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Conceptions of mentoring held by administrators, mentors, and beginning teachers

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The Ohio State University, 1992
CONCEPTIONS OF MENTORING HELD BY
ADMINISTRATORS, MENTORS, AND BEGINNING TEACHERS

DISSERTATION

Presented in Partial Fulfillment of the Requirements
for the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Howard E. Grimm Jr., B.A., M.A.

The Ohio State University
1992

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To Becky, Mike, and John

Whose Presence Has Given My Work Meaning
AKNOWLEDGEMENTS

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iii
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CHAPTER I

Introduction

A common rationale behind new teachers' induction programs is that the primary personnel objective of any organization is to attract the most qualified people and move them, as quickly as possible, toward competence and personal satisfaction within their professional assignments.

This transition is particularly important for new teachers, as they typically know little about the school districts to which they have applied for work. This transition is also difficult because many existing preservice programs have not and likely cannot train prospective teachers adequately for the experiences they will encounter on their first assignment (Brooks, 1986; Huling-Austin, 1987; Burke and Schmidt, 1984; Hall, 1982; Kurtz, 1983; McDonald, 1980; Watts, 1980).
Subsequently, the turnover rate of beginning teachers is high and the quality of instruction in classrooms of beginning teachers is understandably less than that of experienced teachers. One fifth of all teachers entering the profession leave within three years according to a study completed by the National Education Association in 1987. In "difficult-to-teach situations up to 50 percent leave within the first seven years of their career (Schlecty and Vance, 1983).

There are many opinions and a growing scientific basis about what makes a good teacher. There are also many opinions about how to further develop and retain good teachers. Increasingly, many believe that mentoring should be an integral part of teacher development (Ashburn, Mann, Purdue, 1987; Fagan and Walter, 1982) especially for beginning teachers in these critical transitional years from university study to the first years of teaching. However, the study of mentoring, especially in education, has only begun (Hall, 1982). The limited literature that does exist
to this point does suggest that different role groups (administrators, experienced teachers, and beginning teachers) in education may well have different views of what a mentor is and should be (Bowers and Eberhart, 1988; Burke and Notar, 1985-86; Gehrke, 1988). It is important to understand these perspectives because the people in these roles are the key participants in the mentoring process. They are the participants that must come together in a working relationship that will allow the beginning teacher to be successfully inducted into the teaching profession and become a positive contributor to the education of our nation's youth. Understanding the perspectives of the different role groups will assist them in developing this necessary working relationship.

Huling-Austin (1987) acknowledges that to prepare a synthesis on a topic as complex as teacher mentoring and the induction of the beginning teacher is a difficult task. "In a sense, the field of teacher induction is in its infancy so any attempt at presenting 'the final word' is clearly
premature, to say the least." More studies are needed such as the one reported herein.

William James put it succinctly nearly a century ago when he said that psychology is a science, and teaching is an art; and sciences never generate arts directly out of themselves. An intermediary inventive mind must make the application by using its originality. The mystery lies in the inventive mind that weaves a fabric of complex pattern in the name of teaching. One of the many yarns that can assist novices in unraveling and better understanding the complexities of teaching before they create their own patchwork quilt is that counsel and advice offered by the mentor.

This study attempted to shed light on various aspects of mentoring as perceived by educators, especially those involved with mentoring. Specifically, this study focused on the perceptions and opinions of administrators, mentors, and beginning teachers about certain aspects of mentoring and the attributes of effective mentors.
**Purposes of the Study**

The major research question that undergirded this study was:

Do administrators, mentors, and beginning teachers have different orientations in terms of how mentors should assist a beginning teacher to learn to teach while on the job?

Different orientations in this study were framed by four variations in the psychological literature that guide conceptions of learning to teach. The fundamental assumption is that if these parties do hold different beliefs or if those attempting to assist beginning teachers are unclear about the problems that are likely to be encountered, this critically important endeavor is likely to be short-circuited.

Other central questions posed in the study were:

1. What are viewed by these educators as the functions of effective mentoring?
2. What are perceptions by these educators of necessary preparation and selection for effective mentoring?

3. What are seen by these educators as the conditions needed for effective mentoring to occur?

The following general hypotheses guided this study:

1. There will be no differences in the preferred approaches to mentoring between administrators, mentors, and beginning teachers in terms of how mentors assist beginning teachers to learn to teach while on the job.

2. There will be no differences in perceived importance of issues related to mentoring between administrators, mentors, and beginning teachers;

3. There will be no differences in perceived importance of issues related to mentoring between the above educators as a group at different school locations (urban, suburban, rural);

4. There will be no differences in perceived importance of issues related to mentoring between the above educators as a group in different levels of schools (elementary, middle, high);

5. There will be no differences in perceived importance of issues related to mentoring between the above educators as a group in different sized schools (small, medium, large).
Multiple Purposes of Mentoring

The design of any successful induction program should be guided by recognition of the considerable gaps and differences in the training, experience, and levels of competence of first-year teachers. Thus, an induction program should be flexible and multi-dimensional in its purpose and address curricular, instructional, and classroom management needs. It also needs to address various policies and procedures of the school district. An important aspect of such programs should be attention to teacher motivation and the provision of support to help the new teachers adjust to and succeed in their work environment (Brooks, 1986; Hirsh and Brooks, 1986).

On July 1, 1987, the state of Ohio Rule for Entry-Year Programs became effective. This rule requires public schools in the state of Ohio to develop entry-year or induction programs for incoming teachers. Because of this rule, school systems have developed programs for their entry-year teachers. A central aspect of this program is the mentor.
According to the Ohio Rule, criteria are to be determined for the selection, training, and evaluation of the mentors, and for pairing the mentors with the inductees.

The instrumentation developed for this study drew heavily from four literatures: developmental psychology, perceptual psychology, cognitive psychology (especially expert/novice studies), and behavioral psychology. These psychologies were addressed in that they all are considered useful in the field of education for particular aspects of teacher education and learning to teach. Developmental psychology forces us to look at development patterns in teachers. Perceptual psychology considers the perceptions teachers have of their roles and of the pupils in the classroom and influences greatly how they teach. Cognitive psychology considers the intellectual dimensions and self-regulation of teaching. Behavioral psychology considers among other factors how core teaching skills are practiced and reenforced. All can be components of an effective mentoring relationship. Additionally, a review of literature
providing direction for this study addressed definitions, titles, and functions of mentors; issues attached to mentoring; and examples or models of induction programs.

Thus, the purpose of this study was to investigate perceptions of effective mentors and mentoring in selected public school systems in Ohio as held by administrators, mentors, and beginning teachers of Ohio. A survey instrument was developed to gather opinions from three role groups (administrators, mentors, and beginning teachers) that would be involved in the mentoring process. Schools were selected to represent the different types of schools found in Ohio including urban, suburban, and rural; high school, middle school, and elementary school; and, large, medium, and small sizes.

**Rationale for the Study**

Schlecty and Vance (1983) have shown that a number of teachers have left the profession during the first years of their teaching; often because of a lack of support or an adequate understanding of how to address the challenges of
teaching. The need for easing this critical induction period is therefore evident. Researchers (Bowers and Eberhart, 1988; Burke and Notar, 1985-86; Gehrke, 1988; Hirsh and Brooks, 1986) have underscored the importance of the role of the mentor in this transition process. Mentors can serve as a needed connection between preservice training and induction into the teaching profession. Since formalized mentoring in education is just beginning, data about mentors and the mentoring process (i.e., functions of effective mentoring; preparation and selection of mentors; and the conditions needed for effective mentoring) gleaned from this study should be helpful. They could aid school systems in developing effective mentoring programs which in turn would retain and further develop beginning teachers in order to provide higher quality instruction for youngsters in our schools.
Definition of Terms

Definitions of selected terms and concepts used for this study include:

Administrator: Administrators included here are principals, assistant principals, and department level supervisors (i.e., English, science, math, history, languages).

Beginning teacher: Beginning teachers included here are first year, novice teachers who receive the support and educational guidance of the mentor.

Entry year induction program: Programs in the state of Ohio designed to assist beginning teachers in the critical first years of teaching with mentors assuming a key role in the support and continuing education of these beginning teachers.
**Mentor:** Mentors included here are teacher colleagues with experience who by choice or designation establish a supportive and accessible relationship intended to facilitate the development of the professional and instructional skills of the beginning teacher.

**Mentoring:** The process that occurs between the mentor and beginning teacher. That process being one of support and assistance in guiding the beginning teacher towards the attitudes and abilities to be an effective teacher.

This study specifically considered the mentoring process as undergirded by four psychologies: 1. perceptual; 2. developmental; 3. behavioral; and 4. cognitive. While obviously many other disciplines or orientations could have been considered as well, these four applied areas of psychology are generally viewed as contributing in essential ways to learning to teach.

Perceptual psychology is concerned with how teachers' perceptions of their roles and that of the pupils influence
teaching.

Cognitive psychology, among many other topics, looks at how teachers can become more aware of and monitor their reasoning about teaching.

Behavioral psychology assists the beginning teacher in acquiring and reinforcing core abilities. It also undergirds preparation programs where objectives are clearly stated, criteria are explicit and public, and decision-making regarding training needs are based on successful mastery of objectives.

Developmental psychology refers to various stages of development through which teachers progress during their professional careers. Different scholars describe these stages with different constructs. In this study the theoretical work of Frances Fuller (1969) is employed wherein stages are characterized essentially as: 1) survival, 2) mastery, and 3) impact).
Psychological orientation: These orientations were derived from educational psychologies relative to how one person assists another in learning to teach; in this instance, mentors assisting beginning teachers. The instrument was designed to examine whether there is a tendency to perform specific mentoring functions consistent with principles derived from either: a) behavioral psychology, b) developmental psychology, c) perceptual psychology, and d) cognitive psychology as applied in an educational setting.

Limitations

There were several factors that the research design employed in this study needed to consider. First, mentoring is defined and operationalized differently in the various school systems. The state of Ohio requires a mentoring program but allows the individual school systems to develop their own program. A mentoring program in one school system, for example, consists solely of an informal matching of a veteran teacher to a beginning teacher. A mentoring program
in a different school system is a formal process of matching the mentor to the beginning teacher. Mentors are released for varying amounts of time from their classrooms to work with the beginning teacher. This mentoring process is part of a peer assistance review program for all beginning teachers. Some school systems are still developing their programs, while others have had their programs in operation three or more years. Thus, the study was limited by the lack of agreement on aspects of induction and mentoring.

A second limitation was the survey instrument. This instrument included three domains: functions of mentors, the preparation and selection of mentors, and conditions for effective mentoring. It could have included other domains of mentoring and more items per domain.

The instrument in this study also used four educational psychological orientations. Other literatures would have broadened the conceptual base of the instrument. Critical theory, adult development, sociology, and anthropology literatures might have been included to serve this function.
A third limitation to this study was that of sample size. A larger sample size would have increased the generalizability of the findings but was not possible in this doctoral dissertation study.

Significance of the Study

The findings from this study should be useful in several ways. First, this study will add to the growing body of knowledge about the mentor and the mentoring process. Knowledge about the perceptions that administrators, mentors, and beginning teachers have about mentors and the mentoring process has been gained. More knowledge about the process of effectively matching mentor to beginning teacher has been obtained for example.

Second, this study should also contribute to harmonious mentoring relationships by providing information about the preparation of mentors and the necessary conditions for effective mentoring to occur.

Third, and perhaps most fundamentally, this study should contribute to the major goals of teacher retention, and
effective instruction of our nation's youth by providing schools with information about some necessary factors for constructing an effective induction program.

Fourth, the findings from this study should be useful in terms of selecting, preparing, and evaluating mentors. This study considered these issues through such questions as:

Should mentors receive specific training in clinical skills to work with beginning teachers? Should the mentor teacher and beginning teacher have compatible beliefs about teaching and learning? Should the assessment of the beginning teacher be kept separate from those of the principal? Should mentors have at least four or five years of teaching experience?

Fifth, and finally, the study could be the springboard for further studies about the roles of the mentor in the induction process. This study is best characterized as an exploratory survey research. Analysis of the findings revealed some statistical and the investigator believes practical significance as well. These tentative findings however need to be explored further to determine the extent
to which they might play a part in the induction process.

**Summary**

This chapter provided an introduction to the study, a statement of the problem, a description of the background and setting, an identification of the hypotheses that guided the study. Definitions of relevant terms, a discussion of the limitations of the study and assumptions undergirding it, and the general significance of the study were also addressed in this chapter.

In summary, the study investigated whether there were differences in perceptions across role groups of how mentors should assist a beginning teacher to learn to teach. The study also examined views regarding the selection, preparation, and evaluation of mentors.

Chapter two presents a literature review addressing definitions, titles, and functions of mentoring, issues related to the induction year, and, examples or models of induction programs. Chapter three describes the methodology used in this study. Chapter four describes the analyses of
data that were performed. Chapter five summarizes and discusses the conclusions of the study, implications for research and practice and recommendations for further research.
Chapter II

Review of Literature and Conceptual Framework

A review of literature and selected research studies that provided direction for this study and subsequently assisted in interpreting the findings are presented in this chapter. The review of literature has been organized in four sections, each of which had direct bearing on this study. These include studies of four literatures: developmental psychology, perceptual psychology, cognitive psychology, behavioral psychology; definitions, titles and functions of mentors; issues of mentoring; and examples or models of induction programs.

Four Psychological Literatures

This study drew heavily from four literatures: 1) developmental psychology, 2) perceptual psychology, 3) cognitive psychology (especially expert/novice studies), and, 4) behavioral psychology. These psychologies were addressed
because they all are considered useful in the field of education for particular aspects of teacher education and learning to teach.

**Developmental Psychology**

Developmental psychology refers to various stages of development through which teachers progress during their professional careers. Fuller (1969), one of the earliest scholars in this regard, argued that teachers pass through three major stages as they encountered new tasks. These stages are: 1) survival; 2) mastery; and 3) impact. During the survival stage teachers are concerned primarily with their feelings of personal adequacy. In the mastery stage, teachers are focused more on refining their teaching skills and increasing their knowledge of their subjects. Finally, during the impact stage teachers are concerned with how they influence their students.

Berliner (1988) developed a developmental theory of skill learning. The stages of this theory are: 1) novice; 2) advanced beginner; 3) competent; 4) proficient;
and 5) expert.

Novice teachers are student and beginning first year teachers. They are learning a set of context-free rules to guide their behaviors (e.g., praise for correct responses, never smile before Christmas).

Advanced beginners are teachers who are concerned with strategic knowledge. "Strategic knowledge—when to ignore or break rules and when to follow them—is developed as context begins to guide behavior." (Berliner, 1988, p. 3).

Competent teachers are usually third to fourth year teachers. They tend to make conscious choices, set priorities, and decide on plans to follow these choices.

In the next phase teachers become proficient teachers. They are intuitive of what needs are to be accomplished in the classroom. They make microadjustments without thinking about them.

Expert teachers are "arational. They have an intuitive grasp of a situation and seem to sense in nonanalytic, nondeliberative ways the appropriate response to make."
Berliner underscored that teachers develop at different
rates. A person will exhibit different stages of development
for different situations; expertise is highly contextual.
It may not transfer from situation to situation very well.

He considered studies of teaching expertise which
included the following points of interest: 1) interpreting
classroom phenomena; 2) discerning the importance of events;
3) using routines; 4) predicting classroom phenomena; 5)
judging typical and atypical events; and 6) evaluating
performance, responsibility and emotions.

Berliner (1988) concluded that developmental differences
are real and that they have important implications for the
policies we adopt for the education of teachers. The stage
of development of the teacher should be taken into
consideration in the assistance we attempt to provide them.
This likely means extending preservice education into the
beginning practice of the teacher; different measures of
competence for experienced and beginning teachers need to be
used. The development of competence out of ignorance, and expertise out of competence, may take a long time in a profession as complicated as teaching.

Burke, Christensen, and Fessler (1984) have identified eight stages that teachers tend to go through during the course of their professional career. The eight stages are: 1) preservice; 2) induction; 3) competency building; 4) enthusiastic and growing; 5) career frustration; 6) stable but stagnate; 7) career wind-down; and, 8) career exit. Each stage reveals different personal and professional concerns. They underscored that a positive career progression depends upon the support the teacher receives from the organization and that not every teacher will go through each phase.

Burke, Christensen, and Fessler (1984) suggested that this is not a lock-step, linear progression but rather a dynamic relationship that is always moving back and forth between phases in response to personal and organizational influences. They suggested that a greater variety of
professional development opportunities, based upon individual differences in adult learners, will encourage increased growth. Thus, they also supported the concept of formal entry-year assistance or induction programs.

O'Keefe and Johnston (1989) drew from three developmental frameworks and suggested a theoretical explanation for differences in one measure of teacher effectiveness: teacher responsiveness to students. The common thread among these separate frameworks was the concept of perspective taking as a developmentally acquired ability. Perspective taking is defined as the ability to take the perspectives of others into account. The ability to assume the place of another in order to predict the actions and reactions of the listener. The three frameworks were: 1) perspective taking and communication competence in children; 2) cognitive development and adaptive communication behavior in adults; and 3) structural developmental levels and professional understandings.
Their study suggested that the most effective explainers (teachers) were characterized by the ability to respond spontaneously with appropriate information in light of student needs. Dialogue, reflection, and challenge embedded in organizational and personal support systems are critical components of growth-producing contexts.

In summary, a developmental point of view suggests that teacher education should aim to promote growth in teachers' ability to take account of students' perspectives. Teacher educators should consider teachers' cognitive development as important as growth in technical expertise and content knowledge. A developmental perspective would thus help teacher educators be more responsive to students preparing for the role of teacher. The ability to take the perspective of others is generally viewed by these scholars as a developmentally acquired ability that results in more adaptive and effective communication and enhanced classroom effectiveness.
Perceptual Psychology

Perceptual psychology is concerned with teachers' perceptions of their roles and of the pupils in the classroom and how these influence teaching. Even though these studies were initiated some time ago, this is an important line of inquiry. Studies were begun in the late 1960's and Combs (1974) was a pioneer in this field in terms of developing a framework to guide teacher education. He looked at the professional aspects of undergraduate, pre-service teacher education from the vantage point of perceptual-existential psychology.

The following issues were considered: 1) the characteristics of a good teacher; 2) the perceptual view of effective teaching; 3) the creation of effective teachers; 4) the teacher's beliefs about people; 5) the teacher's self; 6) the teacher's purposes; 7) the personal discovery of ways to teach; and, 8) organizing the professional aspects of a teacher-preparation program.
A review of this research led Combs and his associates to place teachers into a set of six dichotomies as follows:

1) Able-Unable (The good teacher perceives others as having the capacities to deal with their problems successfully.);
2) Friendly-Unfriendly (The good teacher sees others as being friendly and enhancing.);
3) Worthy-Unworthy (The good teacher tends to see other people as being worthy of respect, dignity, and integrity rather than unworthy.);
4) Internally-Externally Motivated (The good teacher sees people and their behavior as essentially developing from within rather than as a product of external events to be molded and manipulated; he sees people as creative and dynamic rather than passive or inert.);
5) Dependable-Undependable (The good teacher sees people as essentially trustworthy and dependable in the sense of behaving in a lawful way. He regards their behavior as understandable rather than capricious, unpredictable, or negative.); and, 6) Helpful-Hindering (The good
teacher sees people as being potentially fulfilling and enhancing to self rather than impeding or threatening. He regards people as important sources of satisfaction rather than sources of frustration and suspicion.) (Combs, Blume, Newmand, and Wass, 1974, p. 63)

Combs (1974) also addressed the issue of how good teachers perceive themselves. Good teachers perceive themselves in the following ways: Good teachers identify with others, rather than feel apart from them; good teachers generally see themselves as enough. They have what is needed to deal with their problems; good teachers have trust in themselves. They are dependable and reliable; good teachers see themselves as likeable and wanted; and, finally, good teachers see themselves as worthy of their position.

The good teacher according to scholars in this tradition of perceptual psychology sees himself or herself as a person of consequence, dignity, integrity, and worthy of respect (Brown, 1970; Dellow, 1971; Usher and Hanke, 1971; Van Loan Dedrick, 1972; Vonk, 1970).
Cognitive Psychology

Cognitive psychology addresses a range of topics concerned with teaching and learning but is centrally concerned with how teachers can become more aware of and monitor their reasoning about teaching.

Anderson (1989) advocated a cognitive-mediation conception of learning and learners for beginning teachers. She suggests that teachers benefit from this perspective because it can help preservice teachers construct their own personal conceptions about classroom instruction.

Barnes (1989) highlighted significant developments in the study of teaching, learning, and teacher education that have major implications for improving teacher education and emphasized the need to understand the beginning teacher's prior conceptions of teaching, learning, subject matter, and other commonplaces of teaching before making decisions about what the beginning teachers need to know.

Curwin and Schneider Fuhrmann (1975) outlined a seven stage process for moving from self-awareness toward change.
The process has teachers look at themselves closely to determine their ideal of teaching and compare this ideal to how they are teaching now. This seven stage process includes: 1) self-awareness; 2) data collection; 3) data interpretation and pattern identification; 4) generating and choosing alternatives; 5) experimenting with the alternatives; 6) adoption or rejection of alternatives; and, 7) recycling.

These scholars suggest that the process of self-awareness is a long-term process. It involves risk-taking. The process of examining one's teaching practices is ongoing throughout a teacher's career.

Manning and Payne (1989) developed a cognitive self-direction (CSD) model for teacher education that goes beyond the typical definition of teacher reflection. They found that teachers who become aware of and monitor their thought processes, become more proactive over time. They can begin to use their introspection as a means of verbal self-regulation.
They found benefits of a CSD type of instruction for preservice teacher education to include: "improved lesson planning, improved classroom performance, improved creative problem-solving abilities, more internal locus of control, and less anxiety." (Manning & Payne, 1989, p. 30).

Walters (1989) attempted to demythologize critical thinking. He explained that there is often a reductionistic methodology underlying critical thinking which is problematic in regard to teacher education. Too often creativity, imagination, and noninstrumental speculation are ignored or devalued. Institutions of higher learning need to incorporate into their programs more nonreductionistic approaches.

**Behavioral Psychology**

Behavioral psychology can assist novice teachers in acquiring and reinforcing core abilities of teaching. It characterizes programs of teacher preparation where objectives are clearly stated, criteria are explicit and public, and decision-making regarding training needs are
based on successful mastery of objectives.

Certain contemporary models of coaching derive their support from behavioral psychology. Some contend that the provision of coaching following initial training in the induction programs of beginning teachers is critically important if new behaviors are to be integrated into classroom practice (Showers, 1984). Showers stated that research on training has demonstrated that with thorough training (which includes theory, demonstration, opportunities for practice and feedback) most teachers can acquire skills and strategies previously absent from their teaching repertoires. Her research has also demonstrated that without this training (coaching) there was a rapid attrition of new behaviors over time.

Showers (1984) emphasized the importance of leadership in the design and implementation of training systems at both the building and district levels. Principals in these systems, for example, would be able to facilitate the implementation of peer coaching systems through establishing
norms that reward collegial planning, public teaching, constructive feedback and experimentation, and collaborative problem solving with their teachers.

Schmieder (1973) reviewed the Competency-Based Education (CBE) movement in the United States, a conception of teacher preparation rooted in behavioral psychology. CBE is distinguished by several characteristics. One of the goals of CBE is the training of teachers who are able to demonstrate their ability to be effective with pupils. In this way the emphasis is on the goals and objectives and not the means. It liberates preservice students allowing them the opportunity to engage in an individualized instructional program. Goals and objectives are made public and brought under the scrutiny of peers and students with resulting feedback.

Broudy (1972) critiqued and analyzed performance-based teacher education (PBTE) in terms of three fundamental orientations to teachers: didactics, heuristics and philetics. Didactics refer to the impartation of knowledge
by the teacher to the pupil. Heuristics refer to the effort to help the pupil discover for himself or herself either the contents of a body of knowledge or the methods of arriving at such knowledge and assessing it. Philetics is a name for love or securing rapport with pupils or relating to pupils. He concluded that performance-based programs can accommodate didactics, which aims at rote mastery of a explicitly formulated knowledge and skill. Heuristic and philetic teachings however do not lend themselves to the precise analysis, specification, and evaluation which is the basis of performance-based teacher education.

Definitions, Titles, and Functions of Mentors

Before beginning any review of the issues associated with induction year or models of induction programs, it was necessary to define and address the functions of the mentoring process.

Definitions of Mentors

The concept of mentoring has been used for thousands of years but has become popular in education circles recently as
a means of easing the induction of the beginning teacher into the teaching profession.

The concept of the mentor dates back to Homer's Odyssey. Mentor was the teacher of Odysseus' son, Telemachus. From the description of this relationship between Mentor and Telemachus came the image of the wise and patient counselor who guides and shapes the lives of younger protegees (Homer, 1911).

There are more recent definitions of mentor. Ashburn, Mann, and Purdue (1987) defined mentoring as "the establishment of a personal relationship for the purposes of professional instruction and guidance." Sheehy (1976) defined a mentor as "one who takes an active interest in the career development of another person...a non-parental career role model who actively provided guidance, support, and opportunities for the protegee..." The Woodlands Group (1980) called mentors guides "who support a person's dream and help put (the dream) into effect in the world."
Levinson (1978) defined the mentor in the developmental process as "one defined not in terms of the formal role, but in terms of the character of the relationship and the function it serves... a mixture of parent and peer. A mentor may act as host and guide welcoming the initiate into a new occupational and social world and acquainting the protegee with its values, customs, resources, and cast of characters."

Shapiro, Haseltine, and Rowe (1978) suggested the definition of a mentor to be "an intensive paternalistic relationship in which an individual assumes the role of both teacher and advocate." This suggested a developmental relationship in the induction process.

**Titles and Functions of Mentors**

The title of the mentor often (but not always) connotes its function. Zimpher and Rieger (1988) suggested that while one title is no more appropriate than another, titles do convey both meaning and function (e.g., facilitating teacher, helping teacher).
Anderson (1986) suggested four types of mentors based upon the responsibilities for each role. They are: 1) Clinical Mentor, 2) Colleague Mentor, 3) Consultant Mentor, and 4) Community Mentor. The clinical mentor regularly observes and provides feedback to the beginning teacher. The colleague mentor helps beginning teachers carry out their daily teaching responsibilities. The consultant mentor consults and advises beginning teachers in the areas of curriculum and instruction. The community mentor is, as the name implies, a member of the community who helps beginning teachers develop professionally and/or personally.

Authors have developed other titles that are suggestive of particular functions. Schein (1978) referred to teacher mentors as coaches, sponsors, developers of talent, protectors, and successful leaders. Bird (1985) used the titles of master teacher, teacher specialist, teacher adviser, and teacher consultant. Odell (1986) used the term clinical support teacher. Borko (1986) analyzed the titles of mentors. She called them colleague teacher, helping
teacher, peer teacher, and support teacher. Ryan (1986) referred to the mentor as a helper-friend. Huling-Austin (1987) used the terms support teacher, helping teacher, and teacher consultant. The titles suggest the function of the mentor and somewhat define the relationship of the mentor and beginning teacher.

Zimpher and Reiger (1988) analyzed the titles of mentors and found they ranged in a spectrum from that of a personal relationship (called buddy teachers) to a studied, analytic relationship (called clinical teachers).

Daresh (1988) presented a list of desired characteristics/functions of administrator mentors which would be applicable to teacher mentors. They included such attributes as experience, positive leadership skills, good communication skills, interpersonal skills, ability to ask the right questions to help the beginning administrator reason through situations, intelligence, and the ability to model continuous learning and reflection.
Howey and Zimpher (1989) suggested that "mentors should be able to work with beginning teachers in a variety of activities, including the systematic study of children, structured problem solving, the conduct of action research, self-observation and analysis, and demonstration and coaching for more complex instructional approaches." (p. 446)

**Issues of Mentoring**

This section of the literature review considers the issues of mentoring that were used in the questionnaire of this research. These issues fell into one of three areas of mentoring: functions of mentoring, preparation and selection of mentors, and the necessary conditions for mentoring to occur.

Many authors have addressed the various functions of mentoring. Issues attached to these functions include evaluation, opportunities for the beginning teacher to observe other teachers, risk-taking behaviors, relationship of the mentor and the beginning teacher, and how the mentor assists with the orientation of the beginning teacher to the
school environment.

Bowers and Eberhart (1988) looked at entry year programs as part of overall teacher development and the role of mentors in such programs. They also examined perspectives that inform mentor leadership. These authors concluded that school improvement depends on the efforts of staff who provide and access collegial assistance and are able to collaborate on an ongoing basis. They contend that teachers will continue to learn more about teaching and how learning occurs when working with students, when reflecting on their teaching, and when observing their most successful colleagues. Professional development of this nature, they contend, makes the school a learning place for both the novice and the master teacher, thereby enhancing the school as a learning place for students as well.

Dunleavy (1983) also reviewed literature related to assistance for beginning teachers. He focused upon these areas where beginning teachers need assistance; the types of assistance beginning teachers need; who should provide the
assistance; and, finally, the timing of this assistance. Based on survey results, beginning teachers identified problems associated with learning to instruct and with learning about the schools as an instructional system as the most prevalent problems they face. The respondents also reported that most of the problems faced by beginning teachers were able to be solved by teacher assistance programs.

Thies-Sprinthal (1986) reviewed some of the issues that might arise in induction programs. She identified two major problems in induction programs. First, there is difficulty in the concept of effective mentor assistance of an educative nature. The second problem is concerned with how evaluation is provided while support is provided. Effective mentors provide a support system for beginning teachers but constructive feedback is needed through formative evaluations as this form of assistance aids the development of effective beginning teachers.
Wendt and Bain (1985) reasoned that individuals making the transition from student to teacher must be prepared to undertake new and varied roles. Beginning teachers must adjust to the new environment while learning as much as possible about the school and its policies. Mentors can ease this transition by providing information and opportunities for beginning teachers to learn these new roles.

Curwin and Schneider Fuhrmann (1975) outlined a seven stage process for moving from self-awareness toward change. The process has teachers look at themselves closely to determine their ideal of teaching and compare this ideal to how they are teaching now suggests that the process of self awareness is a long-term process. It involves risk-taking. The process of examining one's teaching practices is ongoing throughout a teacher's career. Mentors can provide opportunities for beginning teachers to reflect upon their professional development. Mentors can make explicit that it is "OK" and sometimes unavoidable to try new techniques and to fail at times.
Other authors addressed the preparation and selection of mentoring. Issues addressed in the questionnaire relative to preparation and selection were the age difference between mentors and beginning teachers, the compatibility of beliefs about teaching and learning, specific training in clinical skills in order to work effectively with beginning teachers, the amount of teaching experience possessed by mentors, possible certification requirements for this role, and specific selection criteria.

A study conducted by Stallion (1987) assessed the relative effects of mentoring relationships on the beginning teachers' classroom management behaviors as affected by training intervention. Findings indicated that mentor teachers were a vital component in transferring the knowledge base of classroom management principles. Thus, it was clear that professional development activities which focus on the latent knowledge and skills in classroom management are a priority in mentor preparation.
Stroble and Cooper (1988) concluded that the assistance skills helpful to mentor teachers in induction year programs were clinical supervision skills of observation, analysis of teaching, interpersonal communication, and the provision of psychological support. Training programs for mentor teachers should attempt to incorporate these skills to increase the effectiveness of the mentoring relationship.

Noninstructional concerns with which teachers, especially beginning teachers, cope on a regular basis can be stressful (Purkerson, 1980). Purkerson argued that teacher noninstructional concerns should be included more fully in preservice programs and extended as well in induction programs.

Zimpher and Rieger (1988) suggested that mentors themselves need to be mentored by other lead teachers and by support personnel in leadership capacities in the district. For mentoring programs to be successful, teachers must be nurtured, assisted, educated, and prepared for the important and critical role of teacher including the various topics
Many authors addressed the conditions of mentoring including: gender, release time for mentors and beginning teachers, financial remuneration, grade level and subject area compatibility, mentor remaining partially in the classroom, title of mentor, voluntary mentor relationship, and assessment of beginning teachers.

Zimpher and Rieger (1988) underscored that the very title assigned to the mentor is important. With naming comes entitlement and the consequences of visibility and designation, responsibility and knowledge, and personal respect.

Adequate time has to be allocated for needed dialogue between mentors and beginning teachers and for reflection by beginning teachers (Thies-Sprinthall, 1986). She argued that the common practice of relatively superficial evaluation does not result in effective teacher development. Standardized evaluations (checklists) do not provide for effective teacher development from her perspective. They can, in fact, result
in the opposite; the learning of poor practice. However mentors prepared with appropriate evaluation instruments can aid in the effective teacher development of beginning teachers. Appropriate evaluation instruments would have mentors become "the major support system for beginning teachers and the major source of modelling and constructive feedback through pre/post-observations in cycles of formative evaluation and assistance" (Thies-Springhall, 1986, p. 17).

Burke and Notar (1986) argued that appropriate rewards should be given to participants in these programs. Those involved in mentoring should receive recognition for this service. Release time for mentoring, as stated earlier, is essential. Mentor teachers could be placed on a career ladder for their effort of being trained for the service and the responsibilities they assume beyond their teaching. "Time, money and resources are valuable ingredients that interact to allow a program to function optimally" (p. 15).

In this regard Burke and Schmidt (1984) detailed an effort to address the problems of beginning teachers
developed by the University of Wisconsin-La Crosse with the support of a consortium of colleges and universities known as the Wisconsin Improvement Program.

Five major components for the Entry Year Assistance Program were listed. First, the concerns of beginning teachers are assessed periodically throughout the year. Second, supervision and observation by university personnel is provided for beginning teachers. These faculty members work more as consultants rather than supervisors for beginning teachers. Third, seminars and other faculty development activities are provided for the beginning teachers based upon the results of the survey. Additionally, a toll-free telephone number at the university is provided for beginning teachers to call university personnel with their concerns. Lastly, a team support system including an experienced teacher as a mentor, the principal, the university consultant and the beginning teacher is developed.

The problem identified was the structuring of the team. Participants were difficult to find and when found, had
conflicts in time and other responsibilities (Burke and Schmidt, 1984).

Burke and Schmidt (1984) also stressed the importance of a collaborative effort between the school and the university in order to provide resources (e.g., time, money, human) for the successful induction of beginning teachers into the teaching profession. A common theme in their experiences that occurred was that lines of communication must remain open between all parties. Dialogues allowed for the clarification of roles and exchange of information that are crucial for the successful induction of the beginning teacher. From their perspective mentoring was determined to be a crucial factor in the successful induction of the beginning teacher. It was again underscored that time and money should be allocated for the mentor teacher to work with the beginning teacher (Burke and Schmidt, 1984).

Futrell (1988) discussed the selection and compensation of mentor teachers. She first identified problems with top-down decision making models which deny first teachers the
time or the means for acclimatization to the complexities of teaching. She discussed the selection of mentors and appropriate compensation. Futrell favored peer selection in that it would reduce the dangers of divisiveness and it would give teachers greater decision-making authority.

Howey (1988) conceived of mentor-teachers as inquiring professionals. Characteristics of teachers as mentors and possible compensation for these teachers were described. The issue of mentoring versus limited teacher assessment was presented. He argued that continued existing evaluation practices will betray teacher accountability, blunt teacher growth and have a negative effect on classroom practice. The role of mentoring should be primarily educative but also include the more enlightened assessment of beginning teachers than most present practice.

Schockett (1984) examined the preferences of proteges in terms of gender of a mentor and also two types of mentoring assistance: 1) vocational and 2) psychosocial.
Four vocational functions were described in this study: educating, consulting and coaching, sponsoring and providing visibility and exposure, and protecting. The educating function underscores the importance of teaching proteges technical skills; provides them with challenging work assignments; and, evaluates the proteges' abilities. The consulting and coaching function introduces proteges to political norms, values, and resources and helps proteges develop a set of personal and professional standards. The sponsoring and providing visibility and exposure function supports proteges' abilities among their colleagues and helps proteges make contacts in the professional community. The protecting function shields proteges from damaging contacts with the professional environment. (Schockett, 1984, p. 5-6)

Four psychosocial functions were also described in this study: role modeling, encouraging, counseling, and moving from a transitional figure to a friend. The role modeling function has proteges observe mentors interacting with others. The encouraging function motivates proteges to do
his or her best. In the counseling function mentors and proteges discuss both personal and professional issues. The moving from a transitional figure to a friend function helps proteges perceive themselves as worthy of the profession). (Schockett, 1984, p. 6-7)

Specifically, the study addressed whether men and women differentially evaluate vocational and psychosocial mentoring assistance and whether they differ in their preferences for a same gender or a cross gender mentor. In this study male and female participants did not differ in the extent to which they found the two types of mentoring assistance desirable. Also, when presented with a choice, they placed less importance on the gender of a mentor than upon the functions a mentor was able to perform.

Kram (1985) however suggested that there were complexities and tensions present in cross-gender mentoring relationships. She reported: "men and women are inclined to assume stereotypical roles relating to each other in work settings; the role modeling function is frequently
unsatisfactory to the younger individual and sometimes to the mentor as well; and, mutual liking and admiration characteristic of all significant work relationships may lead to increasing intimacy and sexual tensions." (Kram, 1985, p. 106-107)

Stroble and Cooper (1988) examined several induction year programs, their role expectations for mentor teachers, and the often conflicting nature of these expectations. They proposed joining the concept of mentor teachers for induction programs with that of supervising teachers at the preservice level to create a new role -- school based teacher educators -- in order to better bridge the preservice-inservice continuum.

The authors concluded that those programs that ask mentor teachers both to assist and formally evaluate beginning teachers are more likely to experience problems than those programs that separate these two functions by assigning them to different persons.
Thies-Sprinthall (1986) found time and money to be the key issues. Adequate time and money have to be provided for the success of mentoring relationships.

**Examples or Models of Induction Programs**

Five exemplary induction programs which included mentor preparation were identified in this review of literature: 1) Charlotte-Mecklenburg Schools, 2) Toledo Schools, 3) Connecticut Schools, 4) New York City Schools, and 5) California Schools.

**Charlotte-Mecklenburg Schools**

The Charlotte-Mecklenburg Schools' Career Development Program attempted to develop the capacity of new teachers to comply with the system's performance expectations (Schlecty, 1984). Beginning teachers were required to participate in sequential training activities of demonstration, coaching, and corrective feedback. They were assigned to advisory/assessment teams composed of the principal, the assistant principal of instruction, and a senior teacher mentor. These team members were expected to regularly
observe and confer with beginning teachers, provide new teachers with necessary coaching and support and assist beginning teachers in locating other needed sources of training and support. The principal was expected to spend a half day per semester and the assistant principal of instruction and the mentor a half a day per month, observing and providing feedback to the beginning teacher. In addition, trained observers and evaluators observed beginning teachers three times during the first year (Schlechty, 1984, p. 10). He cited a weakness of the program to be the lack of systematic training and support for mentors, for advisory/assessment teams, and for principals, and assistant principals of instruction.

Toledo Schools

Waters and Hyatt (1985) described the Toledo Schools' induction program. Seven "consulting teachers" supervised nearly seventy beginning teachers. Consulting teachers benefitted from a close match between the teaching field of an intern and that of a consultant. Consulting teachers also
benefitted from the freedom given to them to channel all their energies into training beginning teachers as they were released from their teaching responsibilities. Consulting experienced teachers possessed certain criteria. They had to possess five years of outstanding teaching service. There were confidential references confirming outstanding experiences from principals, Toledo Federation of Teachers representatives, and three peer teachers. They had demonstrated ability in written and oral expression.

Consulting teachers were chosen by subject specialization and were to serve three years after which they would return to the teaching classroom. The skills that were focused on for development of new teachers in the program included modelling teaching techniques, classroom management skills, and content knowledge. There were three major responsibilities of the consulting teachers to beginning teachers. They were to point out deficiencies; suggest and demonstrate new teaching methods; and demonstrate sample lessons.
Connecticut Schools

Krupp (1984) reported about mentor programs in two elementary schools in Connecticut. These elementary schools held a series of eight workshops designed to foster mentoring relationships in order to ensure staff growth and development. The workshops concentrated on the following topics: introductory session for the entire staff, adult developmental changes, stress and coping mechanisms, and active listening skills which were consistently related to the life of the participant and to mentoring. 'Positive' results in her study were an increased feeling of self worth, the formation of new friendships, and young teachers being provided with both personal and professional assistance.

New York City Schools

Sacks and Brady (1985) described a Mentor Teacher Pilot Project developed by the Bureau of Staff Development in New York City and the Barnard College of Education faculty. Mentors in this program were retired teachers.
Mentors' objectives for inductees included: developing their own teaching styles and confidence; becoming decision makers in their classrooms; understanding children's cognitive and affective needs; becoming sensitive to different learning styles; and broadening and deepening their repertoire of learning activities and effective ways of teaching and coping with the first year (Sacks & Brady, 1985, p. 17).

This project reported that mentors and principals were enthusiastic and actively engaged in the program. New teachers in the project were still teaching in the assigned schools and accepted the mentors' participation.

California Department of State Education

Galvez-Hjornevik (1985) reviewed the Mentor Teacher program of the California Department of State Education. The stated purpose of the California Mentor Teacher Program was to encourage retention of exemplary teachers and to upgrade the skill of new and experienced teachers. Mentor teachers were therefore selected and their time was allocated to staff
development with teacher trainees, to new teachers and even to experienced teachers. Teachers in turn received a $4,000 annual stipend (California State Department of Education, 1983).

Mentor teachers were nominated and selected by committee on the basis of exemplary teaching. There was no certification requirement to become a teacher mentor. Five percent of the teachers in California were eventually designated mentor teachers by the State Department of Education. The governing board of the school district could accept or reject the nominations (California State Department of Education, 1983). Thus, mentor teacher selection and assessment were defined and controlled by the legislature and the school districts. Lists of criteria for selection of mentors were provided to the school districts. The State Department of Education defined the process of assessing the mentor's qualifications.

The State Department of Education recommended funding for the mentor-teacher program through stipends for the
participants, funding through the legislature, and

apportionment of monies to participating districts. Galvez-Hjornevik (1985) states, in summary, that it is "significant that all induction programs ... recognize the need for some type of mentor or sponsor teacher. A careful selection of teachers to serve in the mentor status would set the pace for the future of induction programs. Their influence on the impressionistic beginning teacher would be crucial" (p. 18).

Summary

Research and theoretical writings reviewed for this study were derived primarily from four literatures: developmental psychology, perceptual psychology, cognitive psychology, and behavioral psychology. Literatures were also reviewed which examined definitions and functions of mentoring, issues of the induction year, and examples or models of induction programs. In brief, this review of literature underscored that the mentoring process between the mentor and beginning teacher is complex and interactive during the initial years of the beginning teacher's career.
It also suggested that current information about the role of the mentor in this process is insufficient.
Chapter III

Methodology

Presented in this chapter are the research design, subject selection procedures, instrumentation, data collection and data analyses procedures, and summary.

Research Design

The purpose of this study was to survey administrators, mentors, and beginning teachers from public schools of Ohio to determine their perceptions of mentors in the mentoring process. The survey research design selected to fulfill this purpose has its antecedents in the work of Gay (1981) and Kerlinger (1986). A descriptive sample survey was used in this study. The intent of this study was to describe effective mentoring and the induction process as viewed by administrators, mentors, and beginning teachers of the public schools in the state of Ohio.
Mentors and beginning teachers were chosen from the following school systems: Columbus, Toledo, Cleveland, Cincinnati, Dublin, and Upper Arlington. These school systems were selected because they have had mentoring programs that have been in operation for several years. One hundred mentors and 100 beginning teachers were surveyed. The sample was stratified by urban and suburban settings; elementary, middle, and secondary levels; and small, medium, and large school districts.

As an example of the selection of mentors and beginning teachers, the administrator in charge of the Columbus Peer Assistance Review Program selected mentors and beginning teachers by randomly drawing their names from the list of all mentors and beginning teachers in the program.

Other school systems had fewer mentors and beginning teachers so that all the mentors and beginning teachers received the questionnaire.

The Ohio State Department of Education randomly selected 100 administrators by computer from the list of Ohio
administrators based upon the criteria of elementary, middle, or high school and urban, suburban, or rural location.

Several intervening variables could affect the validity of this research design. First, not all school systems were surveyed. The small sample may not truly reflect the perceptions of the population of the educators of Ohio schools and thus decrease the generalizability of this study. Another possible threat to the validity of this study is the instrument developed for and employed in this study. Sources such as type of questions, wording of the questions, length of the instrument, sponsor of the instrument, method of administration, and respondent errors could all affect the validity of this study.

In response to these concerns participation by the educators of these schools in this research was voluntary (i.e., directions were given to the participants that their participation was voluntary). Mentors and beginning teachers were chosen from specific school systems for several reasons:

1) permission had been sought and gained by the researcher
from the appropriate authorities of each school district;  
2) these school systems had mentoring programs that have been  
in operation for several years; and, 3) the school districts  
were willing to cooperate in order that they might improve  
their mentoring programs from the results of this study.

**Instrumentation**

The instrumentation employed was a descriptive survey. The survey instrument consisted of three sections: 1) socio-demographic information, 2) orientations of administrators, mentors, and beginning teachers towards effective mentoring, and 3) issues of the mentoring process.

The first section of the instrument consisted of a set of questions soliciting socio-demographic information. Solicited information consisted of: 1) age, 2) gender, 3) role (administrator, mentor, or beginning teacher), 4) years of experience, 5) highest degree held (bachelors, masters, or Ph.D.), 6) school level (elementary, middle, or high), 7) school size (small, medium, or large), and, 8) location (urban, suburban, or rural).
The second section of the instrument was designed to describe those attributes perceived as important in mentors by administrators, mentor teachers, and beginning teachers. Each item in this section provided a choice from one of four orientations: perceptual psychology, developmental psychology, behavioral psychology, and cognitive psychology.

Developmental psychology is concerned with the various stages of development through which teachers progress during their professional career. Authors describe these stages using different terms (Berliner, 1988; Burke, Christensen, and Fessler, 1984; Fuller, 1969). It suggests that learning to teach is not a lock-step progression but rather a dynamic relationship which is always moving back and forth between phases in response to personal and organizational influences. It suggests that a variety of opportunities for learning to teach based upon individual differences in adult learners encourages increased growth as a teacher.

Perceptual psychology is concerned with how teachers' perceptions of their roles and responsibilities and of the
pupils in the classroom influence teaching. Core underpinnings of this psychology include these data-based assumptions: 1) teachers attempt to experience as many new situations as possible to increase their pedagogical abilities. This allows teachers to find the methods which best suit them to solve the problems with which they will deal; 2) teachers develop a sense of self-awareness which guides their teaching skills; 3) teachers perceive others as having the capacities to deal with their own problems; 4) teachers develop over time a general internal frame of reference which guides how they interact with other people (Combs, 1974).

Cognitive psychology also suggests a model of self-direction for teacher education (Curwin and Schneider Fuhrmann, 1975; Manning and Payne, 1989; Martin, 1989; Reilly, 1989). Cognitive self-direction suggests that teachers who become more aware of and monitor their thought processes become better teachers. Cognitive self-direction derives from teacher-student interactions in which teachers
use their introspection as a means of verbal self-regulation.

Cognitive self-direction can focus on improved lesson planning, classroom performance, creative problem-solving abilities, more internal locus of control, and less anxiety (Manning and Payne, 1989).

Cognitive psychology often features a reflective interplay. The goal of teacher preparation or entry year curriculum from this perspective is to facilitate an ongoing "reflective interplay" between the personal predispositions and the diverse languages of professional growth associated with our teacher education heritage. Teacher education curricula is grounded into ongoing inquiry of how children and adolescents learn.

Behavioral psychology commonly refers to a performance based orientation of the teacher (Broudy, 1972; Hall, 1974; Hall and Loucks, 1975; Schmieder, 1973). This orientation can focus on precise objectives stated in behavioral terms, explicit and public criteria for the assessment of student competencies. Mastery of previous objectives frequently
determines staff development decisions. Staff development is an ongoing process. Competence is seen as the ability to perform. Feedback is frequently provided to teachers about their performance (Schmieder, 1973).

In the development of the questionnaire each item offered four choices concerning various attributes of a mentor. Each item consisted of four statements randomly arranged and each statement represented one of the orientations briefly identified above. The first set of items attempted to determine the different role groups' perceptions of the mentor's central focus in helping the beginning teacher learn to teach. Set two attempted to determine the different role groups' perceptions in terms of how general assistance should be provided to the beginning teacher. Set three attempted to determine the different role groups' perceptions concerning how beginning teachers are observed and provided feedback. Set four attempted to determine perceptions of the core abilities of the mentor. Respondents then rank ordered these statements according to
their perceived importance.

This section of the instrument was piloted for face validity and content validity by nine experienced teachers from the Upper Arlington School System. All of these teachers had master's degrees in education and each had taught in the public schools of Ohio for at least fifteen years. These teachers were provided a copy of this section of the instrument and brief descriptions of each psychology. They were asked to read the psychological descriptions and then identify the psychology that pertained to each statement of the four sets of statements. There was no statement that was correctly identified less than 70% by these experienced teachers. Comments about the construction of this section of the instrument were also solicited from these teachers and these comments were used for the improvement of this section of the instrument.

The third section of the questionnaire consisted of a set of twenty statements concerned with key issues associated with mentoring as derived from a review of literature about
this process. These twenty issue statements fell into one of three domains. The first domain dealt with issues regarding what the functions of the mentor should be. Issue statements 2, 3, 4, 11, 14 of the questionnaire fell within this domain. The second domain dealt with issues of the preparation and selection of the mentor. Issue statements 7, 9, 10, 12, 15, 16, 18 of the questionnaire fell within this domain. The third domain dealt with issues of the conditions needed to facilitate the mentoring process. Issue statements 1, 5, 6, 8, 13, 17, 19, 20 of the questionnaire fell within this domain.

**Data Collection Procedures**

The questionnaire was developed during the Winter, Spring, and Summer of 1990.

The mailing of the questionnaire occurred in January, 1991. The deadline for responding to the mailing was February 25, 1991. A copy of the questionnaire is provided in Appendix C.
An incentive (a quarter) for participation was sent with each questionnaire in the hope of increasing the response rate.

There were a total of 300 surveyed participants. One hundred participants were administrators, 100 were mentor teachers, and 100 were beginning teachers. The mentors and beginning teachers were from the Columbus, Toledo, Cleveland, Cincinnati, Dublin, and Upper Arlington school systems. The administrators were selected as identified by the Ohio State Department of Education from the public schools of the state of Ohio.

A total of 201 educators (71 administrators, 76 mentors, and 54 beginning teachers) responded to the survey instrument. The total response rate was 67%. Acceptable survey research response rates vary from 50% to 60% (Gay, 1981; Kerlinger, 1986).

Several factors likely contributed to an acceptable response rate. First, the surveyed educators had a vested interest in the mentoring process. They were involved in an
existing mentoring program. Secondly, they were given the questionnaire by their immediate superordinate with instructions to complete the questionnaire. Although the directions clearly stated that the instrument was voluntary, there was probably some indirect influence to complete the questionnaire. Third, although the concrete incentive to participate was small (a quarter), it nonetheless likely influenced a number of people to respond. There were a number of unsolicited comments written on the questionnaire that they appreciated the quarter to purchase a cup of coffee. Fourth, a return addressed stamped envelope was provided. Fifth, the author had official sponsorship from The Ohio State University. Sixth, confidentiality for respondents was stressed in the cover letter. Seventh, the questionnaire was mailed in the Winter after semester exams would have been administered. This was a time when respondents would most probably return a questionnaire. Finally, a deadline for returning the questionnaire was included in the cover letter (Gay, 1981; Kerlinger, 1986).
Data Analysis Procedures

Analysis of the study addressed the major research topic of the orientations of administrators, mentors, and beginning teachers in terms of how mentors should assist a beginning teacher to learn to teach while on the job. Appropriate analyses were performed on each of the data sets corresponding to the different data collection methods used.

Part one addressed socio-demographic characteristics of the participants in the three role groups.

Part two attempted to determine the perceptions of the three role groups (administrators, mentors, beginning teachers) when they considered the attributes of an effective mentor in terms of four different orientations.

Part three considered issues associated with the mentoring process. These issues fell into three different domains. The first domain dealt with the functions of effective mentoring. The second domain dealt with the perceptions of preparation and selection of effective mentors. The third domain dealt with the conditions needed
to facilitate the mentoring process.

Socio-demographic Data

Socio-demographic data consisted of a series of eight items to determine the background of the participants. Those eight items were: 1) age, 2) gender, 3) position (administrator, mentor, beginning teacher), 4) years experience, 5) highest degree held (bachelors, masters, doctorate), 6) school level (elementary, middle, high), 7) school size (small, medium, large), and 8) school location (urban, suburban, rural).

Descriptive statistics were used to determine the distribution of the sample population in this study. These variables were also used in analyzing the next two sections.

Psychological Orientations

Data on the psychological orientations of the three role groups was collected by rank ordering four sets of statements. Each set consisted of four statements addressing a particular aspect of mentoring. Each statement of a set was based on one of four psychologies: perceptual,
developmental, behavioral or cognitive.

Analysis of this data was performed by two methods: 1) percentage psychological orientation (using first choice only) of each role group for each set, and, 2) Friedman Two-Way Analysis of Variance (SPSS, version 4.0).

**Issue Statements**

Data for the twenty issue statements were collected using a five point Likert-scale. These issue statements clustered under three domains: *functions* of the mentoring process, *preparation and selection* of mentors, and, *conditions* needed to facilitate the mentoring process.

Cronbach Coefficient Alpha was generated to determine the reliability of the instrument.

Cross-tabulations of each issue statement were determined. Analysis of data by count and percent for the perceived importance of each issue statement by each role group was performed.

Oblique Principal Component Cluster Analysis of Variables (SAS, version 5.18, 1989) using standardized
scoring coefficients was used to determine the degree to which the twenty issue statements actually clustered to the stated domains.

These clusters were then used in a multiple analysis of variance. Covariates in this analysis were role group, school size, and school level. Follow-up discriminant analysis was performed for variables that revealed a significant function. Multiple analysis of variance was used to determine if there was an interaction effect between the covariates.

A pair-wise multiple comparison procedure was used to determine the interaction effect of the covariates.

**Summary**

This chapter discussed the utilization of a descriptive survey to fulfill the purpose of the study. The purpose was to present data on the study of the conceptions of mentor teachers in selected public school systems in Ohio.

The subjects selected for this study were educators from school systems of Ohio that were actively involved in a
mentoring program.

The survey instrument consisted of three sections. One section dealt with the socio-demographics of the sample. The second section gathered perceptions about the attributes of mentors and the mentoring process. The third section dealt with the perceived importance of the issues of a mentor and the mentoring process.

The survey instrument was developed over a period of several months. A review of literature dealing with applications of behavioral, developmental, cognitive, and perceptual psychologies in education and issues related to the mentoring process aided the construction of the instrument.

Questionnaires were sent out to 300 educators. One hundred administrators were randomly selected from throughout the state of Ohio. One hundred mentors and 100 beginning teachers were chosen from six Ohio school systems that were actively engaged in mentoring programs. Two hundred-one educators responded to the questionnaire (71 administrators,
76 mentors, and 54 beginning teachers) for a response rate of 67%. The analysis performed on the data included the use of descriptive statistics, discriminant analysis, pair-wise multiple comparison technique, and multiple analysis of variance.
Chapter IV

Results

This chapter reports analyses of the data collected to test the hypotheses that guided this study. Interpretations of data collected through the instrument used to assess differences among administrators, mentors, and beginning teachers on their perceptions of functions, preparation and selection, and conditions for effective mentoring are also presented.

Demographics

The first section of the survey instrument consisted of a set of questions soliciting demographic information. These demographic data became the covariates for analyses of the next two sections of the instrument (e.g., role group, size of school, level of school, and school location). The variables were analyzed by descriptive statistics.
An inspection of Table 1 revealed that of the 201 respondents, 71 were administrators, 76 were mentors, and 54 were beginning teachers.

Almost half (46%) of the administrators were between the ages of 41-50. Fifty-three percent of the mentors were between 41-50 years of age. Over half (56%) of the beginning teachers were between the ages of 22-30.

Seventy-three percent of the responding administrators were male but 70% of the mentors and 87% of the beginning teachers were female.

The majority (86%) of the responding administrators had more than ten years of experience. Similarly, 91% of the mentors had more than ten years of experience. The majority of beginning teachers (83%) had less than five years of experience. Not all beginning teachers were new. Those being mentored included those taking on a new assignment or returning to the classroom after a sustained leave of absence.
Most administrators (87%) held a master's degree as their highest degree. Seventy percent of the mentors held a master's degree. The bachelor's degree was the most common highest degree held by the beginning teachers at 83%.

The majority of the responding administrators (59%) and beginning teachers (57%) came from an elementary background while the responding mentors came equally from an elementary background (44%) and a high school background (44%).

The respondents mainly came from small schools defined in this study as having less than 800 students. Seventy-seven percent of the administrators, 44% of the mentors, and 46% of the beginning teachers came from small schools.

Almost half (46%) of the administrators responded from rural schools but the majority of responding mentors (68%) and beginning teachers (59%) were from urban schools.

---Insert Table 1 Here---

Psychological Orientation

The second section of the questionnaire attempted to determine whether there was a dominant psychological
orientation by the three role groups (administrators, mentors, and beginning teachers) when they shared their perceptions of the attributes of an effective mentor.

This study specifically considered the mentoring process as undergirded by four psychologies: 1) perceptual; 2) developmental; 3) behavioral; and 4) cognitive. While obviously many other disciplines or orientations could have been considered as well, these four applied areas of psychology are generally viewed as contributing in essential ways to learning to teach.

Perceptual psychology is concerned with how teachers' perceptions of their roles and that of the pupils influence teaching.

Cognitive psychology, among many other topics, looks at how teachers can become more aware of and monitor their reasoning about teaching.

Behavioral psychology assists the beginning teacher in acquiring and reinforcing core abilities. It also undergirds preparation programs where objectives are clearly stated,
criteria are explicit and public, and decision-making regarding training needs are based on successful mastery of objectives.

Developmental psychology refers to various stages of development through which teachers progress during their professional careers. Different scholars describe these stages with different constructs. In this study the theoretical work of Frances Fuller (1969) was employed wherein stages are characterized essentially as: 1) survival, 2) mastery, and 3) impact).

Four aspects of mentoring were considered in this section of the questionnaire which attempted to determine some of the attributes of mentors. The first set of items attempted to determine the different role groups' perceptions of the mentor's central focus in helping the beginning teacher learn to teach (e.g., mentors should advocate that the best way to learn to teach is practice, practice, practice important teaching skills). Set two attempted to determine the different role groups' perceptions in terms of
how general assistance should be provided to the beginning teacher (e.g., mentors should assist beginning teachers in acquiring the ability to analyze various dimensions of teaching). Set three attempted to determine the different role groups' perceptions concerning how beginning teachers are observed and provided feedback (e.g., when observing beginning teachers, mentors should focus on classifying how novice teachers perceive and interpret various student behaviors). Set four attempted to determine perceptions of the core abilities of the mentor (e.g., mentors should understand that their advice may be too expert for beginning teachers to comprehend).

Analyses of these data was performed by two methods: 1) the percentage of psychological orientation (using first choice only) of each role group for each set of items, and 2) Friedman Two-Way ANOVA (SPSS, version 4.0) with follow-up test of differences between psychological orientations.
Percentage Psychological Orientation

Table 2 reveals each role groups' psychological orientations in terms of what the mentor's central focus in learning to teach should be. Approximately 35% of the administrators selected a perceptual orientation and 33.8% chose a developmental orientation. Mentors and beginning teachers in the aggregate most often selected developmental orientations; 34.2% and 42.6% respectively. All three groups, administrators, mentors, and beginning teachers identified a behavioral orientation least commonly (8.5%, 14.5%, 9.3% respectively). There was not a majority of any role group preferring one orientation. There is a considerable difference between the administrators and mentors in terms of choices embedded in the perceptual orientation (35.2% and 22.4%). Administrators, perhaps understandably, appear to be more concerned about mentors helping beginning teachers develop a sense of their role in the classroom while mentors appear to be more concerned that those attempting to help understand the stage of professional
development of beginning teachers.

---Insert Table 2 Here---

A summary of Table 3 reveals each of the three role groups' psychological orientations in terms of how general assistance is provided to beginning teachers. All three groups, administrators (47.9%), mentors (47.4%), and beginning teachers (35.2%) tended to respond most to principles espoused in a behavioral orientation. The administrators and mentors appeared to be more concerned than the beginning teachers with the mentor's ability to assist the novice with effective teaching practices. Similarly, all three groups, administrators (7.0%), mentors (18.4%), and beginning teachers (13.0%) demonstrated a low preference for a perceptual orientation. The large difference between mentors (18.4%) and beginning teachers (31.5%) in their cognitive orientation suggests that beginning teachers appear to be more concerned that mentors provide them with time for reflection about their teaching practices than the mentors are with this activity.
Table 4 again shows considerable agreement across the three role groups. In terms of what should guide observations of beginning teachers, administrators, mentors, and beginning teachers indicated a strong developmental orientation of 47.9%, 61.8%, and 53.7% respectively. Conversely, administrators (7.0%), mentors (0.0%), and beginning teachers (0.0) least preferred a cognitive orientation. These results suggest that administrators, mentors, and beginning teachers appear to more concerned that mentors consider the stage of professional development of beginning teachers when observing them than the ability of beginning teachers to reflect about their teaching practices. Beginning teachers (25.9%) appear more perceptually oriented towards this aspect of mentoring than mentors (11.8%); so again there are some differences between mentors and beginning teachers.

---Insert Table 4 Here---
The results of table 5 focused on the core abilities of the mentor. Here, there are basic differences. Administrators indicated a behavioral orientation of 42.3%. Mentors revealed a perceptual orientation of 50.0%. Beginning teachers demonstrated a perceptual orientation of 44.4%. Administrators (5.6%), mentors (1.3%), and beginning teachers (1.9%) least preferred a developmental orientation.

In summary, Administrators appear to have a preference for mentors who emphasize the basic teaching skills for beginning teachers but mentors and beginning teachers prefer to have mentors help beginning teachers develop a sense of their broader role. That broader role would include helping beginning teachers: attempt to experience many new situations to increase their background; develop a sense of self-awareness to guide their teaching skills; perceive others as having the capacities to deal with their own problems; and, develop over time a general internal frame of reference which guides how they interact with other people (Combs, 1974).
Table 6 illustrates the results of an analysis using first choice only of the three role groups in terms of the four dimensions of the mentor's responsibilities in assisting beginning teachers that is: the mentor's central focus in helping the novice learn to teach, the focus in general assistance provided to beginning teachers, the mentor's focus in guiding observations of beginning teachers, and the core abilities of the mentor that are desired. In terms of first choices, almost one third (31.3%) of the administrators indicated a behavioral orientation and only 18.0% of them a cognitive orientation. Similarly, almost one third (30.3%) of the mentors demonstrated a behavioral orientation and 15.8% of them a cognitive orientation and as opposed to mentors and administrators, beginning teachers indicated only a 25.5% behavioral orientation. Administrators and mentors indicated a preference for mentors that emphasize basic teaching skills (e.g., the ability to perform specific teaching skills; make explicit precise
behavioral objectives) to beginning teachers rather than those that emphasize to beginning teachers a reflective interplay of their teaching practices. Beginning teachers however indicated developmental and perceptual orientations of 29.6% and 28.2% respectively while 16.7% preferred a cognitive orientation. They indicated a preference for mentors that consider beginning teachers' stage of professional development and how they perceive their roles as teachers in the classroom when working with them.

--Insert Table 6 Here--

These data indicate that this group of educators are practically eclectic and theoretically inconsistent in their orientations towards these various aspects of mentoring. Their orientation was situational and dependent upon the particular aspect of the mentor's responsibilities in assisting beginning teachers that was being considered.

Summarizing the results of Tables 2-6, the orientations of administrators, mentors and beginning teachers about the mentoring process were similar to each other in terms of
different mentoring functions. The particular aspect of mentoring determined the orientations of the role groups. When examining whether one orientation was most common across topics, a slight behavioral orientation was apparent for administrators and mentors but not for beginning teachers who indicated a slight developmental orientation. A cognitive orientation was least preferred by all three role groups for each of the four topics. This analysis also suggests that a current primary concern is stressing core teaching skills in helping beginning teachers to learn to teach but likely there is not enough attention to intellectual discourse about teaching.

**Friedman Two-Way ANOVA**

A summary of the results of the role groups' orientations to the mentor's central focus in helping the beginning teacher to learn to teach is presented in Table 7. The results of the Friedman Two-Way ANOVA for Ordinal Data for all three role groups for main effect showed a statistically significant difference ($\alpha = .05$) for this
mentor function. The results imply that there are statistically significant differences as to which psychological orientation was preferred by administrators, mentors, and beginning teachers in terms of how mentors assist beginning teachers to learn to teach.

--Insert Table 7 Here--

Friedman Two-Way ANOVA Follow-up Test for Ordinal Data was performed since statistical significance was shown. Table 8 summarizes the results of this test.

The administrators' responses drew upon principles espoused in the perceptual, developmental, and cognitive psychologies. It shows that there are statistically significant differences (critical value = 40.58) in their orientation towards this aspect of mentoring with total sum of rank differences above the critical value of significance between behavioral and cognitive, developmental and cognitive, behavioral and developmental, and behavioral and perceptual psychologies.
Mentors' responses drew upon principles espoused in the developmental, cognitive, and perceptual psychologies. It likewise shows that there are statistically significant differences (critical value = 41.48) in their orientation towards this aspect of mentoring with total sum of rank differences above the critical value of significance between behavioral and cognitive, behavioral and developmental, and behavioral and perceptual psychologies.

Beginning teachers' responses drew upon principles espoused in the developmental, perceptual, and cognitive psychologies. It again shows that there are statistically significant differences (critical value = 35.39) in their orientation towards this aspect of mentoring with total sum of rank differences above the critical value of significance between behavioral and developmental, and behavioral and perceptual psychologies but not behavioral and cognitive.

---Insert Table 8 Here---

The educators' responses suggest that they drew upon principles espoused in perceptual, developmental, and
cognitive psychologies. The null hypothesis should not be rejected in regard to this aspect of mentoring. Employing this analysis, Administrators, mentors, and beginning teachers did not have significant differences in their preferred approaches in terms of how mentors assist beginning teachers to learn to teach.

A summary of the results of the role groups' orientations that guide the mentor's general assistance provided the beginning teacher is presented in Table 9. The results of the Friedman Two-Way ANOVA for Ordinal Data for administrators and mentors for main effect showed statistically significant differences (alpha = .05) for this aspect of mentoring. Beginning teachers did not show a statistically significant difference.

---Insert Table 9 Here---

Friedman Two-Way ANOVA Follow-up Test for Ordinal Data was performed since statistical significance was shown. Table 10 summarized the results of this test.
Administrators show a statistically significant difference (critical value = 40.58) in their orientation. They have a behavioral orientation in terms of how general assistance should be provided with the total sum of rank differences above the critical value of significance between perceptual and developmental, perceptual and behavioral, and behavioral and cognitive psychologies.

Mentors also showed a statistically significant difference (critical value = 41.48) in their orientation. They have a behavioral orientation towards this aspect of mentoring with the total sum of rank difference above the critical value of significance between behavioral and developmental psychologies. Administrators and mentors appear to be concerned with the mentor's ability to assist the novice with basic teaching practices (e.g., the ability to perform specific teaching skills; make explicit precise behavioral objectives).

Although beginning teachers reveal no statistically significant differences (critical value = 35.39) in their
orientation, the behavioral orientation had the lowest mean score. They do not have a preferred orientation in terms of how general assistance should be provided with the total sum of rank differences below the critical value of significance between behavioral, cognitive, developmental, and perceptual psychologies.

--Insert Table 10 Here--

The results suggest there are no statistical differences in terms of which orientation is preferred by administrators and mentors in regard to this aspect of mentoring. Beginning teachers likewise showed no preference to a particular orientation. Thus, the null hypothesis should not be rejected for administrators and mentors in regards to this aspect. They did not have statistically significant differences in terms of how mentors assist beginning teachers to teach. Neither should the null hypothesis be rejected for beginning teachers since they did not show a statistically significant difference in a preferred approach to how mentors assist beginning teachers to teach.
A summary of the results of the role groups' orientations concerned with observing a beginning teacher is presented in Table 11. The results of the Friedman Two-Way ANOVA for Ordinal Data for all three role groups for main effect were statistically significant (alpha = .05) for this aspect of mentoring. The results show statistically significant differences as to which orientations were preferred by administrators, mentors, and beginning teachers in terms of how mentors assist beginning teachers to learn to teach while on the job.

---Insert Table 11 Here---

Friedman Two-Way ANOVA Follow-up Test for Ordinal Data was performed since statistical significance was shown. Table 12 summarizes the results of this test.

Administrators show a statistically significant difference (critical value = 40.58) in their orientation. They preferred a developmental orientation in terms of observing beginning teachers with the total sum of rank differences above the critical value of significance between
cognitive and perceptual, cognitive and behavioral, cognitive and developmental psychologies.

Mentors also showed a statistically significant difference (critical value = 41.48) in their orientation. They preferred a developmental orientation with the total sum of rank differences above the critical value of significance between perceptual and developmental, cognitive and perceptual, cognitive and behavioral, cognitive and developmental psychologies.

Beginning teachers reveal a statistically significant difference (critical value = 35.39) in their orientation. They also preferred a developmental orientation in terms of how they should be observed with the total sum of rank differences above the critical value of significance between cognitive and perceptual, developmental and behavioral, cognitive and behavioral, cognitive and developmental psychologies.

--Insert Table 12 Here--
The results imply that all three role groups prefer a developmental orientation. That is taking into account differences in the developmental level of teachers is critical when they are observed. The null hypothesis should not be rejected in regards to this aspect of mentoring. Administrators, mentors, and beginning teachers however do not have statistically significant differences in their preferred approaches to mentoring in terms of how mentors assist beginning teachers to teach.

A summary of the results of the educators' orientations in terms of the core abilities of the mentor is presented in Table 13. The results of the Friedman Two-Way ANOVA for Ordinal Data for all three role groups for main effect were statistically significant (alpha = .05) for this aspect of mentoring. The results show statistically significant differences as to which orientations were preferred by administrators, mentors, and beginning teachers in terms of how mentors assist beginning teachers to learn to teach while on the job.
Friedman Two-Way ANOVA Follow-up Test for Ordinal Data was performed since statistical significance was shown. Table 14 summarizes the results of this test.

Administrators' responses suggest that they drew primarily upon principles espoused in behavioral and perceptual psychologies. There are statistically significant differences (critical value = 40.58) in terms of the core abilities needed in mentors with the total sum of rank differences above the critical value of significance between developmental and cognitive, developmental and perceptual, and developmental and behavioral psychologies.

Mentors drew upon principles espoused in behavioral and perceptual psychologies. There are statistically significant differences (critical value = 41.48) towards this aspect of mentoring with the total sum of rank differences above the critical value of significance between developmental and cognitive, developmental and perceptual, perceptual and cognitive, and developmental and behavioral psychologies.
Beginning teachers drew upon principles espoused in behavioral and perceptual psychologies. There were statistically significant differences (critical value = 35.39) in terms of the core abilities of mentors with the total sum of rank differences above the critical value of significance between developmental and cognitive, developmental and perceptual, perceptual and cognitive, and developmental and behavioral psychologies.

--Insert Table 14 Here--

The results imply that all three role groups preferred perceptual and behavioral psychological orientations in terms of core abilities. They preferred mentors who could demonstrate core teaching skills and who can assist beginning teachers in developing a general internal frame of reference to guide their teaching. The null hypothesis should not be rejected in regard to this aspect of mentoring. Administrators, mentors, and beginning teachers did not have significant differences in their preferred approaches to mentoring in terms of how mentors assist beginning teachers.
to teach generally.

Table 15 shows the composite weighted means psychological orientations for all three role groups across the four aspects of mentoring. The three role groups together have no particular orientation.

---Insert Table 15 Here---

Summarizing the results of the Friedman ANOVA with follow-up tests (Tables 7-15), the psychological orientations of the administrators, mentors, and beginning teachers about the four mentoring processes identified are very similar to each other. The particular aspect of mentoring determines the orientation of the role group. These data suggest that the orientation of the educator is situational in terms of function and independent of the role of the educator.

**Issues of Mentoring**

The third section of the survey attempted to determine the perceived importance of certain issues of mentoring. Variables that were considered were: 1) role group
(administrator, mentor, beginning teacher), 2) level of school (elementary, middle, high school), 3) size of school (small, medium, large), and 4) location of school (urban, suburban, rural). Interaction effects were also considered between: 1) role group and size, 2) role group and level, 3) size and level, and 4) role group and school location.

Analyses of data were performed by several methods: 1) Cronbach Reliability Coefficient Alpha, 2) cross tabulation by count and percentage, 3) Oblique Principal Component Cluster Analysis of Variables (VARCLUS), 4) Multiple Analysis of Variance (MANOVA) of the clusters obtained from VARCLUS, and 5) Follow-up procedures of the MANOVA results using discriminant analysis and multiple comparison techniques.

**Cronbach Reliability Coefficient Alpha**

The reliability of the twenty issue statements dealing with the three domains (1. functions of mentoring, 2. preparation and selection of effective mentors, and 3. conditions for effective mentoring) was determined using a correlation analysis followed by a determination of Cronbach
Reliability Coefficient Alpha. The internal consistency (Cronbach Alpha) for raw variables was 0.621.

The internal consistency for the standardized variables was 0.633. Complete internal consistency would have a value of 1.000. Personality measures, especially ones that are new, should not be expected to have high reliabilities at the beginning stages of development. Coefficients in the sixties or seventies are acceptable reliability (Gay, 1981).

Cross Tabulations by Count and Percentage

Issue statements 2, 3, 4, 11, 14 concerned with the functions of mentors were determined to be of most importance to the 201 educators who responded to the survey. The topics of these issues were combining education and evaluation, opportunities for the beginning teacher to observe other teachers, the degree to which the mentor engages in risk-taking behaviors, the nature of the relationship of the mentor and the beginning teacher, and the orientation of the beginning teacher to the school environment.
Perhaps, surprisingly, less than half of the administrators (43.6%) but over two-thirds of the mentors (69.7%) and beginning teachers (68.5%) indicated that the mentor should evaluate the beginning teacher's performance as well as provide assistance (issue two).

The great majority of administrators (83.1%), and a substantial majority of mentors (68.4%) and beginning teachers (59.2%) considered issue three, the mentor providing the beginning teacher with opportunities to observe other teachers to be most important. Finding ways and means to do this is obviously a problem.

The concern about the mentor exhibiting and encouraging risk-taking behaviors was considered most important by 57.7% of the administrators, 48.7% of the mentors, and 57.4% of the beginning teachers. To their credit these respondents felt that it is important that beginning teachers be allowed to try new concepts and risk failure in the attempt.

Approximately two-thirds of the administrators (61.9%), mentors (69.7%), and beginning teachers (70.4%) indicated
that mentors should be responsible for more than the professional development of the new teachers; they believed that they also should serve as a confidant and advisor, if not a friend. A focus on the technical aspects of teaching is not enough.

All three role groups, administrators (60.6%), mentors (73.7%), and beginning teachers (79.6%) considered the issue of mentors orienting beginning teachers to the unwritten rules and politics of the school and district to be a most important concern. This is an acknowledgement of the importance of a beginning teacher knowing how to go through the politics of the school system.

Issue statements 7, 9, 10, 12, 15, 16, 18 were concerned with preparation and selection of mentors.

Approximately three-fourths of the administrators (76.1%), mentors (76.3%), and beginning teachers (72.2%) did not consider an age difference of 8 or more years to be an important issue. Thus, while there might be some support in the broader literature on mentoring about being a half
generation or more older, it was not viewed as critical in this study.

Issue 15 considered additional certification for mentors. Most administrators (60.6%), mentors (54.0%), and beginning teachers (57.4%) considered the issue of certification for the mentor to be important. This suggests that they believe the possession of a certificate indicates that the mentor has been properly trained for the mentoring process.

Almost three-fourths of the administrators (73.3%) and two-thirds of the mentors (67.1%) felt issue 9, the mentor and beginning teacher having compatible beliefs about teaching and learning, was important. Even more beginning teachers (87.0%) felt it was an important concern. This indicates that all three role groups believe that an effective working relationship with mentors should include some compatibility in beliefs about teaching.

Issues 10, 12, 16, and 18 were also considered very important by each role group. Issue 10 questioned the
importance of the mentor receiving specific training in clinical skills to work with the beginning teacher. All three role groups (administrators, 76.1%; mentors, 76.1%; and beginning teachers, 53.7%) considered such preparation to be important.

Almost every administrator (88.8%), mentor (93.4%), and beginning teacher (92.6%) considered the issue of the mentor having a minimum of four years of teaching experience to be a prerequisite to assuming the role. This seems to indicate a strong concern by all three role groups that the mentor should be an experienced practitioner and that this issue should be addressed in the development of any mentoring program.

The topic of issues 16 and 18 was the establishment of specific criteria and selection procedures. Approximately two-thirds (67.6%) of the administrators, and three-fourths (72.4%) of the mentors and beginning teachers (75.9%) considered the issue of the establishment of specific criteria and selection procedures of mentors to be very
important. In this regard over two-thirds of the administrators (69.0%), mentors (72.4%), and beginning teachers (70.4%) felt that it is very important that the knowledge the veteran teacher possesses about how one learns to teach should be considered in the selection criteria of mentors.

Issue statements 1, 5, 6, 8, 13, 17, 19, 20 were concerned with the conditions of mentoring.

The majority of the administrators (88.7%), mentors (82.9%), and beginning teachers (85.2%) considered the issue of gender to be of little importance in matching mentors and beginning teachers. This group of respondents did not feel that there would be complications due to cross-gender mentoring relationships in this regard.

A little more than one-third (36.6%) of the administrators, and mentors (39.5%), and almost one-half (44.5%) of the beginning teachers considered the title of the mentor, to be of little importance.
On the other hand, all three role groups believed issues 5, 6, 8, 13, 19, 20 were very important. These issues were release time, financial remuneration, mentor and novice at the same grade level or subject, the mentoring relationship being voluntary, and assessment (i.e., how evaluations of beginning teachers by mentors should be conducted).

Approximately two-thirds of the administrators (71.8%), mentors (64.4%), and beginning teachers (66.6%) considered issue five to be very important: beginning teachers should have release time to periodically work with mentor teachers.

Issue six, concerned with the provision of financial remuneration for mentor teachers in the form of additional salary during the year or in the form of supplemental contracts, was considered very important by three-fourths (77.7%) of the mentors, over one-half (57.8%) of the administrators, and over one-third (38.9%) of the beginning teachers.
The three role groups felt that the issue of mentors serving at the same grade level and/or subject area as those they mentor to be an important issue. Almost half (45.1%) of the administrators but almost two-thirds (61.9%) of the mentors, and almost three-fourths (70.4%) of the beginning teachers considered statement eight to be a most important issue.

Issue 13 questioned whether mentors should be partially released from classroom responsibilities to assume this role but should remain primarily a teacher themselves. Three-fourths (77.5%) of the administrators, over half (56.5%) of the mentors, and almost half (44.5%) of the beginning teachers considered this to be very important. The lower percentage of the beginning teachers seems to indicate some insensitivity to the demands placed upon mentors.

The majority of the administrators (81.7%), mentors (52.6%), and beginning teachers (74.1%) felt strongly that this relationship should be a voluntary one.
Almost two-thirds of the administrators (62.0%), mentors (69.7%), and beginning teachers (62.9%) considered the assessment of the beginning teacher by the mentor a most important issue. Specifically, these respondents felt strongly that the assessment should be kept separate from those of the principal.

The three role groups generally were in agreement relative to the importance of most of the twenty issues. The results indicated that there were no differences in the perceptions of administrators, mentors, and beginning teachers about the functions of mentoring, preparation and selection of mentors, or the conditions for mentoring. The null hypothesis, therefore, should not be rejected.

Oblique Principal Component Cluster of Variables Analysis

Oblique Principal Component Cluster of Variables Analysis, VARCLUS, (SAS, version 6.18, 1989) using standardized scoring coefficients was used to determine the degree to which the twenty issue statements clustered to the stated domains (i.e., functions of mentoring, preparation and
selection of mentors, and the conditions for mentoring).

Interpretability was used to guide the decision of the number of clusters needed to explain the variation. Three clusters explained 0.2957 of the variation.

Table 16 shows a comparison of the twenty issue statements of the three domains of the survey instrument with their placement in the three clusters of the VARCLUS procedure.

Cluster one was the functions domain. It explained 0.4401 of the variation.

Cluster two was the preparation and selection domain. It explained 0.2091 of the variation.

Cluster three was the conditions domain. It explained 0.3053 of the variation.

Therefore, this procedure indicated that the twenty issue statements do adequately measure the stated domains of functions of mentoring, preparation and selection of mentors, and the conditions for mentoring.
Multiple Analysis of Variance

Three-Way Multiple Analysis of Variance (MANOVA) was then used on the three clusters from the VARCLUS procedure. Covariates in this analysis were: 1) role group, 2) size of school, 3) level of school, and 4. location of school. Four first order interaction effects were determined for: 1) role group * level, 2) role group * size, 3) size * level, and 4) role group * school location.

Table 17 summarizes the results of this analysis. There were no significant effects of role group, size of school, or level of school (p< .05). School location effect, school size * school level interaction effect, and role group * school location interaction effect were not considered because there were empty cells in the analysis. Unfortunately, there were no respondents in these categories. The interaction effect of role group * level was significant (p< .05). The role group * size interaction effect was marginally significant (p<.05).
Follow-up tests on role group * level of school and role group * size of school were performed using discriminant analysis since significance was shown for these interaction effects.

There were two significant discriminant functions for role group * level of school effect with $F(12, 466) = 2.2706, p = 0.008$. The first significant discriminant function considered the role group * level of school interaction effect in terms of the functions of an effective mentor. The second significant discriminant function considered the role group * level of school interaction effect for the conditions for effective mentoring.

There were no significant discriminant functions for role group * size of school with $F(12, 466) = 1.6433, p = 0.077$. The discriminant function of role group * size of school equals $0.6122 f_1 - 0.8398 f_2 + 0.5975 f_3$. Function one concerning the functions of effective mentoring and function three concerning the conditions for effective mentoring countered function two concerning the preparation
and selection of an effective mentor.

Multiple Comparison Procedure

A pairwise multiple comparison procedure was performed to determine the role group * level of school interaction effect.

This technique showed no significant interaction effect (alpha = .002). This alpha level of significance is a conservative approach as a protection against a Type I error.

Figure one graphically illustrates the results of the multiple comparison procedure. Mentors and beginning teachers tend to respond to the issues of the three domains (functions of mentoring, preparation and selection of mentors, and the conditions for mentoring) in a similar manner which was different than the manner the administrators responded to the issues of the three domains. The greatest difference was between administrators at the high school level and beginning teachers at the elementary level.
The analysis indicates that there may be significant differences in the perceptions of issues relative to the functions of an effective mentor, preparation and selection of an effective mentor, and the conditions for effective mentoring by the three role groups when the level of school in which they teach is considered.

The results of the VARCLUS, MANOVA, follow-up discriminant analysis, and follow-up pair-wise multiple comparison procedure indicate the null hypotheses should not be rejected.

There were no significant differences in the responses of the educators by role group, size of school, and level of school.

There were two significant discriminant functions for the role group * level of school interaction effect. The first significant function was the functions of effective mentoring. The second significant function was the conditions for effective mentoring. Follow-up test using pair-wise multiple comparison procedure revealed no
significant role group * level of school interaction effect.

Summary

In summary, the determination of the percentage of psychological orientation (using first choice only) of each role group for each set of statements shows that the three role groups have no major differences in their preferred approaches to mentoring.

The Friedman Two-Way Analysis of Variance with follow-up test of differences between orientations was found to be statistically significant for each role group for each set of statements. Each role group within a set of statements (with minor variations) preferred the same orientation. The results indicate that the null hypothesis should not be rejected. There were no significant differences in the preferred approaches to mentoring between administrators, mentors, and beginning teachers in terms of how mentors assist beginning teachers to learn to teach.

The VARCLUS, MANOVA, follow-up discriminant analysis, and follow-up pair-wise multiple comparison procedure
indicate the null hypotheses should not be rejected. There were no significant differences in perceived importance of issues of mentoring (functions of mentoring, preparation and selection of effective mentors, and conditions for effective mentoring) between role group, level of school, or size of school in terms of how mentors assist beginning teachers.
Chapter V

Summary, Conclusions, Implications and Recommendations

Introduction

Chapter five includes a brief summary of the study, conclusions derived from these data, implications for research, and implications for practice.

Researchers agree that the field of teacher induction and mentoring are in their infancy (Burke and Notar, 1985-86; Burke and Schmidt, 1984; Brooks, 1986; Huling-Austin, 1987). Hence, there is little known about the complexity of the interactions between the mentor and the beginning teacher; that process of support and assistance that guides the beginning teacher. Mentor in this study was defined as that colleague with advanced experience who by choice or designation establishes a supportive and accessible relationship intended to facilitate the development of the
professional and instructional skills of the beginning teacher.

There is a need to know more about how to retain qualified teachers who enter the teaching profession but leave within their first years of teaching. Therefore, this study was designed to better understand the attributes of an effective mentor, the functions of effective mentoring, the conditions for effective mentoring, and what should go into the preparation and selection of effective mentors.

Summary of the Study

This dissertation is an exploratory study. Survey research design was selected to fulfill the purposes of the study. The major purpose of the study was to survey administrators, mentors, and beginning teachers from public schools of Ohio to determine their perception of mentors in the mentoring process.
The following general hypotheses guided this study:

1. There will be no differences in the preferred approaches to mentoring between administrators, mentors, and beginning teachers in terms of how mentors assist beginning teachers to learn to teach while on the job.

2. There will be no differences in perceived importance of issues related to mentoring between administrators, mentors, and beginning teachers.

3. There will be no differences in perceived importance of issues related to mentoring between the above educators as a group at different school locations (urban, suburban, rural).

4. There will be no differences in perceived importance of issues related to mentoring between the above educators as a group in different levels of schools (elementary, middle, high).

5. There will be no differences in perceived importance of issues related to mentoring between the above educators as a group in different sized schools (small, medium, large).

Research and theoretical writings reviewed for this study were derived primarily from four literatures: developmental psychology, perceptual psychology, cognitive psychology, and behavioral psychology. Literatures were also reviewed which examined definitions and functions of
mentoring, issues of the induction year, and examples or models of induction programs. In brief, this review of literature underscored that the mentoring process between the mentor and beginning teacher is complex and interactive during the initial years of the beginning teacher's career. It also suggested that current information about the role of the mentor in this process is insufficient.

A sample of administrators, mentors, and beginning teachers in Ohio was selected for participation in this dissertation study. Administrators identified by the Ohio State Department of Education were randomly selected from school systems throughout the state of Ohio. Mentors and beginning teachers were selected from six school systems in Ohio which were engaged in a mentoring program.

Descriptive analyses were performed to assess differences among administrators, mentors, and beginning teachers in terms of their preferred approaches to mentoring, their perceptions of the functions of an effective mentor, preparation and selection of a mentor, and the conditions for
effective mentoring. These results were used as covariates in further analyses.

The orientations of the three role groups were determined by two methods: 1) psychological orientation selected most often (percentage using first choice only), and 2) Friedman Two-Way ANOVA for Ordinal Data.

The twenty issue statements were analyzed by four methods: 1) Cross tabulations, 2) Correlation analysis followed by a determination of Cronbach Reliability Coefficient Alpha, 3) Oblique Principal Component Cluster of Variables Analysis, and 4) MANOVA of the clusters with follow-up discriminant analysis and multiple comparison technique.

Conclusions

Conclusions from this study are discussed below relative to each of the hypotheses stated in the summary of the study.

Hypothesis one was posited to investigate the differences among the three role groups (administrators, mentors, and beginning teachers) in their preferred approaches to mentoring in terms of how mentors assist
beginning teachers to learn to teach while on the job. There were found to be no statistically significant differences among administrators, mentors, and beginning teachers in their preferred approaches to mentoring. Although the psychological orientations varied with the aspect of mentoring under consideration (i.e., central focus of the mentor, general assistance provided by the mentor, mentor observing and providing feedback, and core abilities of the mentor), the psychological orientations of the three role groups were similar to each other for each aspect of the survey. These findings indicated that the orientation of the educator is: 1) situational and 2) independent of the role of the educator.

The educators' responses suggested that they drew upon principles espoused in each psychological orientation in helping the beginning teacher to learn to teach. More specifically, the educators on the basis of their responses in this study tended to draw from principles of behavioral psychology when the focus was the way the mentor would
provide *general assistance* to beginning teachers. One possible explanation for this is that this behavioral approach towards the mentoring of beginning teachers would provide beginning teachers with continuing feedback needed during those first years of doubt relative to their impact upon the students in their classes.

The educators' responses also suggested that they drew upon principles espoused in developmental psychology when the focus was on the mentor *observing* beginning teachers. These data suggest that the mentors and administrators are sensitive to developmental differences between beginning teachers and more experienced teachers. Beginning teachers often tend to be at a survival stage in their careers. Their concern is not so much in impacting the students as it is in maintaining control of the classroom and becoming accustomed to the demands of the daily routines of the teaching profession. The mentor who is sensitive to these circumstances will observe and provide feedback relative to the needs and interests of beginning teachers and towards
moving this teacher to a more advanced stage.

The educators' responses suggested that they drew primarily upon principles espoused in behavioral psychology and perceptual psychology when the focus was the core abilities needed by the mentor. Mentors need to be able to demonstrate teaching skills so that beginning teachers can observe those skills in attempting to incorporate them into their own teaching repertoire.

One could conclude that this group of educators was shown to be practically eclectic, if theoretically inconsistent, in its orientations towards these aspects of mentoring. There seems to be no preference in all contexts for their choice of psychologies.

Hypothesis 2 was posited to investigate the differences among the three role groups' perceived importance of issues attached to mentoring. Statistically significant differences were not found among administrators, mentors, and beginning teachers in their perceived importance of these mentoring issues. There were fairly high positive correlation values
determined for these role groups in the manner in which they responded to the importance of these issues. Beginning teachers generally perceived the issues in the questionnaire to be more important than did mentors or administrators. Decreasing perceptions of importance were indicated by mentors, then administrators.

Although significant first-order interaction effects were determined for role group * school level, follow-up discriminant analysis and multiple comparison procedure showed no statistically significant interaction effects. The first-order interaction effect indicated that mentors and beginning teachers perceived the mentoring issues in a similar fashion and that they tended to be different (almost the inverse) than the responses of the administrators at the three different school levels (elementary, middle, high).

One possible explanation for this is the institutional orientations of the three role groups. The administrative role is somewhat distanced from the instructional process for most administrators. They might not perceive mentoring
issues to be as important as mentors and beginning teachers. Mentors and beginning teachers are intimately involved in classroom instruction. Therefore, they would perceive mentoring issues to be more important.

Hypothesis 3 investigated the differences in perceived importance of issues of mentoring among educators at different school locations (urban, suburban, rural) in terms of how mentors assist beginning teachers to learn to teach while on the job. There was determined to be a fairly high positive relationship between the location of the school where the respondents worked and the way that the respondents perceived the importance of the mentoring issues but further analysis indicated there were no statistically significant differences among types of educators at different locations of schools.

Those respondents from urban schools generally perceived the issues in the questionnaire to be more important than did respondents from rural schools or suburban schools. Decreasing perceptions of importance were indicated by
respondents from rural schools, then suburban schools. Although significant first order interaction effects were indicated for role group * location of school, these results had to be abandoned because of two empty cells. Unfortunately, there were no rural-mentor respondents nor beginning rural-teacher respondents.

Hypothesis 4 investigated the differences in perceived importance of issues of mentoring among educators at different school levels (elementary, middle, high). There were no statistically significant differences among educators in their perceived importance of these various mentoring issues. However, there was a small positive relationship between the school level of the respondents and their perceived importance of the mentoring issues. Those respondents from elementary schools generally perceived the issues in the questionnaire to be more important than did respondents from middle schools and high schools. Decreasing perceptions of importance were indicated by respondents from middle schools, then high schools.
Hypothesis 5 considered the differences in perceived importance of issues of mentoring among educators at different sizes of schools (small, medium, large). There were no statistically significant differences among educators at different size schools in their perceived importance of these mentoring issues. However, there was a small positive relationship between the school size of the respondents and their perceived importance of the mentoring issues. Those respondents from medium sized schools (800-1500 students) generally perceived the issues in the questionnaire to be more important than did respondents from small schools (<800 students) or large schools (>1500 students). Decreasing perceptions of importance were indicated by respondents from small schools, then large schools.

Implications for Research

Based on the findings and limitations of this study, the following recommendations for further research are offered:

The number of mentors and beginning teachers but not administrators in the study should be increased and the
population should be representative of rural mentors and rural beginning teachers. This recommendation is based on the fact that preliminary statistical analyses indicated that there might be a significant effect due to the location of the schools but it could not be analyzed further because there were no respondents in these categories.

A national population of educators for the study would also increase the generalizability of the study to other populations.

Qualitative data analyses would considerably enrich the quantitative findings of this study. Periodic observations and interviews of the respondents to conduct a qualitative examination of the respondents' behaviors might determine whether there is, in fact, congruence between their practices and their beliefs or stated perceptions.

The survey instrument could also be revised in several respects. The instrument might include more than the three domains (functions, preparation and selection, and conditions) originally identified and it could include more
items per domain. This recommendation is based on the result that there were not enough issue statements in each domain to capture a conception of mentoring through the use of factor analysis. The twenty issue statements could also employ a seven point Likert scale rather than a five point scale to separate the information more and to prevent extreme skewness of the information obtained about the groups.

The survey instrument could use more conceptual work in terms of how the four orientations were derived. There was some understandable exclusivity in the use of literatures employed on the one hand but the orientations incorporated principles that were not mutually exclusive on the other. Other literatures that would broaden the conceptual base of the instrument might include critical theory, adult development, sociology, and anthropology.

Further research should be conducted to consider the role group * level of school interaction effect. The multiple comparison procedure indicated an interaction effect although it was not statistically significant.
Implications for Practice

Findings in this study were examined for their usefulness in determining the attributes of an effective mentor in a beginning teacher induction program. These data were also analyzed to consider the appropriate functions and conditions necessary for effective mentoring as well as the preparation and selection criteria of effective mentors in a beginning teacher induction program. Since mentoring is a major component of induction year programs, there are also implications for the larger induction year program.

Functions of the Mentor

Respondents spoke to several functions of mentors in the induction year program.

Mentors should participate in the evaluations of beginning teachers' performances since in many cases this cannot be avoided. The assessments should be kept separate from those of the principal.

Mentors should provide ample opportunities for beginning teachers to observe other teachers. The mentor could assume
the duties of the beginning teacher or could provide a substitute teacher to assume the duties. But in the final analysis funds need to be obtained to release beginning teachers on a regular basis.

Respondents indicated that although there is a current primary concern of stressing core teaching skills in helping beginning teachers to learn to teach, likely, there is not enough attention to intellectual discourse about teaching. Current literature (Anderson, 1989; Curwin & Schneider Fuhrmann, 1975; Manning & Payne, 1989) suggests that reflective interplay among teachers is beneficial in the development of effective teaching practices such as improved lesson planning, improved classroom performance, and improved problem-solving abilities. With appropriate funding, time could be provided for mentors to help beginning teachers develop the ability to reflect on and improve their teaching practices.

Mentors should exhibit and encourage risk-taking behaviors. Mentors should make explicit that it is "OK", in
fact, unavoidable to try new teaching techniques and to fail at times.

Mentors should attempt to be a confidant and advisor for beginning teachers and not just concerned with the pedagogical development of beginning teachers. For example, the parties should be allowed time to discuss pressing issues perceived by beginning teachers. This could help the mentoring process by facilitating the basic relationship and communications between the two parties about facets of classroom interactions. This relationship could contribute to the instructional effectiveness of beginning teachers.

Mentors should orient beginning teachers to the unwritten rules and politics of the school and district. This could be done on both an informal and formal basis. On an informal basis, the process would be on-going with the mentor sharing information as the need arises. On a formal basis, time should be allocated for the parties to discuss these issues. This orientation could ease beginning teachers' induction into their work place. It could provide
them with the unwritten knowledge of informal power structures that exist within schools and could aid them in their attempts to obtain necessary materials and funds to carry on classroom activities.

**Preparation and Selection of Mentors**

Respondents spoke to several criteria for the preparation and selection of mentors in the induction year program.

Mentors and beginning teachers should be able to share their personal theories they use over time about teaching and learning. This sharing over time topics such as the reasons why they teach the way they teach, student learning, and the grouping of students would minimize conflict between the parties. This could foster the development of a good working relationship between the mentor and beginning teacher.

Mentors should receive specific training in supervisory skills to work with beginning teachers. This training program could be provided by teacher educators who have expertise in supervisory skills and the mentoring process at
the university level in concert with those in schools. The mentor training program could be school based, on-site, and occur over a considerable period of time (i.e., up to one year). Training seminars could be provided for mentors in supervision. Mentors would be prepared to work collaboratively with beginning teachers. They would learn how to help beginning teachers to systematically observe, collect, and analyze data about various aspects of their classroom activities. Processes and events in the classroom would be analyzed in regard to effective teaching and classroom management based on current research.

Another issue thought to be important by the respondents of this study was that mentors have at least four to five years of successful teaching experience for selection. This experience would be helpful for mentors to share with beginning teachers their own personal examples and developmental patterns that might be useful to assist beginning teachers in similar situations.
Specific criteria and selection procedures beyond teaching competence developed by a selection committee of teachers with input from principals should be established for the selection of mentors. This would increase the probability of providing qualified mentors for beginning teachers in the induction process. Mentors could be selected on their philosophy of how one learns to teach. They should have the ability to use a variety of models and to know when to "call up" a specific model. Their interpersonal skills (i.e., the ability to work with adults) would be an important attribute. The mentor should be able to become a liaison between beginning teachers and administrators to prevent or to help solve general problems. Mentors should go through a training program with teacher educators at the university level to become effective mentors. Mentors should be paired with beginning teachers based on teaching assignment (i.e., subject matter or grade level).
Conditions for Mentoring

Respondents spoke to several conditions that are necessary for mentors to be effective in the induction year program.

Mentors should serve at the same grade level and/or in the same subject area as those they mentor. This would encourage a common language between mentors and beginning teachers upon which the relationship would be based.

Beginning teachers should have release time to periodically work with mentors. This could be on an as needed basis or a minimum of one hour per week. Substitute teachers should be provided so that mentors and beginning teachers could have time to work out problems that exist in the induction of the beginning teachers.

Mentors should be provided with financial remuneration in the form of additional salary during the year or in the form of supplemental contracts as an incentive for qualified personnel to become mentors and to continue to be mentors. The compensation mentoring teachers would receive would vary
with the number of beginning teachers they mentor but it would be similar to other supplemental contracts for that school district.

Mentors should be partially released from classroom responsibilities to assume this role but should remain primarily a teacher themselves. This would assure that mentors would not lose contact with the daily responsibilities of teaching. It would also increase the credibility of mentors with beginning teachers that they do indeed "practice what they preach".

This study indicates that, if possible, the mentoring relationship should be voluntary. Mentors and beginning teachers could meet informally prior to assignment by the school system and within certain constraints could self-select the partnership. Another possibility could have mentors submit a resume. Beginning teachers would consider the resumes and select mentors they felt would be most compatible with their own needs and beliefs. Hopefully, this would be conducive to the development of beneficial working
relationships and successful inductions into the teaching profession.

Finally, the assessment of beginning teachers by mentors should be kept separate from those of the principal. Separate files could be maintained for these separate assessments. This would prevent a breakdown of conditions necessary for the mentoring process to remain effective.

Data from this study suggest that the functions of mentors, preparation and selection of mentors, and conditions for effective mentoring which occur in a beginning teacher induction program is indeed multifaceted. There are many policies, practices, and conditions that must be carefully evaluated to ensure the successful entry of beginning teachers into the teaching profession.
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APPENDICES

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APPENDIX A

INSTRUCTIONAL COVER LETTER
TO ADMINISTRATORS
January 25, 1991

Dear Administrator,

This is a very brief survey that Dr. Ken Howey discussed with you before Christmas. If you have any questions about the survey, please call Ken at 292-5181 or leave a message with Julie and he will call you back. We very much would like these questionnaires back by the end of February.

In addition to having each consulting teacher or mentor complete the survey, we also need the perspectives of first year teachers who have received assistance from a mentor or consulting teacher. Thus, in addition to the 10 minute questionnaire for the 20 experienced teachers there are also questionnaires for 20 first year teachers.

We are not sure of the best way to get these into the hands of the experienced and beginning teachers and are counting on your assistance in this regard. You could, for example, see that they are delivered to each of these people yourself or you could hand them out at a meeting of the mentors or consulting teachers and ask each of them to give one survey to one beginning teacher.

You should know that all responses are confidential; no names are asked for. Neither is this in any way an evaluation of your program or of the mentors. This is simply gathering views of different strategies mentors can employ to help beginning teachers.

If you would want the results we would be happy to have them sent to you.

Thank you for your time, effort, and cooperation.

Sincerely,

Howard Grimm
APPENDIX B

COVER LETTER TO QUESTIONNAIRE
January 25, 1991

Dear Educator:

I am an experienced teacher who is completing his doctoral study at the Ohio State University in the College of Education, Department of Educational Policy and Leadership.

I am especially interested in contributing to what we know about the mentoring of beginning teachers. There are few educators that we can turn to in this regard. You are one of these and hopefully you can take just a few minutes to assist me in contributing to this growing and most important practice.

Thus, I am asking your cooperation in the completion of this survey which should take no more than 10 minutes to complete. It addresses those functions which you view from your experience as most critical for a mentor to perform effectively in helping a beginning teacher.

I am thanking you in advance for completing this survey and mailing it in the stamped self-addressed envelope by February 25, 1991. Here is a quarter for a cup of coffee while you complete the survey. Since you are either an active mentor, beginning teacher, or interested in assisting beginning teachers, I will be most happy to share the results of the survey with you.

Sincerely,

Howard Grimm
Dr. Ken Howey, Advisor
Educational Policy and Leadership
The Ohio State University
121 Ramseyer Hall,
29 West Woodruff Avenue
Columbus, Ohio 43210-1177
Background Information

1. Age: __________

2. Gender: __________

3. Position: (Please check the appropriate box.)
   Administrator _____ Mentor _____ First year _____
   teacher

4. Years experience:
   0-5 _____ 6-10 _____ 11-15 _____
   16-20 _____ 21-25 _____ 26-more _____

5. Highest degree held:
   Bachelors_____ Masters_____ PhD_____

6. Level of school:
   Elementary______ Middle______ High_____

7. Size of School:
   Small (less than 800 students)_____
   Medium (800-1500 students)_____
   Large (more than 1500 students)_____  

8. Location of school:
   Urban _________ Suburban_______ Rural_______
Please rank order from your perspective the following sets of four statements in terms of their importance to being an effective mentor. (1 = most important, 2 = next most important, 3 = next most important, and 4 = least important.)

SET ONE

(1 = most important, 2 = next most important, 3 = next most important, and 4 = least important.)

The mentor should assist the beginning teacher to perceive himself/herself and his/her view of teaching and learning accurately and realistically.

The mentor should show understanding of and empathy toward the stage of development of the beginning teacher as a novice teacher as opposed to a proficient teacher.

The mentor should advocate that the best way to learn to teach is practice, practice, practice important teaching skills.

The mentor should emphasize specific ways that assist the beginning teacher in reflecting upon his/her teaching.

SET TWO

(1 = most important, 2 = next most important, 3 = next most important, and 4 = least important.)

The mentor should assist the beginning teacher in acquiring the ability to analyze various dimensions of teaching.

The mentor should assist the beginning teacher to perceive students and their behavior as creative and dynamic rather than passive or inert.

The mentor should continually reinforce good teaching behaviors where they are exhibited by the novice teacher.

The mentor should assist the beginning teacher in moving from concerns with self as teacher to concerns focused upon student learning.
SET THREE

(1 = most important, 2 = next most important, 3 = next most important, and 4 = least important.)

When observing a beginning teacher, the mentor should understand that there are basic survival needs the beginning teacher needs to cope with before they can address more complicated instructional issues.

When observing a beginning teacher, the mentor should focus on eliciting justifications for their teaching behaviors.

When observing a beginning teacher, the mentor should focus on whether core teaching skills are demonstrated.

When observing a beginning teacher, the mentor should focus on classifying how the novice teacher perceives and interprets various student behaviors.

SET FOUR

(1 = most important, 2 = next most important, 3 = next most important, and 4 = least important.)

The mentor should be able to demonstrate core teaching skills for the beginning teacher.

The mentor should assist the beginning teacher in developing a general internal frame of reference to guide their teaching.

The mentor should understand that his/her advice may be too expert for the beginning teacher to comprehend.

The mentor should focus on whether the beginning teacher knows the reason he/she employed specific teaching skills and if it was the appropriate time to call up the model.
Consider the following statements. Then circle the number 1 – 5 which indicates your belief about the importance of the characteristic for the mentor. The number one indicates not at all important, the number 2 indicates of little importance, the number 3 indicates somewhat important, the number 4 indicates important, and the number 5 indicates very important.

<table>
<thead>
<tr>
<th></th>
<th>NOT AT ALL IMPORTANT</th>
<th>SOWHAT IMPORTANT</th>
<th>VERY IMPORTANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The mentor and the beginning teacher should be of the same sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. The mentor should evaluate the beginning teacher's performance in the classroom as well as provide assistance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. The mentor should provide ample opportunities for beginning teachers to observe other teachers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. The mentor teacher should both exhibit and encourage risk-taking behaviors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Beginning teachers should have release time to periodically work with the mentor teacher.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Mentor teachers should be provided with financial remuneration in the form of additional salary during the year or in the form of supplemental contracts.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. The mentor should typically be older than the beginning teacher by at least half a generation (8 to 15 years).</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NOT AT ALL IMPORTANT</td>
<td>SOMEWHAT IMPORTANT</td>
<td>VERY IMPORTANT</td>
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<tr>
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</tr>
<tr>
<td>8.</td>
<td>The mentor should serve at the same grade level and/or in the same subject area as those they mentor.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9.</td>
<td>The mentor teacher and beginning teacher should have compatible beliefs about teaching and learning.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>Mentors should receive specific training in clinical skills to work with beginning teachers.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11.</td>
<td>Mentors should be responsible for more than the professional development of the new teachers; they should serve as a confidant and advisor, if not a friend.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12.</td>
<td>Mentors should have at least 4 or 5 years of teaching experience.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13.</td>
<td>Mentors should be partially released from classroom responsibilities to assume this role but should remain primarily a teacher themselves.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14.</td>
<td>Mentors should orient the new teacher to the unwritten rules and politics of the school and district.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>NOT AT ALL IMPORTANT</td>
<td>SOMEWHAT IMPORTANT</td>
<td>VERY IMPORTANT</td>
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</tr>
<tr>
<td>15.</td>
<td>Mentors should have enough special training for this role that a certificate is earned on top of their teaching license.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Specific criteria and selection procedures beyond teaching competence should be established for the selection of mentors.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Careful attention should be given to the title of the experienced teacher working with the beginning teacher: master teacher, consulting teacher, peer teacher and mentor connote different constructs.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>The knowledge which the veteran teacher possesses about how one learns to teach should be considered in the selection criteria.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>How important is it for the mentoring relationship to be voluntary?</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>The assessment of the beginning teacher by the mentor should be kept separate from those of the principal.</td>
<td>1 2 3 4 5</td>
<td></td>
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</table>
APPENDIX D

TABLES
Table 1
Frequency Breakdown of Background Information

<table>
<thead>
<tr>
<th></th>
<th>Administrator</th>
<th>Mentor</th>
<th>Beginning Teacher</th>
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<tr>
<td><strong>n</strong></td>
<td>71</td>
<td>76</td>
<td>54</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22-30</td>
<td>0</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>31-40</td>
<td>22</td>
<td>26</td>
<td>16</td>
</tr>
<tr>
<td>41-50</td>
<td>33</td>
<td>40</td>
<td>7</td>
</tr>
<tr>
<td>51-60</td>
<td>16</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>61-70</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
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<td></td>
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<td><strong>School Level</strong></td>
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<tr>
<td>Elementary</td>
<td>42</td>
<td>32</td>
<td>31</td>
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<td>Middle</td>
<td>10</td>
<td>13</td>
<td>12</td>
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<tr>
<td>High</td>
<td>19</td>
<td>31</td>
<td>11</td>
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<td><strong>School Size</strong></td>
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<td>Medium (800-1500)</td>
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<td>Large (&gt;1500)</td>
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Table 2
Mentor's Focus In Learning To Teach
Percentage Psychological Orientations
(using first choice only)

**PSYCHOLOGIES**

<table>
<thead>
<tr>
<th></th>
<th>PERCEPTUAL</th>
<th>DEVELOPMENTAL</th>
<th>BEHAVIORAL</th>
<th>COGNITIVE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator</td>
<td>35.2%</td>
<td>33.8%</td>
<td>8.5%</td>
<td>22.5%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>n = 71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentor</td>
<td>22.4%</td>
<td>34.2%</td>
<td>14.5%</td>
<td>28.9%</td>
<td>100%</td>
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<tr>
<td></td>
<td>n = 76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning Teacher</td>
<td>29.6%</td>
<td>42.6%</td>
<td>9.3%</td>
<td>18.5%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>n = 54</td>
<td></td>
<td></td>
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</tbody>
</table>
### Table 3
General Assistance Provided To Beginning Teachers
Percentage Psychological Orientations
(using first choice only)

<table>
<thead>
<tr>
<th>PSYCHOLOGIES</th>
<th>PERCEPTUAL %</th>
<th>DEVELOPMENTAL %</th>
<th>BEHAVIORAL %</th>
<th>COGNITIVE %</th>
<th>TOTAL %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMINISTRATOR</td>
<td>7.0</td>
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<tr>
<td>n = 71</td>
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<td>20.4</td>
<td>35.2</td>
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<td>100</td>
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<td>n = 54</td>
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Table 4

Mentor's Focus When Observing Beginning Teachers
Percentage Psychological Orientations
(using first choice only)

<table>
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<tr>
<th>PSYCHOLOGIES</th>
<th>PERCEPTUAL</th>
<th>DEVELOPMENTAL</th>
<th>BEHAVIORAL</th>
<th>COGNITIVE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
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<td>ADMINISTRATOR</td>
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<td>47.9</td>
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<td>100</td>
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<td>n = 76</td>
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<td>53.7</td>
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<td>100</td>
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Table 5
Core Ability of The Mentor
Percentage Psychological Perceptions
(using first choice only)

<table>
<thead>
<tr>
<th>PSYCHOLOGIES</th>
<th>PERCEPTUAL %</th>
<th>DEVELOPMENTAL %</th>
<th>BEHAVIORAL %</th>
<th>COGNITIVE %</th>
<th>TOTAL %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMINISTRATOR</td>
<td>33.8</td>
<td>5.6</td>
<td>42.3</td>
<td>18.3</td>
<td>100</td>
</tr>
<tr>
<td>n = 71</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MENTOR</td>
<td>50.0</td>
<td>1.3</td>
<td>32.9</td>
<td>15.8</td>
<td>100</td>
</tr>
<tr>
<td>n = 76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEGINNING TEACHER</td>
<td>44.4</td>
<td>1.9</td>
<td>37.0</td>
<td>16.7</td>
<td>100</td>
</tr>
<tr>
<td>n = 54</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>PSYCHOLOGIES</td>
<td>PERCEPTUAL %</td>
<td>DEVELOPMENTAL %</td>
<td>BEHAVIORAL %</td>
<td>COGNITIVE %</td>
<td>TOTAL %</td>
</tr>
<tr>
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<td>--------------</td>
<td>-----------------</td>
<td>--------------</td>
<td>-------------</td>
<td>--------</td>
</tr>
<tr>
<td>ADMINISTRATOR n = 71</td>
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<td>27.1</td>
<td>31.3</td>
<td>18.0</td>
<td>100</td>
</tr>
<tr>
<td>MENTOR n = 76</td>
<td>25.7</td>
<td>28.3</td>
<td>30.3</td>
<td>15.8</td>
<td>100</td>
</tr>
<tr>
<td>BEGINNING TEACHER n = 54</td>
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<td>29.6</td>
<td>25.5</td>
<td>16.7</td>
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Table 7  
**Mentor's Focus in Learning To Teach**  
Friedman Two-Way ANOVA for Ordinal Data  
Weighted Means of Psychological Perceptions

<table>
<thead>
<tr>
<th>PSYCHOLOGIES</th>
<th>No. of Cases</th>
<th>Friedman X2</th>
<th>DF</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCEP</td>
<td>DEVELOP</td>
<td>BEHAV</td>
<td>COG</td>
<td>CASES</td>
</tr>
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<td>ADMINISTRATOR</td>
<td>2.08</td>
<td>2.31</td>
<td>3.24</td>
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<td>2.50</td>
<td>2.12</td>
<td>3.11</td>
<td>2.28</td>
</tr>
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<td>BEGINNING</td>
<td>2.22</td>
<td>1.98</td>
<td>3.20</td>
<td>2.59</td>
</tr>
<tr>
<td>TEACHER</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Percep = Perceptual; DEVELOP = Developmental;  
BEHAV = Behavioral; COG = Cognitive.  

*p < .05.*
Table 8

Mentor's Focus In Learning To Teach
Friedman Two-Way ANOVA Follow-up Test For Ordinal Data

Differences Between Psychologies

<table>
<thead>
<tr>
<th></th>
<th>P-D</th>
<th>P-B</th>
<th>P-C</th>
<th>D-B</th>
<th>D-C</th>
<th>B-C</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMINISTRATOR</td>
<td>16</td>
<td>82*</td>
<td>20</td>
<td>66*</td>
<td>44*</td>
<td>62*</td>
<td>40.58</td>
</tr>
<tr>
<td>n = 71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MENTOR</td>
<td>29</td>
<td>46*</td>
<td>17</td>
<td>75*</td>
<td>12</td>
<td>63*</td>
<td>41.98</td>
</tr>
<tr>
<td>n = 76</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEGINNING TEACHER</td>
<td>13</td>
<td>53*</td>
<td>20</td>
<td>66*</td>
<td>33</td>
<td>33</td>
<td>35.39</td>
</tr>
<tr>
<td>n = 54</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Note.* P = Perceptual; D = Developmental; B = Behavioral; C = Cognitive.

* = Significant difference greater than the stated critical value.
Table 9
General Assistance Provided To Beginning Teachers
Friedman Two-Way ANOVA for Ordinal Data
Weighted Means of Psychological Perceptions

<table>
<thead>
<tr>
<th>PSYCHOLOGIES</th>
<th>PERCEP</th>
<th>DEVELOP</th>
<th>BEHAV</th>
<th>COG</th>
<th>No. of CASES</th>
<th>x²</th>
<th>DF</th>
<th>Sig.</th>
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</thead>
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<tr>
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<td>2.44</td>
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<td>2.61</td>
<td>71</td>
<td>31.93</td>
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<td>2.53</td>
<td>2.71</td>
<td>2.14</td>
<td>2.62</td>
<td>76</td>
<td>8.45</td>
<td>3</td>
<td>.037*</td>
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Note. Percep = Perceptual; DEVELOP = Developmental;
BEHAV = Behavioral; COG = Cognitive.

*p < .05.
Table 10

**General Assistance Provided To Beginning Teachers**

Friedman Two-Way ANOVA Follow-up

Test For Ordinal Data

Differences Between Psychologies

<table>
<thead>
<tr>
<th></th>
<th>P-D</th>
<th>P-B</th>
<th>P-C</th>
<th>D-B</th>
<th>D-C</th>
<th>B-C</th>
<th>Critical Value</th>
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</thead>
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<tr>
<td><strong>ADMINISTRATOR</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 71</td>
<td>46*</td>
<td>86*</td>
<td>34</td>
<td>40</td>
<td>12</td>
<td>52*</td>
<td>40.58</td>
</tr>
<tr>
<td><strong>MENTOR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 76</td>
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<td>29</td>
<td>7</td>
<td>43*</td>
<td>7</td>
<td>36</td>
<td>41.98</td>
</tr>
<tr>
<td><strong>BEGINNING TEACHER</strong></td>
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<td></td>
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<td></td>
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</tr>
<tr>
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<td>29</td>
<td>13</td>
<td>8</td>
<td>5</td>
<td>35.39</td>
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</tbody>
</table>

**Note.** P = Perceptual; D = Developmental; B = Behavioral; C = Cognitive.

* = Significant difference greater than the stated critical value.
<table>
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<th>BEHAV</th>
<th>COG</th>
<th>CASES</th>
<th>X2</th>
<th>DF</th>
<th>Sig</th>
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</thead>
<tbody>
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<td>2.24</td>
<td>3.28</td>
<td>71</td>
<td>35.13</td>
<td>3</td>
<td>.000*</td>
</tr>
<tr>
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<td>1.61</td>
<td>2.14</td>
<td>3.59</td>
<td>76</td>
<td>97.78</td>
<td>3</td>
<td>.000*</td>
</tr>
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<td>2.61</td>
<td>3.50</td>
<td>54</td>
<td>54.22</td>
<td>3</td>
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</table>

*Note.* Percep = Perceptual; DEVELOP = Developmental; BEHAV = Behavioral; COG = Cognitive.

*p < .05.*
**Table 12**

**Mentor's Focus When Observing Beginning Teachers**

Friedman Two-Way ANOVA Follow-up
Test For Ordinal Data

Differences Between Psychologies

<table>
<thead>
<tr>
<th></th>
<th>P-D</th>
<th>P-B</th>
<th>P-C</th>
<th>D-B</th>
<th>D-C</th>
<th>B-C</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADMINISTRATOR</strong>&lt;br&gt;n = 71</td>
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<td>5</td>
<td>69*</td>
<td>5</td>
<td>79*</td>
<td>74*</td>
<td>40.58</td>
</tr>
<tr>
<td><strong>MENTOR</strong>&lt;br&gt;n = 76</td>
<td>80*</td>
<td>39</td>
<td>71*</td>
<td>41</td>
<td>151*</td>
<td>110*</td>
<td>41.98</td>
</tr>
<tr>
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<td>28</td>
<td>76*</td>
<td>44*</td>
<td>92*</td>
<td>48*</td>
<td>35.39</td>
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</table>

**Note.** P = Perceptual; D = Developmental; B = Behavioral; C = Cognitive.

* = Significant difference greater than the stated critical value.
**Table 13**

*Core Ability of The Mentor*

**Friedman Two-Way ANOVA for Ordinal Data**

**Weighted Means of Psychological Perceptions**

<table>
<thead>
<tr>
<th>PSYCHOLOGIES</th>
<th>No. of CASES</th>
<th>Friedman $X^2$</th>
<th>DF</th>
<th>Sig</th>
</tr>
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<td>DEVELOP</td>
<td>BEHAV</td>
<td>COG</td>
<td></td>
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<td>1.92</td>
<td>2.42</td>
<td>71</td>
</tr>
<tr>
<td>MENTOR 1.78</td>
<td>3.54</td>
<td>2.17</td>
<td>2.51</td>
<td>76</td>
</tr>
<tr>
<td>BEGINNING 1.78</td>
<td>3.59</td>
<td>2.00</td>
<td>2.63</td>
<td>54</td>
</tr>
<tr>
<td>TEACHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Percep = Perceptual; DEVELOP = Developmental;
BEHAV = Behavioral; COG = Cognitive.

*p < .05.*
Table 14
Core Ability of The Mentor
Friedman Two-Way ANOVA Follow-up
Test For Ordinal Data

Differences Between Psychologies

<table>
<thead>
<tr>
<th></th>
<th>P-D</th>
<th>P-B</th>
<th>P-C</th>
<th>D-B</th>
<th>D-C</th>
<th>B-C</th>
<th>Critical Value</th>
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<td>124*</td>
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<td>n = 71</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MENTOR</td>
<td>134*</td>
<td>30</td>
<td>56*</td>
<td>104*</td>
<td>78*</td>
<td>26</td>
<td>41.98</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEGINNING TEACHER</td>
<td>98*</td>
<td>12</td>
<td>46*</td>
<td>86*</td>
<td>52*</td>
<td>34</td>
<td>35.39</td>
</tr>
<tr>
<td>n = 54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. P = Perceptual; D = Developmental; B = Behavioral;
C = Cognitive.

* = Significant difference greater than the stated critical value.
TABLE 15
Composite Weighted Means of Psychological Perceptions Across the Four Aspects of Mentoring

<table>
<thead>
<tr>
<th>PSYCHOLOGIES</th>
<th>PERCEPTUAL</th>
<th>DEVELOPMENTAL</th>
<th>BEHAVIORAL</th>
<th>COGNITIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMINISTRATOR</td>
<td>2.37</td>
<td>2.64</td>
<td>2.32</td>
<td>2.69</td>
</tr>
<tr>
<td>n = 71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MENTOR</td>
<td>2.37</td>
<td>2.49</td>
<td>2.39</td>
<td>2.75</td>
</tr>
<tr>
<td>n = 76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEGINNING TEACHER</td>
<td>2.25</td>
<td>2.47</td>
<td>2.52</td>
<td>2.77</td>
</tr>
<tr>
<td>n = 54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 16
Comparison of Domains and VARCLUS Clusters
By Issue Numbers from the Questionnaire

<table>
<thead>
<tr>
<th>Functions</th>
<th>Preparation and Selection</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain</td>
<td>Cluster</td>
<td>Domain</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>14</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>17</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 17
MANOVA Test Criteria and F Approximations
For the Hypotheses of no Overall Effect

<table>
<thead>
<tr>
<th>Source</th>
<th>Wilk's Lambda Value</th>
<th>F</th>
<th>DF of Numerator</th>
<th>DF of Denominator</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role</td>
<td>0.96</td>
<td>1.2778</td>
<td>6</td>
<td>352</td>
<td>0.266</td>
</tr>
<tr>
<td>Size</td>
<td>0.96</td>
<td>1.1581</td>
<td>6</td>
<td>352</td>
<td>0.328</td>
</tr>
<tr>
<td>Level</td>
<td>0.97</td>
<td>0.9100</td>
<td>6</td>
<td>352</td>
<td>0.487</td>
</tr>
<tr>
<td>Role*Level</td>
<td>0.86</td>
<td>2.2706</td>
<td>12</td>
<td>466</td>
<td>0.008*</td>
</tr>
<tr>
<td>Role*Size</td>
<td>0.90</td>
<td>1.6433</td>
<td>12</td>
<td>466</td>
<td>0.076</td>
</tr>
</tbody>
</table>

*p < .05
APPENDIX E

FIGURES
Figure 1
Role Group * School Level of Interaction Effect
Multiple Comparison Procedure