 521). It was easy to rationalize that if two sets of scores are highly correlated, one of the variables had caused the other to change.

In this study it is important to note the low and/or negative coefficients when viewing the coefficients of the three treatment groups of teachers. In this study it appeared that the complexity of the teaching situation didn't seem to be strongly correlated with the score of the effective teaching characteristics. This suggests that these outstanding teachers were able to overcome any teaching situation in which they taught.

Another factor to be considered regarding correlation is that with such a restricted sample it was difficult to determine if, indeed, there was any correlation between the complexity of the context in which these teachers taught and their scores of the effective teaching characteristics. With such a small population any difference in one or two context complexity ratings would significantly affect the correlation coefficient. Statistically, there was too much variance with the three populations to determine any relationship between teaching context and the score of effective teaching characteristics.

Limitations

There were limitations to the conclusions one can draw from this study. Those caveats were:
1. **The population size.** Although the number of teachers who volunteered to participate in this study was disappointingly low, it was decided to use those twenty-nine responses to see what, if any, differences might occur between the three treatment groups. However, the data analysis can suggest the direction other hypotheses might take in future studies with the practice of mentoring. For example, one could analyze the differences between different groups who have been involved in some form of mentoring or why twenty-four percent of teachers deemed outstanding are not working as teachers by the fourth year of teaching. This study may prove to be the initial one of many concerning the participants of a mentoring program.

2. **The "halo effect."** The halo effect, the rating of specific traits being influenced by general impressions of the persons rated, might have occurred by the principals who did the actual rating of their own teacher(s). There was no neutral rating by those principals that would lead one to conclude that there was bias toward the teachers surveyed in this study.

3. **The training of the observers.** The principals who did the actual rating using the survey instrument were not trained in its use. Principals may have varied in the way the instrument was employed and the "base data" were collected and discussed with the subjects.

   Difficulty in rating several subjects by one principal may also have occurred. Perhaps an inordinate number of subjects were rated by one principal and unintentionally a principal may have pitted one excellent teacher against another in the same building thinking that one teacher had to be "more outstanding" than the other. This would lead to skewed ratings of some teachers who, if they rated separately without
being compared to others, may have received a different rating.

4. The bias of the instrument toward direct teaching. This survey instrument measured those behaviors of teachers that can be examined for their effect on the teaching process. However, the qualities of effective teaching make up more than those found by observing direct teaching. There are other attributes of excellent teachers such as decision-making skills, empathy, flexibility, and collegialness that were not measured by this rating scale.

Because of the complexity of ascertaining the quality of beginning teachers, the practice of mentoring, and the Mentor-Teacher Program itself, it was decided to focus on the comparison of three small groups of beginning teachers for use in this study.

Based on the analysis of the data presented in this chapter, the final chapter will discuss the conclusions and implications related to these findings.
Chapter 5
SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The purpose of this study was to compare the effective teaching characteristics of teachers who participated in the Mentor-Teacher Program with teachers who did not, but were judged to have comparable teaching potential.

The study then sought to determine if mentoring could be a practice appropriate and beneficial for teachers during the induction or beginning stage of teaching. First, the writer reviewed the literature pertaining to the practice of mentoring and internship programs. It was also necessary to review the literature identifying and describing the effective teaching characteristics of master teachers. These effective teaching characteristics would then be incorporated as essential elements of mentor and internship programs for beginning teachers.

The study focused on the following questions:

1. What does the literature indicate are the effective teaching characteristics exhibited by master teachers?

2. To what degree are these effective teaching characteristics exhibited by teachers who participated in the Mentor-Teacher Program?

3. To what degree are these effective teaching characteristics exhibited by teachers who did not participate in the Mentor-Teacher Program, but who were judged to have comparable teaching potential?

4. What is the difference in effective teaching characteristics between these groups and is it significant?

Eighty-two outstanding beginning teachers were solicited to participate in this study determining the degree to which effective teaching characteristics were exhibited by these teachers. The twenty-nine "yes" responses were distributed in this way: nine G.T.A. intern
teachers, eight outstanding Oregon State University graduates, and twelve Beaverton School District teachers.

A three-part survey questionnaire was utilized to gather the data. The twenty-nine returned questionnaires were used for the final data analysis. The one-way analysis of variance test (ANOVA) was used to compare the means of each of the three treatment groups of teachers with the others to determine if there was a significant difference between the groups.

Summary of the Findings

ANOVA tests were computed for each of the twenty-three effective teaching characteristics in Part III of the questionnaire, one for each of the six domains of teaching, and one for the overall total of effective teaching characteristics. All twenty-three effective teaching characteristics retained the null hypothesis that there was no significant difference between the three treatment groups of teachers. The null hypothesis was also retained in all six domains of teaching and in the overall total of effective teaching characteristics.

There were five effective teaching characteristics with high F values close to the 3.44 level of significance: (a) effective praise, (b) management of seatwork/homework, (c) efficient use of time, (d) formative feedback, and (e) review of subject matter.

When the high F value effective teaching characteristics were compared with the domain in which they were a part, Domain III - Lesson Organization, appeared to have the highest number with three, and Domains II - Management of Student conduct, and VI - Testing, had only one high F score each.
The domains with no hypotheses that were either rejected and/or of high F value were Domains I - Planning, IV - Presentation of Subject Matter, and V - Communication.

In Part II, the Context Complexity Scale, the G.T.A. intern teachers had a Pearson product-moment correlation coefficient of .344. This was interpreted as a low, positive correlation. The O.S.U. teachers had a correlation coefficient of .016, a slight, almost negligible positive correlation. The Beaverton teachers had a correlation coefficient of -.050, a slight, almost negligible negative relationship. Of the three treatment groups in this study the G.T.A. intern teachers had the highest relationship. However, none of the three groups had a very high relationship at all.

A composite descriptive profile of the "typical" teacher in each of the three groups of teachers was generated from Part I, the demographic data. The most obvious similarities in the three groups of teachers were (a) each group was almost entirely female, (b) the teachers in all three samples earned a 3.6 to 4.0 G.P.A. for the last two years of college, (c) they all maintained this 3.6 to 4.0 G.P.A in their post-graduate work, and (d) they taught in one or two elementary schools since college graduation.

There were more differences in the three samples of beginning teachers. (a) the G.T.A. teachers were younger than the other two groups, (b) more of the G.T.A. teachers were recent graduates from college, (c) the outstanding O.S.U. teachers earned a lower overall college G.P.A., (d) the G.T.A. teachers and the Beaverton teachers earned more graduate credits and/or a Master's degree, however, a Master's degree was an integral part of the Mentor-Teacher Program,
(e) the Beaverton teachers had more years of teaching experience than did the other two groups, (f) more O.S.U. teachers and Beaverton teachers had been substitute teachers, and (g) none of the O.S.U. teachers had been involved in any informal and/or informal mentoring/internship program, and those Beaverton teachers who had been in a mentoring program were in either an informal program or the Cooperative Professional Educational Experience (CPEP) through Portland State University.

Conclusions

Based on the findings of this study, there was one major conclusion: there was no significant difference between the teachers who participated in the Mentor-Teacher Program and those teachers who did not, but were judged to have comparable teaching potential. In all twenty-three ANOVA tests of the effective teaching characteristics, it was found that there were no significant differences between the groups of teachers. There were also no significant differences found in any of the six domains of teaching, and no difference in the overall total of the effective teaching characteristics.

In order to further determine if any significant difference occurred between the three treatment groups of teachers the Tukey's Least Significant Difference Test was employed for all thirty ANOVA tests. There was no critical difference found between any of the means of the three treatment groups of teachers in any of the thirty ANOVA tests examined. Although the writer knew that if no significant difference exists within the ANOVA, one is not to look further for significance. However, it was decided to take the more analytical
approach by applying a test of critical difference to the computed F value of each of the thirty ANOVA tests, although it violated the assumptions behind ANOVA.

When the Context Complexity Scale was correlated with the total score of the effective teaching characteristics it was found that the G.T.A. intern teachers had a small, positive correlation; the highest correlation of the three groups of teachers. The outstanding O.S.U. teachers had a slight, positive relationship. The Beaverton teachers had the lowest correlation of the three groups with a slight, negative relationship. In this study the complexity of the teaching situation didn't seem to be meaningfully related to the score of the effective teaching characteristics.

Implications

Inasmuch as the purpose of this study was to compare the effective teaching characteristics of teachers who participated in the Mentor-Teacher Program with teachers who did not, and the one major conclusion was that there were no significant differences between the three groups of teachers, the question that can be asked is "Why was that so?"

This study was done using three outstanding groups of teachers - the G.T.A. interns from the Mentor-Teacher Program, teachers who graduated from Oregon State University with the potential of becoming outstanding elementary school teachers, and teachers in the Beaverton School District, a district well know for its excellent teachers. When viewing all the tests of variance in this study there were no tests that rejected the hypothesis that there was a significant difference between the three groups of teachers. A further test of significance
was employed and no critical difference was found between any of the means of the three groups.

Because there were no significant differences between the groups of beginning teachers who had participated in the study, conclusions must be stated cautiously.

In this study no measures were sensitive enough to establish a significant difference between the groups. It might be that when outstanding teachers are compared with other outstanding teachers there will be little difference. Perhaps no matter what measure is employed or the university training, the outstanding teachers will still emerge as outstanding teachers.

This is not to suggest that mentoring is not an effective practice for the improvement of teaching. It may be that the effective teaching characteristics of those novice teachers were enhanced by their participation in the Mentor-Teacher Program. That is to say, the group of teachers who did participate in the program were shown to be equal to those teachers who did not participate. One possible interpretation could be that mentoring overcame the advantage of experience as illustrated in the demographic profile of each group of teachers.

But, as states such as Oregon establish formal support programs for beginning teachers, the criterion must be "How can the mentoring process provide for the success of its participants?" What can school districts do for their beginning teachers?

Most school districts have some sort of inservice programs for their teachers. However, the only inservice new teachers may receive is that offered during the time just before school begins in the fall or just after. It may be that this is exactly the wrong time for this type
of inservice to occur. Beginning teachers enter their first year of teaching armed with the ideas, projects, and theories gained from teacher education programs and student teaching experiences. It is only after a time in the classroom that these teachers discover how limited their practical knowledge actually is. It may be that this is the best time for mentoring to begin. Fuller (1969) states that the early inservice years may offer the best opportunity for improved teaching, an opportunity soon lost. Knowing that a mentor is there might not create such feelings as isolation, frustration, or anxiety. In a way these new teachers may now know "the right questions to ask."

It would be most timely for school districts/schools to offer inservice programs aimed at new teachers and their problems during the first months of teaching. The programs would deal directly with the issues and problems experienced by first-year teachers, programs that provide them with practical answers to immediate problems. And this inservice should be on-going throughout the school year. For example, new teachers could be brought together for a training session at regular intervals in which respected, experienced teachers would work on the stated needs of the beginning teachers. It could be problems as complex as discipline or situations such as the first grading period or back-to-school night. These training sessions could become a support group for beginning teachers.

There has always been the informal process of mentoring or "buddy-up" successfully implemented in schools. Often mentors are persons much closer to the beginning teacher's age and who have a great empathy for the difficult world of the new teacher. Schools might find it beneficial to establish an "ad-hoc" mentoring committee, made up teachers who
were new to a school in the last year or so. It is with these teachers the new teacher(s) will interact with throughout the school year. A new teacher might be more comfortable with teachers who work in the same building and thus, share the same trials and tribulations. In adapting to the social system of the school, new teachers need to adjust to both the mores and values of the school as well as to the characteristics of the students. New teachers would be a part of a collegial group whose activities would be centered on helping the new teacher(s) move from novice to experienced status and that those activities might best be differentiated according to needs, strengths, and weaknesses perceived by both the new teacher(s) and other members of the collegial group.

However the process of mentoring may be implemented, legislated by law, formally adopted by a school district or school, or the informal pairing of two teachers, it is a practice which has shown itself to be a most positive educational idea whose time has come. In a NIE review it was stated:

The conditions under which a person carries out the first year of teaching have a strong influence on the level of effectiveness which that teacher is able to achieve and to sustain over the years; on the attributes which govern teacher behavior over even a forty year career; and, indeed on the decision whether or not to continue in the teaching profession (1978, p. 3).

Experienced teachers have identified their induction as a formative influence on the rest of their careers. Sandefur and Adams (1976) assert that the lack of induction of beginning teachers is the major cause of attrition from the teaching profession during the first three years of teaching. Some research identifies the induction years as the most critical period for determining the eventual effectiveness of a teacher.
Preservice teachers must learn what is known about "good teaching." Beginning teachers must acquire a knowledge base of the variety of particular skills and patterns of behavior that have been demonstrated by effective teachers. Teacher education programs must then be designed and developed based on the knowledge and skills of effective classroom teaching.

However, many teachers, and especially beginning teachers, may not be cognizant of what are the effective teaching characteristics exhibited by master teachers.

An idea worth suggesting is that teachers, both novice and veteran, have for their own personal use a list of effective teaching characteristics exhibited by master teachers. To have this list might become a method of self-monitoring one's own teaching for both accomplishments and shortcomings. As teachers become more aware of the teaching skills they do and don't utilize well it would be a way for a teacher to set up one's own goal(s) for the enhancement and improvement of their teaching. In order to accent the positive or affect change it is first necessary to become aware of that which one wants to or not to alter. Having a checklist of characteristics to refer to might be an essential instrument for helping teachers realize those effective teaching characteristics they do employ in their own teaching.

The awareness of effective teaching characteristics would then be integrated into the practice of mentoring. Through this the mentoring process will be enhanced.

However, awareness, by itself, does not enable teachers to gain these effective teaching characteristics. Teachers will profit from a process that enables them to observe more systematically the effects of
their teaching on students; that is, a training program that helps beginning teachers become aware of their own teaching effectiveness.

The practice of mentoring has long been a part of the preparation in many professions. It is a practice that has been used for a long time with beginning teachers, however formal and/or informal it may have been. Recent reforms, adoptions, and legislation have furthered mentoring by emphasizing it as a viable and worthwhile practice for beginning teachers. To care, nurture, and guide a novice in any field is a way to increase the chance of success of that individual in that profession.

RECOMMENDATIONS FOR FURTHER STUDIES

The first recommendation is to have a larger sample size. In order to make as accurate a conclusion as possible regarding the effectiveness of the practice of mentoring, it will be necessary to compare a varied population of beginning teachers - those who have been involved in different mentoring practices with those who have not participated in any mentoring.

A study using trained observers would allow for a more consistent rating of the subjects. Also, the use of another type of rating instrument, one which would enable a trained observer to measure not only the effective teaching characteristics but note other attributes demonstrated by teachers. In this way a more overall measure of a teacher's qualities could be determined.

If further studies are to be made, ways of quantifying mentoring must be found. The practice of mentoring may be impossible to measure with observation instruments. Perhaps longitudinal studies of mentored
beginning teachers and then continued throughout their teaching careers would give the best data regarding the lasting effectiveness of mentoring. Such studies should attempt to assess what teaching qualities were enhanced by mentoring and to what degree the practice of mentoring affected teachers' development throughout their professional career.

Further studies comparing teachers who have participated in the Mentor-Teacher Program with "typical" beginning teachers from various teacher training institutions might show a greater level of significant difference(s) between the G.T.A. intern teachers and the "typical" beginning teachers. However, this practice of mentoring may be better utilized by other teachers who are not of such high quality. Whereas mentoring may enhance the skills of outstanding teachers it might be a most beneficial practice to use with teachers who are not of such high quality.
BIBLIOGRAPHY


The OSU-Beaverton Mentor-Teacher Program (M-T P) Agreement. Undated Manuscript.


University of Oregon. *Resident Teacher Master's Degree Program*. undated manuscript.


APPENDICES
APPENDIX A

FIRST SOLICITATION LETTER
May 5, 1987

Dear

As part of my doctoral dissertation I am conducting a study of the effective teaching characteristics of outstanding teachers - those behaviors of teachers that can be examined for their effects on the teaching process. This study will help identify those effective teaching characteristics and to what degree each effective characteristic is utilized by outstanding teachers. This study has been approved by Oregon State University and Beaverton School District #48 as a viable research project and judged to have merit to the field of educational research.

As many of the teachers selected to participate in this study are employed by the Beaverton School District you may be asked to participate in this study as well. Your role will be to observe the teacher and then indicate on a survey instrument the degree to which she/he employs each effective teaching characteristic. The survey instrument covers six domains of teaching: (1) Planning, (2) Management of Student Conduct, (3) Lesson Organization and Development, (4) Presentation of Subject Matter, (5) Communication: Verbal and Nonverbal, and (6) Testing: Student Preparation, Administration, and Feedback. This survey takes approximately one half hour to complete.

I realize the extreme need for sensitivity and confidentiality involved in a study such as this. You have my guarantee to protect the confidentiality of yourself and your teacher. All of the information collected in this study will be held in strictest of confidence. The surveys are coded with an identification number previously assigned. The number will enable us to send follow-up surveys to non-respondents. The master list of identification numbers and associated names will be maintained by The Department of Planning and Evaluation, Beaverton School District #48. I will not have personal access to this list. This list will be destroyed once all surveys are returned. Your responses will be entirely confidential. There is no intention of writing anything in which you or your teacher could ever be identified. Also, any information obtained will not be used for evaluative purposes.
May 5, 1987
page two

Thank you for your consideration and assistance with this doctoral study. If I can answer any questions concerning this study, please contact me.

Cordially,

Joseph H. Hauserman
4010 N.W. 192nd Avenue
Portland, Oregon 97229
645-4828 (home)
649-0227 (school)

Enclosure
APPENDIX B

DR. LYNCH'S LETTER
TO: Selected Elementary School Principals

FROM: Steve Lynch

SUBJECT: PARTICIPATION IN A RESEARCH STUDY

The study in which your participation is being requested concerns the Mentor-Teacher program. This program has been in operation for several years and Mr. Hauseman's study should help to determine its effectiveness.

Although participation is voluntary, the study will be seriously jeopardized if a small number of principals choose not to participate. For this reason, I urge you to provide Mr. Hauseman with necessary information. The Department of Planning and Program Evaluation will hold the confidential listing of participants so that no one is able to associate names with the responses provided by either teachers or principals.

Thank you for your cooperation.

ks

[C:\WP\S\CORR\APR28ELE.MEM]
APPENDIX C

SECOND SOLICITATION LETTER
October 1, 1987

Dear

This past May you were sent a letter asking your help regarding my doctoral study of the effective teaching characteristics of outstanding teachers. I realize that asking teachers to participate in any survey so close to the end of the school year was not the best of times. I would like to take this opportunity to again ask you to participate in this study. October is a far less hectic and pressured time of the school year.

Please allow me to further explain this study of outstanding beginning teachers and the importance of your participation in it. The purpose of this study is to ascertain the effective teaching characteristics being employed by outstanding beginning teachers. You have been selected as an outstanding beginning teacher and thus qualify for participation. In a study such as this there is a limited and specially selected number of participants. It is therefore imperative that as many teachers who were selected participate.

Your role in this study will be to allow your principal to observe you and then indicate on a survey instrument the degree to which you employ each effective teaching characteristic. The survey covers six domains of teaching: (1) Planning, (2) Management of Student Conduct, (3) Lesson Organization and Development, (4) Presentation of Subject Matter, (5) Communication: Verbal and Nonverbal, and (6) Testing: Student Preparation, Administration, and Feedback. This survey takes about one half hour for your principal to complete.

You are asked only to complete the demographic information profile and a Context Complexity Scale, a scale which reflects your perception of your teaching environment. These two parts take only a few minutes of your time.

I encourage you and your principal to talk about the study, what it will require of each of you, and your comfortableness in participating. I think you will find this study meaningful by providing you an opportunity to become more aware of the many effective teaching characteristics you employ. You will also be providing data which identifies the effective teaching characteristics being used by outstanding teachers, like yourself.

I realize the extreme need for sensitivity and confidentiality involved in a study such as this. Your responses will be entirely confidential. You have my guarantee to protect the confidentiality of yourself and your prin-
October 1, 1987

page two

cipal. All the information collected will be held in the strictest of con- 
fidence. Everything will be coded with a number and will be returned to the 
Department of Planning and Program Evaluation.

I will have no personal access to the master list of identification numbers 
and associated names. The master list will be maintained by the Department 
of Planning and Evaluation, Beaverton School District #48. This list will be 
destroyed once all surveys are returned. Nothing will be written which could 
possibly identify either you or your principal. Also, any information obtained 
will not be used for evaluative purposes.

I have enclosed a self-addressed stamped postcard on which I would like you 
to indicate your willingness to participate in this study. It is important 
to my research that you return the postcard even if you choose not to take 
part.

Thank you for your time and consideration. I hope you can help me complete 
the last part of my doctorate. If I can be of any assistance, or answer any 
questions, please contact me.

Cordially,

Redacted for Privacy

Joseph H. Hausman
4010 NW 192nd Avenue
Portland, Oregon 97229
(503) 645-6828 (home) – collect calls accepted
(503) 591-4524 (school)

Enclosure
APPENDIX D

SOLICITATION RETURN POSTCARD
Regarding participation in your effective teaching characteristics study,

_____ I will participate in the study.

_____ I will not participate in the study.

Name ____________________________________________

Maiden name ______________________________________

Material to be sent to your principal should be addressed to:

Name of Principal _________________________________

Address ________________________________________

_________________________________________________
APPENDIX E

TEACHER'S PARTICIPATION LETTER
October 15, 1987

Dear Teacher,

Thank you for electing to participate in this effective teaching characteristics study. Your assistance is greatly appreciated.

The survey questionnaire was sent to your principal. She/He has given you a packet containing Part I, a diagnostic information profile, and Part II, the Context Complexity Rating Scale (this scale is important as it reflects your perception of your teaching environment). These should take only a few minutes of your time to complete. A copy of the survey questionnaire the principal will be using has also been included.

When you have completed the profile and the Context Complexity Rating Scale please return them to your principal and place them in the return envelope. The principal will enclose her/his survey questionnaire to be returned.

You will note everything is coded with a number and is to be returned to The Department of Planning and Program Evaluation. I will not have personal access to the master list of identification numbers and associated names. The master list will be destroyed once all surveys are returned and before it is given to the researcher for analysis of data. Your responses are entirely confidential.

Thank you again for your time and trust regarding this doctoral study.

Cordially,

Redacted for Privacy

Joseph H. Hauseman
4010 N.W. 192nd Avenue
Portland, Oregon 97229
645-4828 (home)
591-4524 (school)
APPENDIX F

PRINCIPAL'S PARTICIPATION LETTER
October 15, 1987

Dear Principal,

Thank you for your participation in this effective teaching characteristics study. Your assistance is greatly appreciated.

Please give Parts I and II (the smaller bound packet) and the paper-clipped copy of the survey questionnaire to the teacher as soon as you receive this packet of materials.

Your role in this study is to observe the teacher and then indicate on the survey instrument the degree to which she/he employs each effective teaching characteristic. The survey questionnaire covers six domains of teaching: (1) Planning, (2) Management of Student Conduct, (3) Lesson Organization and Development, (4) Presentation of Subject Matter, (5) Communication: Verbal and Nonverbal, and (6) Testing: Student Preparation, Administration, and Feedback. This survey takes approximately one half hour to complete. You may wish to use notes, observations, or any other methods to assist your rating of the teacher. You may also wish to discuss the teaching characteristics listed on the survey with the teacher, but please rate the teacher without her/his actual assistance.

When you have completed the survey questionnaire please enclose it in the return envelope. Also, please check with the teacher to see if she/he has completed Parts I and II, and has placed them in the return envelope.

You will note everything is coded with a number and is to be returned to The Department of Planning and Program Evaluation. I will not have personal access to the master list of identification numbers and associated names. The master list will be destroyed once all the surveys are returned and before the survey is given to the researcher for analysis of data. Your responses are entirely confidential.

Thank you again for your time and assistance regarding this doctoral study.

Cordially,

[Redacted for Privacy]

Joseph H. Haaseman
4010 N.W. 192nd Avenue
Portland, Oregon 97229
645-4828 (home)
591-4524 (school)
APPENDIX G

PARTICIPATION REMINDER LETTER
Dear

Recently your principal was sent a reminder regarding your participation in my doctoral study. However, it is you, the teacher, who is the essential participant in this study.

In order to summarize the data it is essential to have all teachers who elected to participate return their survey questionnaires. Because the population for this study is specific, the participation of each outstanding beginning teacher is essential.

At this time in the school year may principals have completed their observation(s) of teachers. It is not necessary to make another one just for this study. Your principal may use previous notes, observation data, etc. to complete the questionnaire.

If at this time you are unable to complete this questionnaire, please send me a short note saying so. It is important for me to account for each teacher in this survey.

I appreciate your assistance and understanding in completing this project.

Thank you,

Redacted for Privacy

Joseph H. Hauserman
4010 NW 192nd Avenue
Portland, Oregon 97229
503-591-6524 (Hilton School)
503-645-4828 (home - call collect)
APPENDIX H

PART I, THE DEMOGRAPHIC PROFILE
Part I

Instructions for Completing the Questionnaire

Part I of this effective teaching characteristics survey is included to provide an informational profile of outstanding beginning teachers. Read each question carefully and respond as indicated by the directions given.

1. Age (Circle number)
   1 Younger than 20 years old
   2 20 - 24 years old
   3 25 - 29 years old
   4 30 - 34 years old
   5 35 - 39 years old
   6 Older than 39 years old

2. Sex (Circle number)
   1 Female
   2 Male

3. Year Graduated From College/University (Circle number)
   1 1981
   2 1982
   3 1983
   4 1984
   5 1985
   6 1986
   7 Other

4. Overall College/University G.P.A. (Circle number)
   1 3.6 - 4.0
   2 3.0 - 3.5
   3 2.6 - 2.9
   4 2.0 - 2.5

5. Last Two-Years G.P.A. (Circle number)
   1 3.6 - 4.0
   2 3.0 - 3.5
   3 2.6 - 2.9
   4 2.0 - 2.5
6. Post-Graduate Credit Hours/Degrees (Circle number)

1  0 - 23 credits
2  24 - 44 credits
3  45 - 59 credits
4  60 - 74 credits
5  75 credits/Master's +

7. Post-Graduate G.P.A. (Circle number)

1  3.6 - 4.0
2  3.0 - 3.5
3  2.6 - 2.9
4  2.0 - 2.4

8. Years of Teaching Experience (Circle number)

1  0 years
2  1 year
3  2 years
4  3 years
5  4 years
6  5 years
7  6 years

9. Number of Schools Taught In Since College/University Graduation (Circle number)

1  0 schools
2  1 school
3  2 schools
4  3 schools
5  4 schools
6  5 schools
7  6 schools

10. Have you done any substituting?

1  Yes
2  If yes, how long? ____
3  No

11. Involvement In Any Mentoring/Internship Programs (Circle number)

1  Yes, in a formal mentoring/internship program
2  Yes, in an informal mentoring/internship program (i.e. teaming, buddy)
3  If yes, please explain __________________________
4  No, not in any mentoring/internship program of any type
APPENDIX I

PART II, THE CONTEXT COMPLEXITY SCALE
Part II of the questionnaire contains five factors which assess the complexity of content of the setting in which you, the teacher, teach. These five factors are: (1) Organization of Instruction, (2) Instructional Support, (3) Physical Facilities, (4) Pupil Characteristics, and (5) School Administrator.

Please circle the rating (0, 1, 2, 3, 4, 5, 6, 7) which most clearly describes your teaching setting in relation to each of these factors.

1. Circle the number below that best describes your setting in relation to organization of instruction. (Consider elements such as amount of individualization, intra-classroom grouping, grouping for different subject(s), self-contained/team teaching.)

<table>
<thead>
<tr>
<th>Unusually demanding as a context in which to teach</th>
<th>Moderately demanding</th>
<th>Unusually easy as a context in which to teach</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Circle the number below that best describes your setting in relation to instructional support. (Consider elements such as aide/volunteer help, counseling available, specialists; e.g. music, P.E., media, speech, special reading.)

<table>
<thead>
<tr>
<th>Limited</th>
<th>Adequate</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Circle the number below that best describes your setting in relation to physical facilities. (Consider elements such as playground/playroom/gym use; media center use; adequate classroom/work space; adequate books, materials, supplies; outside noise; classroom temperature control.)

<table>
<thead>
<tr>
<th>Limited</th>
<th>Adequate</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Circle the number below that best describes your setting in relation to pupil characteristics. (Consider elements such as boy/girl ratio, pupil population change/turnover, socio-economic status, absentee rate, number of "acting out" pupils, pupils with learning disabilities, homeroom grade level reading ability, number of gifted pupils, English as a first/second language, physical handicapped pupils.)

<table>
<thead>
<tr>
<th>An unusually difficult group to teach</th>
<th>Moderately demanding</th>
<th>An unusually easy group to teach</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Circle the number below that best describes your setting in relation to school administrator. (Consider elements such as years of administrating in this setting, use of discipline, relates to/supports teacher, teacher assessment.)

<table>
<thead>
<tr>
<th>Little supervisory support</th>
<th>Moderate supervisory support</th>
<th>Strong supervisory support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OVERALL RATING

Considering all five factors (Organization of Instruction, Instructional Support, Physical Facilities, Pupil Characteristics, and School Administrator), please circle the number on the scale below which best describes your school's overall setting.

<table>
<thead>
<tr>
<th>Highly demanding</th>
<th>Moderately demanding</th>
<th>Unusually easy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
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APPENDIX J

PART III, THE EFFECTIVE TEACHING CHARACTERISTICS SURVEY QUESTIONNAIRE
EFFECTIVE TEACHING CHARACTERISTICS
SURVEY QUESTIONNAIRE

Part III

Teacher ________________________________ Code Number ________

This title page with the teacher's name on it is for the principal's convenience. It will be removed from the survey questionnaire before it is given to the researcher for analysis.

When you, the principal, have completed the survey questionnaire, please return it, along with the demographic information profile and the Context Complexity Scale which have been completed by the teacher, in the self-addressed, stamped envelope to:

Department of Planning and Program Evaluation
Beaverton School District #48
P.O. Box 200
Beaverton, Oregon 97075
Attn: Kim Schnell
This part of the questionnaire contains effective teaching characteristics. You are being asked to indicate the degree to which the teacher employs each effective teaching characteristic. These effective teaching characteristics have been grouped into six domains of teaching: (1) Planning, (2) Management of Student Conduct, (3) Lesson Organization and Development, (4) Presentation of Subject Matter, (5) Communication, and (6) Testing.

Instructions for completing the questionnaire

For each item please circle the rating (0,1,2,3,4) which most closely represents your judgment of the degree to which the teacher employs the effective teaching characteristic. The following key should be used for the assignment of the ratings:

0. The teacher exhibits no competence in this effective teaching characteristic.
1. The teacher exhibits low competence in this effective teaching characteristic.
2. The teacher exhibits moderate competence in this effective teaching characteristic.
3. The teacher exhibits good competence in this effective teaching characteristic.
4. The teacher exhibits exceptional competence in this effective teaching characteristic.

I. PLANNING

Content Coverage

1. The teacher selects appropriate content for instruction on the basis of specific criteria, such as learner state, proper sequence, timeliness, or other factors deemed important.

2. The teacher names the skills, concepts, facts, rules, principles, laws, or value statements to be taught.

3. The teacher separates content to be taught into distinct elements or parts.

4. The teacher states the order in which the subject matter will be taught.
Utilization of Instructional Materials

5. The teacher names specific text pages or other characteristics of the material to be used for instruction. 0 1 2 3 4

6. The teacher prepares or arranges instructional materials that are to be used for instruction so to be readily available. 0 1 2 3 4

Activity Structure

7. The teacher states the activity in which the students will engage, or the order or pattern for a series of activities in which the students will engage for a given period of time. 0 1 2 3 4

8. The teacher breaks an activity into its component parts, specifying steps to be followed, materials to be used, and teacher/student participation in the activity, and the amount of time to be spent on an instructional activity. 0 1 2 3 4

Goal Focusing

9. The teacher states the intended student outcome that should result from instruction, what the learner does know or needs to know or should be able to do. 0 1 2 3 4

10. The teacher determines whether or not students have met the established criteria for acceptable performance. 0 1 2 3 4

II. MANAGEMENT OF STUDENT CONDUCT

Rule Explication and Monitoring

11. The teacher specifies rules of student conduct, demonstrates rules, provides practice in their use, and checks student conduct by the rules. 0 1 2 3 4

12. The teacher notes rule infraction, specifies who the deviant is, what he/she is doing wrong, and why this is improper conduct or what the proper conduct is. 0 1 2 3 4

Teacher Withitness

13. The teacher indicates to the students that the teacher knows what they are doing (withitness). 0 1 2 3 4
### Part III (continued)

#### Efficient Use of Time

<table>
<thead>
<tr>
<th></th>
<th>Low Competence</th>
<th>Moderate Competence</th>
<th>High Competence</th>
<th>Exceptional Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Teacher stops student deviant conduct before the deviant 0 conduct spreads to other students or becomes more serious.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. Teacher attends to a task and a disruption simultaneously without affecting the ongoing task activity.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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#### Group Alert

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<th>High Competence</th>
<th>Exceptional Competence</th>
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</thead>
<tbody>
<tr>
<td>16. Teacher asks questions before calling on student(s) in order to create suspense and group focus during recitation, and to alert nonperformers that they will be called on anytime.</td>
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#### Movement Smoothness

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</tr>
</thead>
<tbody>
<tr>
<td>17. Teacher does not start an activity, stop it to turn to another, or become distracted by some unrelated event, object, or idea that comes to mind, and then return to original activity or drop it altogether.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18. Teacher does not engage in a series of actions or talk beyond what is necessary for students to understand or to know how to participate in an activity, pertaining to conduct, use of materials, or to parts of an activity.</td>
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<td>1</td>
<td>2</td>
<td>3</td>
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#### Effective Praise

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<th>Exceptional Competence</th>
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<tbody>
<tr>
<td>19. Teacher uses praise for desirable conduct, participation, or other appropriate actions of student(s).</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>20. Teacher's praise reflects spontaneity, variety, warmth, and meaningful content.</td>
<td>0</td>
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### III. INSTRUCTIONAL ORGANIZATION AND DEVELOPMENT

#### Efficient Use of Time

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<th>Exceptional Competence</th>
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</thead>
<tbody>
<tr>
<td>21. Teacher begins classwork promptly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22. Teacher shifts from one activity to another in a systematic, academically-oriented way.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23. Teacher organizes the class to keep the lesson moving and provides structure for those students who finish classwork early.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
24. Teacher routinizes activities such as passing papers out, moving to get books, writing on the board, etc., and has materials prepared, procedures worked out, and everything in order.

Review of Subject Matter

25. At the beginning of a new lesson the teacher either rehearses the previous lesson(s) or involves students in doing so before moving to a new aspect of a topic or problem.

Lesson Development

26. Teacher orients students to the classwork and engages them in academic activities.

27. Teacher gives clear verbal presentation of some problem or aspect of a lesson, or gives a demonstration, or informs students by modeling performance.

28. Teacher uses different levels of questioning for a student or the whole class about the lesson content to ascertain the levels of understanding.

Teacher Treatment of Student Talk

29. Teacher acknowledges and accepts student responses.

30. Teacher asks student to elaborate, justify his/her (student's) response.

Teacher Academic Feedback

31. Teacher provides verbal or nonverbal behavior that signifies the student response(s) is correct, or gives information about its value and/or implications.

32. Teacher provides an explanation of an error or gives a correction.

33. Teacher redirects question to another student to answer or react to the response.

Management of Seatwork/Homework

34. Teacher explicates procedures for independent practice of lesson content (seatwork/homework).
35. Teacher ascertains whether or not students understand what they are to do at seatwork/homework.

36. Teacher alerts students as to when their work will be assessed.

37. Teacher circulates about the room as students engage in seatwork and assists students by checking errors, giving feedback, or helping students who need help.

IV. PRESENTATION OF SUBJECT MATTER

Presentation of Conceptual Knowledge

38. Teacher analyzes and presents information to facilitate the acquisition of concepts through giving verbal meanings to new terms or new aspects of a current topic or describing attributes, examples, categories, or a concept or has student do so.

39. Teacher identifies and analyzes the cause(s), the effect(s) of conditions, and linking words to connect effect(s) to cause(s), to solve a problem or to explain a known effect.

40. Teacher uses criteria and factual evidence to analyze and assess the kind of situations to which specific knowledge or a concept applies.

V. COMMUNICATION

Control of Discourse

41. Teacher maintains good verbal control of information that increases the chances that students will comprehend what is said.

42. Teacher indicates to the student what is important in the subject matter to be studied through use of words, use of underlining, colors and cartoons in presenting information, and through repetition of main points.

Task Attraction and Challenge

43. Teacher motivates and challenges students to become task involved.

44. Teacher expresses or shows genuine zest for a task.
Teacher's Speech

45. Teacher uses voice characteristics that distinguish main auditory stimuli from the content or message of the lesson.

Body Language

46. Teacher uses body language that expresses interest, excitement, joy, and positive personal relations.

VI. TESTING

Preparation for Testing

47. Teacher informs students in a positive and non-threatening way of the purpose of the test, how the test results will be used, and how the results are relevant to them personally.

48. Teacher tells the class what knowledge is important for them to study.

49. Teacher instructs students in test-taking skills so that students' abilities to utilize the characteristics and format of a test and/or test-taking situation will improve their chances of making a higher score.

Test Administration

50. Teacher sets up the physical arrangements favorable to student performance on tests.

51. Teacher sets a warm and encouraging classroom atmosphere for the test.

52. Teacher monitors throughout testing situation.

Formative Feedback

53. Teacher provides information to students about their test performance.

54. Teacher uses test data to identify and correct errors in students' understanding.

55. Teacher expresses approval of student response(s) to test item(s) or to discussion of responses.

Please return Part III (this survey questionnaire), along with Part I (the demographic information profile) and Part II (the Context Complexity Scale), which have been completed by the teacher, in the self-addressed, stamped envelope.
APPENDIX K

ANOVA TESTS DATA
### ANOVA TESTS DATA

#### OVERALL TOTAL

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<th>Source of Variation</th>
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#### DOMAIN I - PLANNING

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#### DOMAIN III - INSTRUCTIONAL ORGANIZATION AND DEVELOPMENT

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#### DOMAIN IV - PRESENTATION OF SUBJECT MATTER

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#### UTILIZATION OF INSTRUCTIONAL MATERIALS

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### ACTIVITY STRUCTURE

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### GOAL FOCUSING

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### RULE EXPLICATION AND MONITORING

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### ANOVA TESTS DATA (cont.)

#### TEACHER WITHITNESS

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#### GROUP ALERT

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#### MOVEMENT SMOOTHNESS

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EFFICIENT USE OF TIME

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REVIEW OF SUBJECT MATTER

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**ANOVA TESTS DATA (cont.)**

### LESSON DEVELOPMENT

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### TEACHER TREATMENT OF STUDENT TALK

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### TEACHER ACADEMIC FEEDBACK

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#### MANAGEMENT OF SEATWORK/HOMEWORK

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#### PRESENTATION OF CONCEPTUAL KNOWLEDGE

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TASK ATTRACTION AND CHALLENGE

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TEACHER’S SPEECH

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BODY LANGUAGE

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ANOVA TESTS DATA (cont.)

PREPARATION FOR TESTING

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TEST ADMINISTRATION

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FORMATIVE FEEDBACK

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