

A LONGITUDINAL TREND STUDY OF A UNIVERSITY-BASED TEACHER  
INDUCTION PROGRAM: OBSERVABLE BEHAVIORS OF URBAN TEACHERS  
AND THEIR PERCEPTIONS OF PROGRAM COMPONENTS  
FIVE YEARS AFTER PARTICIPATION

A Dissertation

by

VICKIE V. MOON MERCHANT

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2005

Major Subject: Curriculum and Instruction

A LONGITUDINAL TREND STUDY OF A UNIVERSITY-BASED TEACHER  
INDUCTION PROGRAM: OBSERVABLE BEHAVIORS OF URBAN TEACHERS  
AND THEIR PERCEPTIONS OF PROGRAM COMPONENTS  
FIVE YEARS AFTER PARTICIPATION

A Dissertation

by

VICKIE V. MOON MERCHANT

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Approved by:

Chair of Committee,  
Committee Members,

Head of Department,

Norvella P. Carter  
Elizabeth S. Foster  
Stephanie L. Knight  
Patricia J. Larke  
Dennie L. Smith

August 2005

Major Subject: Curriculum and Instruction

## ABSTRACT

A Longitudinal Trend Study of a University-based Teacher Induction Program:

Observable Behaviors of Urban Teachers and their Perceptions

of Program Components Five Years after Participation. (August 2005)

Vickie V. Moon Merchant, B.S., Texas A&M University-Corpus Christi;

M.S., Texas A&M University-Corpus Christi

Chair of Advisory Committee: Dr. Norvella P. Carter

This longitudinal trend study (Gall, Borg & Gall, 1996) examined the effectiveness of a one-semester university-based teacher induction program as compared to a two-semester university-based teacher induction program based on the observation scores of classroom teaching behaviors urban novice teachers exhibited during the first year of teaching. These scores were further analyzed in relation to the socio-economic level of the school and the grade level taught. Additionally, the study explored the past participants' perceptions of the teacher induction program components of a one-semester program and a two-semester program during their fifth year of teaching. Their perceptions were also examined in relation to the socio-economic level of the school and the grade level taught.

The study examined the observation scores of classroom teaching behaviors of 145 urban novice teachers participating in either a one-semester or two-semester university-based teacher induction program. The urban novice teachers demonstrated growth over

time as measured by the first and final observation scores of classroom teaching behaviors. However, the length of the university-based teacher induction program did not affect the observation scores of classroom teaching behaviors. Further, neither the socio-economic level of the school nor the grade level taught affected the observation scores of classroom teaching behaviors.

Although the three components of the university-based teacher induction program received high means, 82 past participants of a one-semester or a two-semester teacher induction program responding to the Teacher Induction Program Participant Survey (TIPPS) recognized formative observation as the most effective component. Peer support and professional development were perceived second and third respectively. No statistical significant differences of the one-semester or two-semester past participants' perceptions of peer support, professional development or formative observation were found related to the socio-economic level of the school or the grade level taught.

“A journey of a thousand miles begins with the first step”

Confucius

To my family, past and present, who has always supported and  
helped me take the first steps toward my goals.

To my parents, Chuck and Johnnie Vermillion, who instilled in me  
attaining any goal was possible.

To my children, Michelle and Matt, for their continued belief  
in their mother accomplishing her dreams.

And to my husband, Gary,  
for his continued support and believing that I could accomplish  
a goal that I thought was unreachable.

Through his encouragement, I was able to attain it.

## ACKNOWLEDGEMENTS

“It takes a village” for all students to succeed and reach their dreams. I feel like I have a “village” to thank for helping me achieve this goal.

Special thanks to Dr. Norvella P. Carter, my dissertation chair, who saw my potential, created a passageway and assisted me in achieving my goals, to Dr. Stephanie Knight, who encouraged me to do well in difficult times, to Dr. Patricia Larke, who helped me see the world through another lens and to Dr. Elizabeth Foster, who shared my passion for mentoring.

I am deeply indebted to my friend and counsel, Dr. Jana Sanders, who shared laughter and frustration and gave indispensable advice in times of great triumphs and trials. I want to also thank Dr. Robert Cox, Dr. Tim Wells and Dr. Jane Wilhour for affording me the opportunities to develop and implement an innovative program.

Other members of my village include members of the Corpus Christi Group: Debbie Vera, Shanah Yandell, Patty Walter, Ouida Plimper and Corinne Valadez and especially to Kim Livengood, who proclaimed that this adventure was an imminent sign. Without the group support in studying, deconstructing, traveling and sharing from the very beginning of this journey, the mountain would have been more difficult to climb—and the summit, impossible to surmount.

## TABLE OF CONTENTS

	Page
ABSTRACT.....	iii
DEDICATION.....	v
ACKNOWLEDGEMENTS.....	vi
TABLE OF CONTENTS.....	vii
LIST OF FIGURES.....	xi
LIST OF TABLES.....	xii
CHAPTER	
I INTRODUCTION.....	1
Background of the Study.....	1
Statement of the Problem.....	4
Statement of the Purpose.....	5
Research Questions.....	6
Significance of the Study.....	7
Situated Cognition.....	7
Socio-cultural Theory.....	8
Situated Cognition Theory.....	9
Definitions of Terms.....	11
Assumptions.....	14
Limitations of the Study.....	14
Summary.....	14
II REVIEW OF THE LITERATURE.....	16
Teacher Quality.....	16
Teacher Attrition.....	18
Turnover.....	18
Uncertified teachers.....	22
Demographic Divide.....	24
Teacher Preparation.....	31
Urban Schools.....	36
Teacher Induction Programs.....	42
History of Induction Programs.....	44

CHAPTER	Page
Issues Confronting Novice Teachers.....	51
Effects of Teacher Induction Programs.....	54
Types of Teacher Induction Programs.....	73
Components of Teacher Induction Programs.....	78
Mentoring.....	105
Training.....	106
Support.....	108
Incentives.....	109
Benefits.....	110
Summary.....	110
III    METHODOLOGY.....	112
Demographics of the Study.....	112
Description of the University-based Teacher Induction Program...	114
Program Goals.....	116
Components of the University-based Teacher Induction Program.....	117
Population.....	128
Sample.....	128
Sample for Data Collection Period I.....	132
Sample for Data Collection Period II.....	135
Instruments.....	137
Pilot Studies.....	138
Teacher Induction Program Formative Observation Instrument.....	139
Teacher Induction Program Participant Survey.....	139
Reliability of the Instruments.....	141
Validity of the Instruments.....	142
Research Design.....	142
Data Collection.....	143
Teacher Induction Program Formative Observation Instrument.....	144
Teacher Induction Program Participant Survey.....	145
Data Analysis.....	146
Procedure.....	146
Summary.....	152
IV    RESULTS AND ANALYSIS.....	153
Research Question 1.....	155
Research Question 2.....	158



CHAPTER	Page
Socio-economic Level of the School.....	159
Grade Level.....	162
Research Question 3.....	166
Formative Observation.....	170
Peer Support.....	175
Professional Development.....	181
Research Question 4.....	186
Socio-economic Level of the School.....	186
Grade Level.....	189
Summary.....	190
 V SUMMARY AND CONCLUSIONS.....	 192
Research Question 1.....	195
Research Question 2.....	196
Socio-economic Level of the School.....	197
Grade Level.....	198
Research Question 3.....	199
Formative Observation.....	201
Peer Support.....	202
Professional Development.....	203
Research Question 4.....	205
Recommendations.....	206
Implications for Further Research.....	211
Summary.....	212
 REFERENCES.....	 214
 APPENDIX A.....	 249
 APPENDIX B.....	 256
 APPENDIX C.....	 258
 APPENDIX D.....	 260
 APPENDIX E.....	 262
 APPENDIX F.....	 266
 APPENDIX G.....	 268

	Page
VITA.....	276

## LIST OF FIGURES

FIGURE		Page
3.1	Conceptual Framework of the Integrated Triad of the University-based Teacher Induction Program.....	118
4.1	One-semester Past Participants' Perceptions of the Effectiveness of Formative Observation.....	171
4.2	Normal Q-Q Plot of One-semester Past Participants' Perceptions of the Effectiveness of Formative Observation.....	172
4.3	Two-semester Past Participants' Perceptions of the Effectiveness of Formative Observation.....	173
4.4	Normal Q-Q Plot of Two-semester Past Participants' Perceptions of the Effectiveness of Formative Observation.....	174
4.5	One-semester Past Participants' Perceptions of the Effectiveness of Peer Support.....	176
4.6	Normal Q-Q Plot of One-semester Past Participants' Perceptions of the Effectiveness of Peer Support.....	177
4.7	Two-semester Past Participants' Perceptions of the Effectiveness of Peer Support.....	178
4.8	Normal Q-Q Plot of Two-semester Past Participants' Perceptions of the Effectiveness of Peer Support.....	179
4.9	One-semester Past Participants' Perceptions of the Effectiveness of Professional Development.....	182
4.10	Normal Q-Q Plot of One-semester Past Participants' Perceptions of the Effectiveness of Professional Development.....	183
4.11	Two-semester Past Participants' Perceptions of the Effectiveness of Professional Development.....	183
4.12	Normal Q-Q Plot of Two-semester Past Participants' Perceptions of the Effectiveness of Professional Development.....	184

## LIST OF TABLES

TABLE		Page
2.1	Teachers Involved in Induction Experiences.....	52
3.1	Ethnicity of Urban District’s Student Population.....	113
3.2	Ethnicity of Urban District’s Teacher Population.....	114
3.3	Length of University-based Teacher Induction Program, School Level Taught and Gender of Participating Urban Novice Teachers.....	131
3.4	Length of University-based Teacher Induction Program, Ethnicity and Gender of Participating Urban Novice Teachers.....	133
3.5	Length of University-based Teacher Induction Program, Socio-economic Level of the School and Gender of the Participating Urban Novice Teachers.....	134
3.6	Length of University-based Teacher Induction Program and the Schools’ Socio-economic Level of Participating Urban Novice Teachers Responding to the TIPPS.....	136
3.7	Length of University-based Teacher Induction Program and the Grade Level Taught by of Participating Urban Novice Teachers Responding to the TIPPS.....	137
4.1	Means and Standard Deviations of Observation Scores of Classroom Teaching Behaviors of One-semester and Two-semester Participants.....	156
4.2	Observation Scores of Classroom Teaching Behaviors of One-semester Participants and Two-semester Participants Related to the Socio-economic Level of the School.....	161
4.3	Observation Scores of Classroom Teaching Behaviors of One-semester Participants and Two-semester Participants Related to the Grade Level Taught.....	163

TABLE	Page
4.4	Survey Items Corresponding with Program Components and Reliability..... 167
4.5	Means and Standard Deviations of Responding One-semester or Two-semester Participants' Perceptions of the Components of a University-based Teacher Induction Program..... 169
4.6	One-semester and Two-semester Past Participants' Perceptions of the Effectiveness of Formative Observation..... 170
4.7	One-semester and Two-semester Past Participants' Perceptions of the Effectiveness of Peer Support..... 176
4.8	One-semester and Two-semester Past Participants' Perceptions of the Effectiveness of Professional Development..... 181
4.9	Statistical Significance of One-semester or Two-semester Past Participants' Perceptions of the University-based Teacher Induction Program Components Related to Socio-economic Level of the School and the Grade Level Taught..... 187

## CHAPTER I

### INTRODUCTION

“Cross this bridge at a walk,” stated the sign above the entrance to a covered bridge. Single travelers on horseback surely were tempted to race through the bridge, but we [sh]ould not hurry this process. Change takes time. Crossing at a walk slowed us down, but allow[ed] time for conversation and reflection

Newton, Nash & Ruffin, 1996, p. 84

#### Background of the Study

Today’s schools face tremendous challenges. The No Child Left Behind Act (NCLB) (2001), a federally enacted law, required a highly qualified teacher to serve every student in the United States (National Commission on Teaching and America’s Future [NCTAF], 2003; Trahan, 2002). Since student achievement was directly affected by teacher quality, this requirement has far-reaching implications affecting the next generation of leaders of our country (Darling-Hammond & Sykes, 2003; Howard, 2003; McCowen, 2004). Furthermore, more than two million teachers will be needed by 2012 (NCTAF, 2003) to replace retiring teachers and serve the escalating diverse student enrollment (Darling-Hammond & Sykes, 2003) during a time of increased accountability of students’ achievement (USDOE, 2002). Compounding this requirement is the attrition of beginning teachers. NCTAF (2003) reported, “Teacher retention has become a national crisis” (p. 22). In a national study, Ingersoll (2001) found that more than

---

This dissertation follows the style and format of *The Journal of Educational Research*.

45 percent of beginning teachers leave the profession during their first five years of teaching. Furthermore, the largest teacher turnover occurred in high poverty, urban schools (Ingersoll, 2001; NCTAF, 2003). Often underqualified teachers or those teaching outside of their certification area replaced certified teachers who left urban schools (Darling-Hammond & Sykes, 2003; NCTAF, 2002).

Urban schools serve 75 percent of the students of color, 40 percent of the nation's children of poverty and 40 percent of students with limited English proficiency (Claycomb, 2000). The annual teacher attrition rate in urban districts is 20 percent, while high poverty schools experienced a 16 percent teacher turnover rate (Ingersoll, 2001; NCTAF, 2003). Furthermore, due to insufficient funding, resources for salaries, educational materials and facilities are limited when schools compete to hire highly qualified or experienced teachers (Darling-Hammond & Sykes, 2003; NCTAF, 2003). Often inexperienced or uncertified teachers fill these vacancies in urban schools (Darling-Hammond & Sykes, 2003; NCTAF, 2003). These teachers lack effective instructional skills and knowledge of culturally responsive pedagogy needed to address the needs of students representing diverse populations (Haberman, 1995, 2000; Odell, 1990; Veenman, 1984).

Researchers have determined that assistance and support provided to novice teachers during their first years of teaching directly influenced their retention within the educational profession (Huling-Austin, 1989; Odell, 1990; Recruiting New Teachers, Inc., 2000a). According to Fideler and Haselkorn (1999), 84 percent of the mentoring programs have been initiated by single school districts, while 31 percent of those have

worked in collaboration with an institution of higher education. These programs focused on recruiting and retaining novice teachers, while improving the instructional performance of both novice and mentor teachers (Galvez-Hjornevik, 1985; Ganzer, 2001a; Hutto & Haynes, 1989; Kilberg, 2000). Many programs are deemed as informal or formal mentoring programs as well as teacher induction programs. Developing teacher induction programs that provided quality psychological and professional support, while assisting in applying innovative teaching practices have been significant factors in retaining committed, competent teachers (Feiman-Nemser, Carver, Schwille & Yusko, 1999; Gold, 1996; Recruiting New Teachers, Inc., 2000a).

Recruiting New Teachers, Inc. (2000a) reported a retention rate of 93 percent of teachers who participated in either an induction or mentoring program. These programs enhanced the existing skills of novice teachers and decreased the attrition rate (Darling-Hammond, 1998; Recruiting New Teachers, Inc., 2000a). More recent studies have determined that beginning teachers benefit from being a member of a learning community, also termed a community of practice (Barab, Barnett & Squire, 2002; Edwards & Protheroe, 2003; Lave, 1996; Meyer, 2002; Putnam & Borko, 2000).

The key components of mentoring programs provided by individual school districts or in collaboration with a university have been identified. These elements included using experienced teachers as mentors, professional development based on the needs of beginning teachers, opportunities for collaboration and support, formative observations, feedback, orientation, reflection observing other teachers, administrative support and program goals (Brewster & Railsback, 2001; Evertson & Smithey, 2001;



Fallon, 2004; Feiman-Nemser, et al., 1999; Fideler & Haselkorn, 1999; Fleishmann, et al., 2000; Grant, 2003; Horn, Sterling & Subhan, 2002; Joerger & Bremer, 2001; Maulding, 2002; McKibben, 2001; Moir & Gless, 2001; Nugent & Faucette, 2004; Recruiting New Teachers, Inc., 2000b; Seo, Bishop & Langley, 2004; Wong, Sterling & Rowland, 1999). However, Fideler & Haselkorn (1999) found that only a few teacher induction programs included a majority of these comprehensive elements.

#### Statement of the Problem

More than two million teachers will be needed by 2012 (NCTAF, 2003) to replace retiring teachers and serve the escalating diverse student enrollment (Darling-Hammond & Sykes, 2003). The attrition rate of novice teachers nationally has been more than 45 percent during the first five years of their career (Ingersoll, 2001). As a result, a shortage of certified teachers has existed, especially in urban schools that serve a diverse student population (Darling-Hammond & Sykes, 2003). Nationally, programs that support novice teachers have been inconsistent in their duration and components (Sweeny & DeBolt, 2000). Mentoring programs have focused on developing the skills of both the mentor and the novice teacher, while induction programs concentrate on enhancing the instructional skills and retention of the novice teacher (Fideler & Haselkorn, 1999). In addition, few institutions of higher education have been solely responsible for a comprehensive university-based teacher induction program. Little research has been conducted on classroom teaching behaviors of urban novice teachers or participants' perceptions of the effectiveness of components of a formal university-based teacher induction program. Therefore, it is critical to examine the observation

scores of classroom teaching behaviors of urban novice teachers participating in a one-semester university-based teacher induction program and in a two-semester university-based teacher induction program. Further, the effectiveness of the program components as perceived by those participating in a one-semester university-based teacher induction program and in a two-semester university-based teacher induction program needs to be examined.

#### Statement of the Purpose

The purpose of this longitudinal trend study (Gall, Borg & Gall, 1996) is to examine the effectiveness of a one-semester university-based teacher induction program and a two semester university-based teacher induction program based on the observation scores of classroom teaching behaviors exhibited during the first year of teaching. Statistically significant differences will be determined from the observation scores of classroom teaching behaviors of novice teachers who participated in a one-semester university-based teacher induction program and those who participated in a two-semester university-based teacher induction program in relation to the socio-economic level of the school and the grade level taught.

Further, the study will also examine the participants' perceptions of the teacher induction program components of a one-semester university-based teacher induction program and a two-semester university-based teacher induction program during their fifth year of teaching. Statistically significant differences will be determined of the participants' perceptions based upon the socio-economic level of the school and the grade level taught.

## Research Questions

The following questions will be examined in this study:

1. Is there a statistically significant difference between the observation scores of classroom teaching behaviors of urban novice teachers who participated in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program?
2. Is there a statistically significant difference between the observation scores of classroom teaching behaviors of urban novice teachers who participated in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program related to the socio-economic level of the school or the grade level taught?
3. Which program component, as perceived by urban novice teachers, participating in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program, was identified as most effective after teaching five years?
4. Is there a statistically significant difference in the effectiveness of program components, as perceived by urban novice teachers five years after participating in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program, related to the socio-economic level of the school or the grade level taught?

### Significance of the Study

During a time when teacher shortages are critical, educators must be able to refer to the literature to determine the effective components of teacher induction programs. The significance of this study will be the contribution of the study's results in assisting educators to design and implement teacher induction programs that will lead to the retention of teachers and increase the quality of instruction in our large, public urban school districts.

### Situated Cognition

To address the issues and isolation confronted by the novice teacher, the sociocultural and situated cognition theories were utilized in teacher induction programs. The foundational theory of situated cognition was the sociocultural learning theory (Lave & Wenger, 1991/2003; Vygotsky, 1978). Through the application of these learning theories, novice teachers participating in teacher induction programs were guided by either a more experienced colleague, or mentor, or through interactions with communities of practice (Lave & Wenger, 1991/2003; Vygotsky, 1978).

The individual's learning in cultural contexts while interacting with others was recognized as a predominant concept by both the sociocultural and situated cognitive theorists (Hansman, 2001; Lave & Wenger, 1991/2003; Vygotsky, 1978). The social and cultural contexts in which events occurred, the activities and the tools used to complete activities resulted in the individual constructing knowledge (Hansman, 2001). Both theories postulated that social interaction was necessary for learning and problem solving (Lave & Wenger, 1991/2003; Vygotsky, 1978). As Vygotsky (1978) defined the

zone of proximal development (ZPD) as a more knowledgeable colleague guiding a novice to solve more complex problems, Lave and Wenger (1991/2003) determined that the implementation of cognitive apprenticeship assisted the novice in constructing knowledge.

### Socio-cultural Theory

Vygotsky (1978) discerned that as social beings, humans learned in social and cultural contexts through interacting at different levels with people who shared beliefs, values and cultures. Further, he posited that students solved problems at two levels, the intrapsychological, or independent level, and the interpsychological level, a potential level achieved in conjunction with an experienced peer (Vygotsky, 1978). At the independent level, individuals accomplished tasks based on prior knowledge and experiences previously mastered (Vygotsky, 1978).

### *Zone of Proximal Development*

Vygotsky (1978) hypothesized that processes not yet fully developed within an individual were assisted in maturing through the zone of proximal development (ZPD). At the interpsychological level, a more experienced peer, or mentor, scaffolded, or guided, the novice to solve more complex problems through social interaction and the utilization of signs and tools (Minami & Ovando, 2001; Vygotsky, 1978; Wineberg, 1997). Learning occurred through the ZPD or “the distance between actual development as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86). Later, when confronted with a similar problem,

the individual solved it independently (Minami & Ovando, 2001; Vygotsky, 1978; Wineberg, 1997); thus increasing the independent level of the learner. The use of signs and tools, such as social interaction, reading, writing and other environmental or contextual strategies, assisted in mediating the interactions (Hansman, 2001; Lave, 1988; Putnam & Borko, 2000; Vygotsky, 1978).

#### Situated Cognition Theory

Wenger (2000) and Amstutz (1999) postulated that education was based on behavioral and cognitive theories that concentrated on developing the individual through an emphasis on the self and personal growth. In the situated cognitive model, this transfer of learning to the application of knowledge was addressed along with focusing on the learning styles of the learners through communities of learners (Hansman, 2001; Pratt, 2002).

#### *Communities of Learners*

While Vygotsky (1978) professed that an individual's learning occurred through the ZPD with a more experienced peer, Lave and Wenger (1991/2003) expanded his theory by stating that learning of the individual occurred within a community of learners, or community of practice (Lave, 1996; Putnam & Borko, 2000). Participants in a community of learners became more knowledgeable by social interacting with others who had similar experiences and challenges (Lave & Wenger, 1991/2003; Wenger & Snyder, 2000a, 2000b).

Through these collegial interactions, novices developed cognitive structures and were provided opportunities to discuss, question and examine their experiences

(Stanulis, Fallona & Pearson, 2002). Novices were also encouraged to reflect, evaluate and change their practices (Stanulis et al., 2002). Self-confidence and efficacy were established through the social context of the peer activities (Lave, 1996; Putnam & Borko, 2000). Such collaboration acted a deterrent to isolation and discouragement (Gilles, Cramer & Hwang, 2001).

### *Cognitive Apprenticeship*

Lave (1996) defined the levels of interaction experienced through cognitive apprenticeship. She suggested that as people interacted within a community of practice, they advanced from participants on the periphery of the community of learners to full participants, or experts; thus increasing the novice's knowledge through socially interacting with members of the community (Brown, Collins & Duguid, 1989; Lave, 1996; Machles, 2003). Experiences were shared through informal gatherings of “free-flowing, creative ways that foster[ed] new approaches to problems” (Wenger & Snyder, 2000a, p. 140). As members of the community of learners became more experienced and educated, new experts within the community were developed. These experts then assisted the next group of new members on the periphery of the community to become more knowledgeable. Further, the knowledge base of established members of the community of practice was enhanced through socially interacting with new members (Brown et al., 1989; Lave, 1996; Machles, 2003).

As Lave (1996) explained, “the situated cognition perspective of learning required a commitment to facilitate inclusion of all participants equitably so that each contributes equally in the decisions of power, influence and values of themselves and

others” (p. 162). As new members were cultivated as experts, then experienced members faded their support (Brown et al., 1989; Machles, 2003). As a result, the thinking and learning of the community changed due to the ideas brought by its members (Brown et al.; Lave, 1996; Machles, 2003). Applying the socio-cultural and situated cognition theories to teacher induction programs assisted in preparing novice teachers to solve issues which they confronted, become more experienced teachers which, in time, affected student learning (Amstutz, 1999; Hansman, 2001; Putnam & Borko, 2000).

#### Definition of Terms

1. Beginning teacher – the teacher of record within a school district during their first two years of teaching. Other terms such as novice teacher, mentee, protégé and first year teacher as used in this study were interchangeable.
2. Classroom teacher behaviors – behaviors exhibited by teachers as they instructed their students within their classrooms. These behaviors were scripted and compared with a pre-determined standards found in the Teacher Induction Program Formative Observation Instrument (TIPFOI).
3. Cohort – group of beginning teachers who entered the program in the fall or spring semesters of the same academic year.
4. Formative observations – a series of classroom observations of a novice teacher instructing students during the teacher’s initial year of teaching conducted by a university mentor. Results of the formative observation were then compared to list of pre-determined standards and used in this study.



5. Integrated triad – a teacher induction program model used in this study which included (a) weekly peer support sessions facilitated by university mentors, (b) professional development on identified concerns and research-based practices, and (c) formative observations that addressed the classroom, teaching behaviors of the individual teacher. Additionally, reflective techniques were employed within each component of the triad.
6. Longitudinal trend study - a study “describing change by selecting a different sample at each data collection point from a population that does not remain constant” (Gall, Borg & Gall, 1996, p. 377).
7. Mentor – a retired teacher trained by the program coordinator in the stages of teacher development, mentoring techniques, research-based teaching strategies, observation and coaching skills. The use of retired teachers as mentors was specific to this study.
8. Mentoring program – a campus-based program in which trained mentors were primarily responsible for the emotional and instructional support of the novice teacher.
9. One-semester participants – urban, novice teachers specific to this study who participated in a one-semester university-based teacher induction program. The term, specific to this study, was used to clarify the discussions in Chapters III, IV and V.
10. Peer support sessions - regularly scheduled weekly meetings specific to this

study that assisted entry-level teachers. The novice teachers were grouped in a community of learners by similar grade level or disciplines to cope with problems encountered. The small group sessions revolved around work-related issues raised by group members. The mentor facilitated and adapted discussion topics to address current concerns of the group members.

11. Professional development instruction – weekly sessions specific to this study which addressed the identified topics of concern and best practices, while assisting the novice with the knowledge, skills and strategies necessary to effectively teach students.
12. Reflection – activities specific to this study in which beginning teachers considered their own practice, acquired new ideas from peers and transferred the practices to their instruction.
13. Teacher induction program– a program designed to provide emotional and professional assistance to beginning teachers during their first year of teaching.
14. Two-semester participants - urban, novice teachers specific to this study who participated in a two-semester university-based teacher induction program. This term, specific to this study, was used to clarify the discussions in Chapters III, IV and V.
15. University-based teacher induction program – a program specific to this study in which participants enrolled in a one-semester teacher induction program or a two-semester teacher induction program that provided peer support, professional development and formative observations. Rather than the school district being

responsible for the emotional and instructional support of the novice teacher, the College of Education at the regional university provided this service through coursework.

#### Assumptions

The following assumptions were made:

1. The yielded survey responses represented honest and unbiased opinions.
2. Participants were representative of urban novice teachers.

#### Limitations of the Study

The limitations of this study were:

1. The survey was sent to the program participants five years after participating in the university-based induction program. According to Gall, Borg and Gall (1996), additional treatments could occur during the time span between participating in the program and the administration of the questionnaire.
2. As the mentees participated in the professional development and observation components, they became more skilled and aware of the criteria and indicators of the observation instrument.
3. Although all the university mentors had been trained in using the formative observation instrument, the measured outcomes could have been affected by the mentor's experience or physical conditions when conducting the observations.

#### Summary

This chapter discussed the shortage of teachers in our nation's schools, the high attrition rate of teachers beginning their career in education and the cultural mismatch

occurring in urban schools between the teacher and the students representing diverse cultures. Furthermore, although many studies have measured effects of mentoring programs on mentors and novices, few longitudinal trend studies have been conducted on the effectiveness of a one or two semester university-based teacher induction program.

## CHAPTER II

### REVIEW OF THE LITERATURE

At a time when legislators, through the No Child Left Behind (NCLB) Act of 2001, mandated that highly qualified teachers be assigned to every classroom by 2006 (Trahan, 2002; USDOE, 2001), almost 30 percent of the nation's teaching force is in transition (Ingersoll, 2001; NCTAF, 2003). According to the USDOE (2003) and Darling Hammond (1999), student achievement is directly affected by the quality of teachers assigned to the classroom. Additionally, classrooms are replete with children from more culturally, linguistically, economically and ethnically diverse (CLEED) (Larke, personal communication, September, 2002) populations (Bartell, 2005; Good & Brophy, 2000; Portner, 2001). Teacher vacancies, often occurring in urban schools, are filled by uncertified teachers or those teaching out of their area of expertise (Darling-Hammond, 2000a; Ingersoll, 2002).

#### Teacher Quality

Highly qualified teachers have been defined by NCLB as teachers who possess content knowledge, understand the processes of student learning and development and employ a wide range of pedagogical content knowledge (Darling-Hammond & Sykes, 2003; Segall, 2004; Shulman, 1987; USDOE, 2001). However, the NCLB requires "highly qualified teachers" to only complete full state certification, which includes completion of a bachelor's degree and a demonstration of competency in content knowledge and pedagogy on the required state tests (Exstrom, 2003; Trahan, 2002; USOE, 2003).

Highly qualified teachers should be able to “critically examine, reflect upon and perfect their own practice as they continually seek to acquire new knowledge and expertise” (Bartell, 2005, p. 5). Therefore, a highly qualified teacher should be defined more extensively than merely by requiring teachers to satisfactorily complete state mandated tests.

Teacher quality is a critical indicator in predicting student achievement (Bartell, 2001; Darling-Hammond, 1998; Exstrom, 2003; Falk, 2004; Fallon, 2004; Ingersoll, 2002; USDOE, 2003; Wojnowski, Bellamy & Cooke, 2003). Joerger and Bremer (2001) stated, “students were the direct recipients of highly skilled and satisfied teachers as reflected in higher levels of student achievement on standardized tests” (p. 8). Researchers reported that students who were instructed by an ineffective teacher for three years in succession scored 54 percent less than those students who had the most effective teachers for three years (Darling-Hammond, 1997; McCowen, 2004; Sanders & Rivers, 1996). Schools staffed with 100 percent certified teachers earned higher standardized test scores than those with less than 85 percent certified teachers (Fuller, 1998). Better trained and more experienced teachers equated to higher levels of student learning, which, in turn, led to a more significant education of a generation of leaders for the 21<sup>st</sup> century (Darling-Hammond & Sykes, 2003; Falk, 2004; McCowen, 2004). While there was little doubt that highly qualified teachers are necessary for increased student achievement, retaining teachers within the classroom appears to be a challenge for the educational profession.

## Teacher Attrition

As NCTAF (2003) reported, “Teacher retention has become a national crisis” (p. 22). Forty-five percent of novice teachers abandoned the education profession within their first five years of teaching with the largest turnover rate occurring in high poverty, urban schools (Ingersoll, 2001; NCTAF, 2003). This exodus appeared to be related to the “demographic divide” and a lack of knowledge and skills proven to be successful when teaching students representing diverse cultures (Banks, 2001b; Carter, 2003a, 2003b; Carter, Gayles-Felton, Hilliard & Vold, 1999; Carter & Larke, 1995, 2003; Gay, 2000; Gay & Howard, 2000; Larke, 1992; Weiner, 1999).

### Turnover

While the NCLB (2001) is proactive in requiring highly qualified teachers being assigned to every classroom, the shortage of teachers has increased. The NCTAF (2003) stated that of the total American teaching force of over 3.4 million teachers in 2000, approximately 534,000 teachers entered the teaching workforce in 1999-2000. However, almost 540,000 of these practicing teachers departed after the 2000-01 academic year (Ingersoll, 2001). Therefore, school districts hired as many teachers during 2000-01 as were hired in the previous academic year; thus creating the “revolving door syndrome” (Ingersoll, 2001, p. 150).

While teachers represented 4 percent of the national workforce, the rate of teacher attrition appeared to be higher than that of other professions (Howard, 2003; Ingersoll, 2002). The average annual turnover rate of other occupations has been approximately 11 percent (Ingersoll, 2001). Recently, the annual turnover rate for

teachers has risen from 14.5 percent in 1988-89 to 17 percent in 2000-01 (Ingersoll, 2001). While 40 percent of newly certified teachers failed to seek teaching positions (Feistritzer & Chester, 2000; Carter, 2003a, 2003b; Haberman, 2002; Howard, 2003; McKibben, 2001), another 46 percent of novice teachers abandoned the profession within the first five years of their career before acquiring adequate experience to become effective educators (Darling-Hammond & Sykes, 2003; Ingersoll, 2001; NCTAF, 2003). Undergraduates with high scores in verbal ability who entered teaching, left the profession within the first three years of their career (Schlechy, 1983; Wojnowski et al., 2003). Equally disconcerting was the fact that uncertified teachers often employed in urban schools have a higher attrition rate than fully certified teachers (Fuller, 2003).

Seventy-five percent of the demand for new teachers is caused by teacher attrition (Fuller, 2002). Researchers reported that the shortage of teachers was greater in high poverty, urban schools located in the southern and western United States (Croasmun, Hampton & Herrmann, 1999; Haberman, 2002). High poverty schools across the nation experienced an annual teacher turnover rate of 20 percent, while the teacher turnover rate of low poverty schools was 13 percent (Ingersoll, 2001). Sixteen percent of urban teachers annually left their positions (NCTAF, 2003). Hanushek, Kain & Rivkin (2004) found that 20 percent of teachers assigned to schools ranked in the bottom quartile of student achievement annually exited their schools, while 15 percent left schools that were ranked in the top-quartile. Haberman (2002) asserted, “teacher attrition increase[d] as the number of minority students increase[d]” (p. 25).



Twenty-six percent of public school teachers left teaching due to dissatisfaction with the teaching conditions, while 25 percent left teaching to pursue other jobs offering greater compensation (Ingersoll, 2002; Justice, Greiner & Anderson, 2003; Portner, 2001; Thomas, 1998). According to NCTAF (2003), “teacher attrition has become a national crisis” (p. 22). Cochran-Smith (2001) posited that increasing “economic security and societal respect” would aid in the recruitment of talented college graduates who might have considered teaching (p. 197).

Even though there has been an increase in initiatives, such as “Troops to Teachers” and “Teach for America”, to recruit teacher candidates to pursue a teaching career (Ingersoll, 2002, p. 146), as many as 45 percent of those recruited left the profession within their first five years of their career (Ingersoll, 2001). Even with increased efforts in teacher recruitment, teacher educational entities were unable to produce enough certified teachers to fill the schools’ need for qualified teachers (Eller, Doerfler & Meier, 2000). Ingersoll (2001) posited that the “revolving door syndrome” of exiting teachers departing the classrooms for “reasons other than retirement” (p. 150) appeared to be caused by inequities in teacher compensation and working conditions when compared with other professions (Justice et al., 2003; Ingersoll, 2001, 2002).

Ingersoll (2001, 2002) refuted the premise that there is a shortage of teachers. He hypothesized that merely recruiting additional teachers failed to solve the staffing problems of schools. He proposed that addressing the organization of schools might aid in the retention of teachers. In a study using data collected from the Schools and Staffing Survey (SASS) and the Teacher Follow-up Survey (TFS), Ingersoll (2001, 2002)

determined that the attrition rate reflected not only those who left the profession, but also teachers who transferred to a different district but still continued to teach. This migration of teachers accounted for at least half of the overall turnover of teachers. The study determined that high poverty urban schools had a higher rate of teacher turnover (Ingersoll, 2001). According to Ingersoll's study (2001), of the 26 percent of teachers that left high poverty schools, almost 10 percent of those migrated to another district while nearly 16 percent of teachers left teaching.

Ingersoll (2001) posited that high rates of teacher turnover are outcomes of underlying problems in school functioning and, thereby, negatively affecting student performance (Ingersoll, 2001). According to Justice et al. (2003), faculty instability caused a negative impact on minority students due to an inconsistent student-teacher relationship within the school.

Ingersoll (2001, 2002) found teacher turnover was caused by job dissatisfaction linked to inadequate compensation, lack of administrative support, having little influence over decisions made in the schools and student discipline problems. Larger class sizes, intrusions on classroom time and insufficient planning time were also factors in leaving the school (Ingersoll, 2001; Patterson, Roehrig & Luft, 2003). Other researchers cited stress caused from inadequate resources, disparity in school funding and working with students and families with an array of needs as reasons for teachers leaving the educational profession (Claycomb, 2000; Darling-Hammond & Sykes, 2003). Because high poverty, urban schools often have the aforementioned characteristics, beginning teachers who were employed in these types of schools were "more than twice as likely to

leave than teachers working in more affluent schools” (Darling-Hammond & Sykes, 2003, p. 25).

#### Uncertified Teachers

When a highly qualified certified teacher at a high poverty, highly diverse, public urban school vacates a classroom, an uncertified teacher is often hired to fill the void (Foster, 2004; Ingersoll, 2002; Justice et al., 2003). According to Fidler and Haselkorn (1999), 80 percent of urban districts have employed uncertified teachers, over 50 percent hired teachers with emergency permits, while 60 percent utilized long-term substitutes. Within this group of unqualified teachers were 12 percent that have had no training (Fidler & Haselkorn, 1999). A small percentage of these teachers have previously been employed as paraprofessionals or volunteered to work in the schools (Hertzog, 2002).

Currently, many students enter urban classrooms taught by either uncertified teachers concurrently enrolled in education classes, certified teachers teaching out of their certification area (Patterson et al., 2003), or long-term substitutes who lacked professional training (Bartell, 2005; Croasmun et al., 1999; Fuller, 2003; Hertzog, 2002; Ingersoll, 2002; USDOE, 1997). Thirty-nine percent of uncertified teachers teach in schools that serve culturally, linguistically, ethnically and economically diverse (CLEED) (Larke, personal communication, September, 2002) students (Darling-Hammond, 2000a). Presently, 25 percent of English, science, social studies and foreign language courses were taught by teachers, who lacked a minor in the subject area of which they teach (Ingersoll, 1999; Joerger & Bremer, 2001; NCTAF, 2003; Recruiting

New Teachers, Inc., 2000a; USDOE, 1997). Furthermore, certified teachers instruct only 50 percent of math and science classes in urban schools (Claycomb, 2000; Ingersoll, 2001). Fuller and Alexander (2004) reported that schools serving a student population of predominantly African-Americans, employ the greatest number of uncertified teachers. They found that 49 percent of English teachers, 45 percent of math teachers, 40 percent of science teachers and 44 percent in social studies failed to be certified, yet were employed as the teacher of record.

Uncertified teachers have reported dissatisfaction with the training they received and have a greater attrition rate than certified teachers (Darling-Hammond, 2000). Henke, Chen & Geis (2000) reported that 49 percent of uncertified teachers who began teaching in the 1992-93 school year had left within five years. Additionally, due to insufficient and limited training, uncertified teachers experienced greater difficulties when diagnosing students' needs, planning for instruction and applying pedagogical strategies (Darling-Hammond, 2000). Furthermore, they have more difficulty when managing the classroom, were less motivated in addressing students' learning styles and were more apt to blame the students for ineffective instruction (Darling-Hammond, 2000).

Because entry-level and uncertified teachers were often assigned to high needs schools, the least experienced, untrained teachers with the fewest resources frequently instructed the most underserved students (Bartell, 2005; Darling-Hammond, 2000; Darling-Hammond & Sykes, 2003; Ingersoll, 2001; Oakes, Franke, Quartz & Rogers, 2002). Therefore, when teachers lacked sufficient education and experience, student

achievement was negatively effected (Darling-Hammond & Sykes, 2003; Howard, 2003; McCowan, 2004); thus, resulting in an increase in teacher attrition.

### Demographic Divide

Researchers reported that causes of teacher attrition were varied (Boreen & Niday, 2000; Conway, Hansen, Schulz, Stimson, Wozniak-Reese, 2004; Ganzer, 2000; Gilles et al., 2001; Hertzog, 2002; Ingersoll, 2002; Kent, 2000; Ponticelli & Zepeda, 1997; Stanulis et al., 2002; Veenman, 1984; Wilkinson, 1994). However, the most common causes were related to the cultural mismatch or “demographic divide” between the culture of teachers and their students (Gay & Howard, 2000) and the lack of preparation in teacher education courses to prepare novice teachers to teach students representing diverse cultures, especially in urban classrooms (Claycomb, 2000; Gay & Howard, 2000; Haberman, 1995, 2002; Hausfather, 1996; Stanulis et al., 2002).

Therefore, teacher attrition appears to be the result of a growing disparity that exists between the ethnicity and culture of the increasingly diverse student population and the teachers in urban schools (Bartell, 2005; Fullen, 2003; USDOE, 1997; Zeichner, 2003). Of the 54 million students who attend public schools, 64 percent are European Americans and 36 percent represent people of color (Carter, 2003a, 2003b; Futrell, 1999; Gay & Howard, 2000; Howard, 2003). Of these, 15 percent live in poverty and 13 percent have special needs (USDOE, 2002). By 2020, the student population is projected to consist of 18.6 million Hispanic American students, 12.7 million European American students, 10.5 million African American students and 2.3 million students from other underserved groups (Good & Brophy, 2000; Howard, 2003). Over 48 million

people over 5 years of age speak a language other than English at home (U.S. Census Bureau, 2003; Villegas & Lucas, 2002). Further, students immigrating to the United States from other countries now attending schools have previously received little or no education, but presently reside in urban communities and attend urban schools (Howard, 2003). Students of color make up 79 percent of the urban school population, while 20 percent of children under the age of 18 lived in poverty (Villegas & Lucas, 2002). Large numbers of CLEED students (Larke, personal communication, September, 2002) attended urban schools with members of their same ethnic groups (Gay & Howard, 2000).

Teachers serving this diverse student population represented approximately 88 percent European American, monolingual females reared in lower or middle class families, that reside in rural or suburban settings (Arekere, 2004; Lortie, 1975; Meek, 1998; Scherer, 1999; USDOE, 1997; Weiner, 1999). Most veteran and novice teachers have had few cross-cultural experiences. Few teachers, as students, have attended schools or socialized with people of color (Gay & Howard, 2000). The number of African American teachers decreased from 8 percent in 1990 to 7 percent in 2000, while teachers of Hispanic descent decreased from 6 percent in 1990 to 4 percent in 2000 (Carter, personal communication, September 29, 2001).

When teachers are unaware of the diverse languages and cultures of the students they teach, “cultural incompatibility” or cultural mismatch occurs (Carter & Larke, 1995, 2003; Nieto, 2000, p. 236). Due to being reared and living in a predominately White, middle-class culture, teachers are unexposed or oblivious to the experiences

confronting children of underserved populations (Larke, 1992). Because of the cultural mismatch, or “demographic divide” (Gay & Howard, 2000, p. 1), students have difficulty in identifying with their teachers (Bartell, 2005). Furthermore, students are often unfamiliar with the learning strategies presented by teachers who are unaware of the importance of integrating their students’ culture within instruction and the schools’ curriculum (Banks, 2001b; Bartell, 2005).

Therefore, a “demographic divide” or “an increasingly racial, cultural and linguistic divide between teachers, who are primarily European American, and the K-12 student population, which is becoming more diverse,” (Gay & Howard, 2000, p. 1) has been created between the teaching population and the students they teach (Carter, 2003).

Adding to the causes for teacher attrition is the lack of preparation in teacher education programs that addressed the issues that confront novice teachers (McCann, Johannessen & Ricca, 2004) and appear to be related to the “demographic divide” (Gay & Howard, 2000, p. 1). At a time when a greater number of highly qualified teachers are needed in classrooms, teacher preparation programs have been challenged to prepare a more competent workforce to serve an increasingly diverse student population (Bartell, 2005; Darling-Hammond, 2001). Members of a quality-teaching workforce included teachers being adequately prepared in content and pedagogical knowledge.

Additionally, these teachers possess a high level of self-efficacy to teach in a variety of contexts to educate students who may or may not share the teacher’s culture, language, economic status and ethnicity (Bartell, 2005; Haberman, 1995; Ziechner, 2003).

While professional teaching standards vary from state to state, some teacher preparation programs continue to focus on educating young, middle- or lower-class, single Protestant women to become teachers (Larke, 1992). Many of these teacher candidates have resided only in suburban or rural areas of the country (Haberman, 2002) and have had few experiences with people of color (Gay & Howard, 2000; Larke, 1992). Often, they are taught to utilize generic teaching competencies (Haberman, 2002; Oakes, Franke, Quartz & Rogers, 2002) that addressed the learning styles, behaviors and language use of the majority culture (Foster, 2004, p. 24; Haberman, 2002).

Further compounding the dilemma is the lack of required multicultural education classes and instruction in methods proven to be successful with students representing diverse cultures within the traditional curriculum such as culturally responsive pedagogy (Carter et al., 1999; Gay, 2000; Grant, 1989; Grant & Tate, 2001; Larke, 1992; Taylor, 1994; Weiner, 1999). Multicultural education and culturally responsive pedagogy require reformed curriculum and strategies to empower students representing cultural, linguistic, ethnic, economically diverse (CLEED) (Larke, personal communication, September, 2002) groups (Banks, 2001b, 2001c; Gay, 2000). Major goals included educating students for social criticism and social change, while utilizing higher-level thinking skills to make decisions and solve problems (Banks, 2001b; Pang, 2001). Through routinely incorporating “examples, data and information from various cultures to illustrate key concepts, principles, generalizations and theories” (Banks, 2001d, p. 12) within the curriculum of subject areas taught (Banks, 2001d; Pang, 1994), only then will students understand “how knowledge was created and influenced by racial, ethnic and



social classes that reflect the social context of the times” (Banks, 2001a, p. 21). Through curriculum projects, students acquire and employ higher level thinking skills to analyze social issues of equity and social justice of their communities. Further, students learn to pursue social action to improve issues existing within their community (Banks, 2001b; Pang, 2001).

Culturally responsive teaching strategies addressed the needs of CLEED students (Gay, 2000; Larke, personal communication, September, 2002). As Gay stated, “Teach the whole child...by any means necessary” (personal communication, March 22, 2002). This pedagogy utilizes prior knowledge, including examples of the students’ lives, cultural experiences and interests (Banks, 2001d; Gay, 2000; Irvine, 2003; Pang, 2001) to present knowledge and skills in the context of real world application (Gay, 2000; Irvine, 2003). Further, using literature and language of students representing diverse populations holistically engages them in the learning process and assists them in learning new skills (Gay, 2000; Webb-Johnson, 2002). Employing collaboration as a teaching technique, as in cooperative learning groups, rather than competition between individuals, enables group members to regard themselves as acquiring equal status and learning to respect members of other cultural groups (Banks, 2001a; Pang, 2001). Incorporating learner-centered or active engagement strategies such as those described in multiple intelligences (Armstrong, 1994; Gardner, 1993), rather than teacher-directed instruction, addresses the individual student’s learning styles and provides support to assist the student in increasing learning and achievement (Banks, 2001d; Gay, 2000; Pang, 2001; Webb-Johnson, 2002). Further, this philosophy teaches students to be more

aware of and honor their own and others' cultural heritages (Gay, 2000). Through the inclusion of multicultural education and culturally responsive pedagogy within the teacher preparation curriculum better prepares beginning teachers to manage issues present in classrooms.

Moreover, teacher educators preparing novice teachers to teach in contemporary schools have failed to link theory and practice within the realm in which they will teach (Bullough, 1992; Roth & Tobin, 2002; Watzke, 2003). Curran (2000) emphasized the importance of teacher educators being knowledgeable about current educational standards, mandated curricula, available instructional resources, student demographics and existing working conditions in schools. Without knowing the current challenges faced by novice teachers, teacher preparation programs failed to equip their recent graduates with the necessary pedagogical skills required to properly educate students in their charge (Gay, 2000; Pang, 2001).

However, few teacher preparation programs in the nation incorporate applicable pedagogical activities in field-based collaborative settings that serve high poverty or highly diverse urban schools (Howey, 1999; Roth & Tobin, 2002). According to Grant and Tate (2001), preservice teaching experiences that included field experiences and student teaching placement in urban or high needs schools positively effected the preservice teacher's ability to work with students from diverse student populations or those who represented a background different from their own (Carter & Larke, 1995). This view was supported by a study of preservice teachers conducted by Larke, Wiseman and Bradley (1990). They found that through experiences in which preservice

teachers interacted with African American and Mexican American children, the attitudes of both groups changed. This experience allowed preservice teachers to utilize their instructional skills, while learning more about the culture of the students they mentored. Additionally, both groups felt less threatened and more accepted as they became better acquainted with each other's cultures (Larke et al., 1990).

Additionally, preservice teachers were frequently educated in utilizing the deficit model of teaching (Nieto, 2002) and, thereby, learned to stigmatize students who were culturally, linguistically, ethnically, economically and experientially diverse (Books, 1998; Larke, personal communication, September, 2002). The deficit model of teaching assumes that students who are genetically, culturally, linguistically, economically, ethnically or experientially different from the predominate culture are functioning under a deficit (Books, 1998; Larke, personal communication, September, 2002; Nieto, 2000). The premise of the paradigm states that students are in danger of school failure due to environmental factors, dysfunctional families and cognitive or motivational limitations (Haberman, 1995; Valencia, 1997; Villegas, 1991). This process "blamed the victim", a label provided by those in power (Haberman, 1995; Valencia, 1997; Villegas, 1991). Through discourse in education classes, the preservice teacher "learn[ed] how best to 'fix' students regarded as problems or an anomaly from the norm" while failing to address greater social issues (Books, 1998, p. xxiv).

Due to these beliefs, teachers lack high expectations for diverse learners, possess low levels of self-efficacy and utilize the contributions approach to curriculum development when teaching students representing diverse cultures (Banks, 2001b,

2001e; Bartell, 2005). Additionally, teachers utilizing the deficit model integrate fewer effective instructional strategies, such as culturally responsive teaching methods, proven to motivate students representing other cultures (Gay, 2000; Howard, 2003; Larke, 1992; Taylor, 1994). Furthermore, these teachers often failed to develop and maintain positive, supportive relationships with students of diverse populations and their caregivers (Carter et al., 1999; Foster, 2004; Haberman, 2002).

Gay and Howard (2000) asserted that being unprepared to teach students representing diverse populations leads to “the fear of teaching students of color and resistance to dealing directly with race and racism in teacher preparation and classroom practices” (p. 2). Without the inclusion of multicultural education in teacher education programs, novice teachers lack an understanding of the “cultural knowledge, curriculum design... [or]... pedagogical skills” (Banks, 2001b, 2001e; Gay & Howard, 2000, p. 2). According to Haberman (2002) and Foster (2004), traditional programs further fail to consider the importance of the knowledge, prior experiences and maturity that teachers needed to possess to be effective with students of color and children of poverty, especially those teachers working in urban schools (Books, 1998; Gay & Howard, 2000; Haberman, 1995, 2002).

### Teacher Preparation

Imig (2002) and Wise (2002) contend that teacher preparation programs have been transformed during the past decade. Imig (2002) asserts that the undergirding philosophy of teacher education has changed from behaviorism to constructivism. Additionally, teacher admission requirements have been raised (Imig, 2002: Wise,

2002). Wise (2002) asserted that even though the USDOE reported that “teacher preparation programs are failing at producing the kinds of teachers the nation requires” (USDOE, 2003b, viii), graduates from teacher education programs “met the challenge set when Congress passed Title II of the Higher Education Act in 1998” (Wise, 2002, p. 1). Furthermore, Wise (2002) stated that even though requirements for entry, exit and licensure recommendations have been increased. Graduates from teacher preparation entities surpassed those who sought alternative routes to teacher certification (Wise, 2002).

Through the advent of professional development schools, universities and colleges within them have been collaborating with public school systems by using veteran teachers as clinical faculty and assigning preservice teachers to work with public school students (Darling-Hammond, 2000a; Imig, 2002; Lawson, 1992). These clinical experiences conducted in contextual settings better prepared preservice teachers, extended the professional development of experienced teachers and encouraged collaborative research and inquiry (Darling-Hammond, 2000b; Fallon, 2004). Imig (2002) explained that through increased field-based experiences, attention has been focused on the learning needs of students of poverty and those representing diverse populations.

Zeichner (2003) stated that the redesign of teacher preparation programs might have had adverse effects. He asserted that “teaching standards have often been defined in a way that enables programs to ignore what we know from research about what teachers need to know, do and be like to be successful in teaching all students to high

standards” (Ziechner, 2003, p. 500). For example, the Interstate New Teacher Assessment and Support Consortium (INTASC) issued teaching standards that established a foundation for performance assessment in teacher preparation programs (Ziechner, 2003). However, these national guidelines failed to include standards associated with culturally responsive teaching that address the learning styles of CLEED (Larke, personal communication, September, 2002) students (Carter, 2003a, 2003b; Gay, 2000; Irvine & Armento, 2001; Ziechner, 2003). Ziechner (2003) asserted that the lack of integrating instructional methods such as culturally responsive pedagogy, which addressed the learning styles of diverse populations, leads to novice teachers’ dissatisfaction with teaching due to the problems encountered and being unable to find solutions. This lack of knowledge needed to enhance instruction for students of diverse populations further exacerbated teachers leaving the profession.

Moreover, Zeichner (2003) noted that raising teacher admission requirements had acted as a gatekeeper for those who wanted to teach and were entering the profession “from an uneven playing field” (p. 500). Instead, he recommended that teacher education programs consider the applicant’s skills, attributes, potential and academic performance, rather than focus entirely on grade point averages and test scores. This proposed change in teacher education requirements encourages an increase in the diversity of teacher candidates, while decreasing the demographic divide (Gay & Howard, 2003).

McCann et al. (2004) recommended that teacher preparation classes offer preservice teachers experiences in developing their professional persona, “ a public self”

(p. 1). Through clinical practices, such as assuming the role of the teacher in schools, various community settings and among peers, preservice teachers were given opportunities over a period of time to compare their behaviors against “recognizable and legitimate standards” (McCann et al., 2004, p. 2). In their study, McCann et al. found that teachers who left the profession were more focused on personal needs than the needs of students. Having a more experienced colleague, or mentor, share techniques in balancing work requirements with personal needs often curtailed this exodus (McCann et al.). Additionally, mentored novice teachers found the work rewarding after learning strategies that were effective with the students they were teaching. Therefore, teachers who entered a classroom lacking the necessary training, skills and strategies to deal with the challenges of teaching (Banks, 2001b, 2001e; Claycomb, 2000; Gay, 2000; Hausfather, 1996; Haberman, 2002; Nieto, 2000; Stanulis et al., 2002) often left the profession prematurely (Ingersoll, 2001), while those who were mentored continued to teach.

Darling-Hammond (2004) argued that only a few teachers have access to the type of teacher preparation that today’s schools our society requires. In a study of seven institutions that provided models for teacher preparation, Darling-Hammond (2004) “documented each program’s goals, strategies, content and processes... the capabilities of the prospective teachers who graduated from these programs... and the policies, organizational features, resources and relationships enabling these programs to be successful” (p. ix). These particular teacher education programs were chosen based on predetermined criteria (Darling-Hammond, 2000). While each institution implemented a

different model for teacher preparation, which included baccalaureate, post-baccalaureate and graduate programs, similar characteristics of the programs included:

a common, clear vision of good teaching that [was] apparent in all coursework and clinical experiences; well-defined standards of practice and performance that [were] used to guide and evaluate coursework and clinical work; a curriculum grounded in substantial knowledge of child and adolescent development, learning theory, cognition, motivation and subject matter pedagogy, taught in the context of practice; extended clinical experiences (at least 30 weeks) which [were] carefully chosen to support the ideas and practices presented in simultaneous, closely interwoven coursework; strong relationships, common knowledge, and shared beliefs [were developed] among school- and university-based faculty; extensive use of case study methods, teacher research, performance assessments, and portfolio evaluation to ensure that learning [was] applied to real problems of practice (Darling-Hammond, 2000b, p. x).

In this study, Darling-Hammond (2000b) found that the graduates of these programs, possessed an in-depth knowledge of curriculum and assessment, developed relationships with individual students and implemented teaching strategies that engaged diverse learners. Further, future teacher educators were taught to be more responsive in meeting the individual student's intellectual and academic levels, talents and both cultural and linguistic experiences through knowledge of the learning process (Darling-Hammond, 2000b, 2004). They also learned to utilize individual characteristics, learning styles and prior experiences when building new knowledge (Darling-Hammond, 2004).



Furthermore, these novice teachers attained deeper subject matter knowledge and applied pedagogical strategies in their clinical experiences that addressed a variety of learning styles (Darling-Hammond, 2004). These skills assisted in developing and planning curriculum that diagnosed and supported in-depth learning for all students and to become more “learner-centered” (Darling-Hammond, 2004, p. 4). With this type of teacher preparation, novice teachers were better trained to face the issues and assignments that confronted them in the critical first years of teaching (Darling-Hammond, 2004).

Beginning teachers, who were alternatively certified, often lacked a strong academic and professional preparation. They confronted the same issues as traditionally certified teachers and learned pedagogical content knowledge as they were employed as a teacher (Bartell, 2005). Justice et al. (2003) conducted a study comparing 65 traditionally and 94 alternatively certified teachers. They found that 88 percent of traditionally prepared teachers felt that they were adequately prepared, while alternatively prepared teachers stated that they lacked adequate knowledge in pedagogical content knowledge, skills in classroom management, effective teaching strategies and skills to diagnose students’ needs (Justice et al., 2003). Further, only 40 percent of alternatively certified teachers that were surveyed stated they would choose to follow this same route of certification (Justice et al., 2003).

#### Urban Schools

The largest teacher turnover occurs in high poverty, urban schools (Dolton & Newson, 2003; Fidler & Haselkorn, 1999; Ingersoll, 2001; NCTAF, 2003).

Underqualified teachers and lack of experienced teachers teaching in urban schools, insufficient funding of urban schools, demographic divide between the cultures of teachers and students and lack of preparation in culturally responsive pedagogy have exacerbated this exodus.

Often underqualified teachers or those who were teaching outside of their certification area replaced certified teachers who abandoned urban schools (Darling-Hammond & Sykes, 2003; NCTAF, 2003). Resources for salaries, educational materials and facilities are limited when schools competed to hire highly qualified or experienced teachers (Brenner, 2000; Darling-Hammond & Sykes, 2003; NCTAF, 2003). Therefore, teachers filling vacancies in urban schools are often inexperienced or uncertified. These teachers lack the skills and knowledge of culturally responsive pedagogy needed to address the needs of students representing diverse populations that attend urban schools (Gay, 2000; Haberman, 1995, 2000; Odell, 1990; Veenman, 1984).

Novice teachers' careers were challenged when their initial teaching experience began at an urban school (Haberman, 1995, 2002; Justice et al., 2003; Meek, 1998; Scherer, 1999; Weiner, 1999; USDOE, 1997). Entering their first assignment with idealism and high hopes for making a difference in students' lives, novice teachers realized that the working conditions, available resources and salaries were often disproportionate to those in suburban schools (Bartell, 2005; Ingersoll, 2001, 2002; Urban Teacher Collaborative, 2000). Novice teachers often lacked the necessary expertise to modify curriculum to meet the learning styles of individual students that

represented diverse cultures or those who were English language learners (Bartell, 2005).

When the majority of teachers are representative of the predominate European American, middle-class culture, their experiences with minority cultures are usually limited prior to entering urban classrooms. This lack of exposure to the issues confronting diverse populations and inadequate preparation in teacher education coursework for the realities of the urban classroom (Birrell, 1995; Haberman, 1995) caused novice teachers to experience “culture shock” when they were assigned to an urban school (Carter et al., 1999; Gay, 2000; Grant, 1989; Grant & Tate, 2001; Nieto, 2000). Culture shock, the demographic divide and cultural mismatch are terms that represent a mismatch between the teacher’s and students’ cultural backgrounds, language and practices (Carter et al.; Gay, 2000; Grant, 1989; Grant & Tate, 2001; Nieto, 2000).

Additionally, due to a high turnover rate of certified teachers in urban schools, fewer experienced teachers familiar with the culture of urban schools are available to guide, support and mentor novice teachers (Bartell, 2005; Darling-Hammond, 2005). Experienced teachers often leave urban schools when more advantageous teaching opportunities become available at affluent schools. Affluent schools offer greater compensation, access to more resources, better working conditions, more voice in school policies and reform efforts. Further, the teacher’s will educate students representing communities more similar to the teacher’s culture (Bartell, 2005; Ingersoll, 2001).

Students representing diverse populations, concentrated in urban schools, possess learning styles that require culturally responsive teaching strategies such as learner-centered activities, social interaction, cooperative learning and multiple intelligences, rather than utilizing traditional, passive instruction (Gay, 2000; Irvine, 1992, 2003; Irvine & Armento, 2001). Additionally, Birrell (1995) and Foster (2004) assert that preservice teachers need to be taught to develop relationships with individual students in their classrooms. Prolonged, contextualized experiences occurring in urban settings and observing multiple grade levels assist preservice teachers in learning the competencies and skills necessary to successfully meet students' needs (Oakes et al., 2002). Due to the lack of skills in meeting the challenges prevalent in urban schools, novice teachers abandon the field of education (Darling-Hammond & Sykes, 2003; Gay & Howard, 2000; Haberman, 1995, 2002; Hausfather, 1996).

When beginning teachers lack assistance from trained mentors during the critical first years of their career, those remaining in urban schools often resort to survival tactics or follow the norms of the existing school culture when instructing their classes (Ballantyne & Hansford, 1995; Roth & Tobin, 2002; Stanulis et al., 2002). Fifty-seven percent of entry-level teachers reported that their initial focus of utilizing learner-centered activities changed to a more traditional directed teaching model (McLaughlin & Talbert, 1993). This change was due to a lack of organizational and management skills as well as daily confrontations of oppositional behaviors that challenged the dominant society's expectations and conceptions of teacher authority in the classroom (Birrell, 1995).

This change resulted in the implementation of ineffective teaching practices (Ganzer, 2000; McLaughlin & Talbert, 1993; Ponticella & Zepeda, 1997; Veenman, 1984), using inappropriate classroom management strategies (Stanulis et al., 2002) and lowering expectations for students (Bartell, 2005; Birrell, 1995; Good & Brophy, 2000; McLaughlin & Talbert, 1993). Further, novice teachers began using instructionally ineffective coping strategies, such as abandoning cooperative learning and class discussions (Wong et al., 1999). They also implemented additional rules and sanctions that promoted a teacher-centered, rather than learner-centered, classroom (Wong et al.).

Hertzog (2002) also determined that novice teachers often abandoned learner-centered strategies due to their more experienced colleagues' resentment of their implementation of innovative strategies. Novice teachers found collegial conflict unsettling since they relied on their colleagues' confirmation to judge their teaching effectiveness (Stanulis et al., 2002). Classroom management issues and collegial resentment resulted in novices requiring students to passively listen to direct instruction and completing worksheets (Haberman, 1995).

Conversely, others relaxed rules or engaged in a variety of trial and error teaching strategies, rather than implement previously learned research-based practices (Bartell, 2005). Novice teachers often discarded successful techniques before they had had time to adequately practice the skills to become well practiced in their implementation (Stanulis et al., 2002). Further, when novice teachers felt their teaching competence would be questioned, they hesitated to ask for assistance from a more experienced coworker (Halford, 1999). Often beginning teachers failed to comprehend

the precise assistance they needed when questioned by more experienced teachers (Bartell, 2005; Huling-Austin, 1989; Newberry, 1977). Further, novice teachers often assumed that they should possess all the content and pedagogical knowledge needed to address classroom challenges (David, 2000). They inaccurately assumed that due to earning an educational degree, they would be able to successfully solve the problems that they experienced (Bartell, 2005; Huling-Austin, 1989; Newberry, 1977).

Therefore, if a novice asked for assistance from a mentor teacher, it was usually about topics that could be quickly and easily answered (Newberry, 1977). Moreover, veteran teachers were reluctant to offer assistance since it might be perceived as interfering (Huling-Austin, 1990; Newberry, 1977). Other experienced teachers felt that being involved with the problems of beginning teachers was undesirable (McCann & Johannessen, 2004; McKibben, 2001; Newberry, 1977; Wilkenson, 1994). These contradictory views lead to “a double barrier to assistance” (Huling-Austin, 1990, p. 543).

Novice teachers abandoned their assigned classrooms for a variety of reasons. Among these were issues that confronted novice teachers such as, the school’s organizational environment, the demographic divide between the cultures of the teachers and their students and a lack of preparation in teacher education programs to address students’ unique learning styles present in today’s classrooms, especially in urban districts. While beginning teachers were regarded as highly qualified due to completing the state’s requirements for certification, they lacked the applicable knowledge of pedagogical skills that can only be learned through adequate teacher preparation courses,

the guidance and support of a more experienced teacher or a teacher induction program (Bartell, 2005). To retain teachers in the profession within their first five years of teaching, the aforementioned causes of attrition were addressed in various studies.

### Teacher Induction Programs

Bartell (2005) explained, “No matter what initial professional preparation first year teachers receive, teachers are never fully prepared for classroom realities and for responsibilities associated with meeting the needs of increasingly diverse student populations” (p. 28-29). Therefore, teacher induction programs have become a necessary requirement in the progression of the novice teacher to becoming an expert teacher (Berliner, 1997).

The purposes of induction consisted of easing the transition from preservice training to full-time teaching, while enhancing initial preparation received in preservice training to maximize the effectiveness of classroom instruction (Bartell, 2005; Brewster & Railsback, 2001; Gold, 1996; Huling-Austin, 1992; Veenman & Denessen, 2001). Teacher induction has been defined in terms of a period of time in a teacher’s career as well as an assistance program for teachers beginning their career (Wong et al., 1999).

The length of time suggested for support, or induction, has changed from the inception of teacher induction in the 1960s. Newberry (1977) suggested that teachers receive support from veteran teachers for 6 months to one year. Often researchers proposed that novice teachers receive at least one year of planned support during their initial work experience (Fideler & Haselkorn, 1999; Huling-Austin, 1990; Lawson, 1992; McCormack & Thomas, 2003; Veenman, 1984; Veenman & Denessen, 2001),

while others recommended that induction support continue through the first two (Feiman-Nemser et al., 1999; Odell & Huling, 2000) or three years of teaching (Bartell, 2005; Fideler & Haselkorn, 1999). However, the recommended length of time was highly variable due to differences in novice teacher's individual experiences and the issues confronted (Wong et al., 1999). Throughout this induction period, the novice became more familiar with job responsibilities, work settings and professional standards and expectations (Bartell, 2005; Fideler & Haselkorn, 1999).

Ramsey (2000) stated that induction was a crucial period of time in a teacher's career:

The quality of induction following [an] appointment to a teaching position [was] one of the most important determiners of the self-perceptions which beginning teachers will hold as professional practitioners. What happens in induction [was] critical to shaping the quality of the teacher's future performance. The induction period [was] a major test of the extent to which employers, school leaders and the profession [were] interested in and committed to the quality of teaching in schools (p. 64).

As an assistance program, induction has been defined as "the transition from students of teaching to teacher of students" (Huling-Austin, 1990, p. 535) or "a bridge from the preservice teacher program to expert practice that is honed and refined over time" (Darling-Hammond, 2005, p. xii). Induction programs were designed to provide flexible systems of support for the individual novice teacher and to reduce the severity of



the issues and isolation encountered during the critical first years of teaching (Joerger & Bremer, 2001; Wilkinson, 1994; Wong et al., 1999; Wojnowski et al., 2003).

Further, induction programs were designed to meet the individual needs of each novice teacher. This goal was regarded as a more promising approach than a “one-size-fits-all” model of support (AFEE, 2004, p. 113; Joerger & Bremer, 2001). Meeting the individual’s needs was accomplished through a more experienced educator guiding a novice teacher in learning the application of ideas, approaches and practices (Bartell, 2005; Gold, 1996; Huling-Austin, 1989; Vygotsky, 1978). “The goal of teacher induction programs [was] to enhance the initial professional experience of beginning teachers so they are successful and effective and remain in the profession” (Joerger & Bremer, 2001, p. v). The strategies used during the early years of the novices’ career were found to be those that teachers continued to utilize throughout their career (Bartell, 2005; Schlechy, 1983). Therefore, novice teachers learning to implement effective instructional strategies during their initial years of teaching was critical for future student achievement.

#### History of Induction Programs

Induction programs in the United States have had a limited history (Huling-Austin, 1990). However, more than three decades of research on beginning teacher induction have communicated theoretical, empirical and interpretive findings. These findings have described the program goals, concerns of novice teachers, components, useful resources and positive effects.

The term, *induction into teaching*, was coined during the 1960s (Lawson, 1992). Induction, at that time, was associated the novice's entry into a school setting as a beginning teacher (Horn et al., 2002; Lawson, 1992; Wong et al., 1999). Prior to 1962, formal teacher induction programs rarely existed; however, informal mentoring practices were often present. During that time, a college degree endorsed the beginning teacher's qualifications to teach and often assured a lifetime teaching certificate (Freemeyer, 1999). However, according to Newberry (1977), novice teachers acquired information by listening to conversations between more experienced teachers, inspecting materials at duplicating machines, observing through opened classroom doors and visiting colleagues' classrooms before or after school. Using these observational methods of experienced teachers' practices, novice teachers gleaned information about the curriculum and methods that faculty members used to instruct students. As relationships between a novice and a more experienced colleague developed, Newberry (1977) noted that the pair was usually located in close proximity, taught the same grade or discipline and shared the same conference time. During this early experience, a more experienced veteran teacher informally provided the knowledge of the school's culture and curriculum (Newberry, 1977).

In a summary of the existing 1960s and 1970s literature on induction, Galvez-Hjernevik (1985) reviewed eleven pilot programs of induction based on the beginning teacher's need for assistance in elementary and secondary schools. Within these pilot programs often initiated by local districts or individual school campuses, Galvez-Hjernevik (1985) found several commonalities. These included assisting the novice

teacher in classroom management, content knowledge, pedagogy and stress reduction techniques. Her study provided a foundation for educational entities interested in developing or enhancing teacher induction programs (Gold, 1996).

National attention focusing on induction was further expanded through several studies conducted in the 1980s. Attrition rates of novice teachers were reported at 40-50 percent within the first seven years of beginning a teaching career (Schlechy & Vance, 1983). Veenman's (1984) synthesis of eighty-three studies concentrated on the perceived concerns of beginning teachers. Through Veenman's analysis of frequently listed concerns, the educational community was apprised of the issues beginning teachers faced during the first years of teaching (Huling-Austin, 1990). As a result of these studies, state legislatures recognized possible solutions to the problems of recruiting and retaining novice teachers such as increasing salaries and addressing teachers' support systems (Halford, 1999). Because increasing teachers' salaries proved to be a tax burden for voters, legislators endorsed the implementation of teacher induction programs (Snow, 2000); however, these programs were often unfunded mandates (Hurley, 1989; Sweeny & DeBolt, 2000).

*Tomorrow's Teachers* (Holmes Group, 1986) and *A Nation Prepared: Teachers for the 21<sup>st</sup> Century* (Carnegie Forum, 1986) recommended the establishment of induction programs for beginning teachers. The Holmes Group (1986) proposed a paid, year-long, supervised internship, while the Carnegie Forum (1986) supported developing a new professional curriculum for graduate schools based on systematic knowledge of

teaching. The Carnegie Plan (1986) also included internships and residencies within the context of the public schools.

Lawson (1992) noted that teacher educators and policy makers began to realize that “becoming a teacher is not a simple transition from one role to another; it is a social process involving complex interactions between and among prospective and experienced teachers and their social situations” (p. 164). During the induction period, novice teachers were transformed from “being students of teaching to teachers of students” (Huling-Austin, 1990, p. 535). Many problems confronting new teachers were concluded to be due to inexperience (Fallon, 2004). Therefore, studies then began to focus on the socialization process and adjustment of beginning teachers into the existing school culture (Horn et al., 2002). As state legislatures assigned support for beginning teachers to school districts, the responsibility of teacher preparation was transferred from the universities to the local districts (Horn et al.; Wong et al., 1999).

During the 1990s, studies were primarily divided between research describing the experiences of novice teachers’ and the effects of induction as an intervention (Horn et al., 2002; Lawson, 1992; Wong et al., 1999). Studies of the novice teacher included the perceived needs and concerns of beginning teachers as well as the characteristics and roles of mentor teachers. Studies of the effects of induction as an intervention concentrated on program goals, program components, mentees’ and mentors’ professional development, teaching effectiveness, cost effectiveness and retention rate. Researchers found that retention of novice teachers positively related to the quality of the first years of teaching (Bartell, 2005; Conway et al., 2004; Croasmun et al., 1999;

Darling-Hammond, 2000a, 2004; Dexter, 2000; Eller et al., 2000; Fallon, 2004; Feiman-Nemser, 2001b; Fideler & Haselkorn, 1999; Fleischmann, Ganzer, Marchione & Massie, 2000; Freemyer, 1999; Ganzer, Marchione & Fleischmann, 1999; Gilles et al., 2001; Halford, 1999; Heidkamp, 1999; Hendrick & Childress, 2002; Hertzog, 2002; Howard, 2003; Huling-Austin, 1990; Ingersoll, 2001; Kelchtermans & Ballet, 2001; Kent, 2000; Kilberg, 2000; Lawson, 1992; McCann et al., 2004; McLaughlin & Talbert, 1993; Meyer, 2002; NCTAF, 1996; 2001; Olebe, 2001; Olebe, Jackson, & Danielson, 1999; Pascopella, 2004; Patterson et al., 2003; Ponticelli & Zepeda, 1997; Rogers & Babinski, 1999; Roth & Tobi, 2002; Smith, 2003; Snow, 2000; Stanulis et al., 2002; Sweeny & DeBolt, 2000; Texas State Board for Educator Certification [TSBEC], 1998; Tillman, 2003; Veenman & Denessen, 2001; Watzke, 2003; Wilkinson, 1994; Wojnowski et al., 2003; Zeichner, 2003).

Also during that period, a dichotomy of views between the use of assistance and assessment emerged (Huling-Austin, 1990; Feiman-Nemser, 1998). Some researchers maintained that a supportive mentoring role should address the immediate and emotional needs of beginning teachers (Huling-Austin, 1990; Moskowitz & Stephens, 1997). They contended that beginning teachers were reluctant to share their teaching concerns with mentors who were charged with their evaluation. Moskowitz and Stephens (1997) agreed that a novice teacher's future employment should not be affected by the mentor's judgment.

Other researchers argued that formative observations identified goals, provided feedback and documented the beginning teacher's progress in developing teaching

competence based on pre-determined standards (Feiman-Nemser, 2000; Feiman-Nemser et al., 1999; Sweeny, 2001). They stated that formative observations in combination with support enabled beginning teachers to implement effective management and instructional strategies (Feiman-Nemser et al., 1999; Giebelhaus & Bendixen-Noe, 2000). Furthermore, beginning teachers were taught to identify areas needing improvement based on pre-determined standards when the results of the formative observations were discussed with their mentors (Gold, 1996; Odell, 1990). Huffman and Leak (1986) reported that beginning teachers viewed their mentor's constructive criticism and feedback positively.

While previous research focused on attrition, novice's experiences and needs, the roles of mentors and the conflict between assistance and assessment, Fideler and Haselkorn (1999) surveyed the literature on urban teacher induction programs. They found that beginning teacher support structures that worked well in most school settings, failed to be successful in the urban context (Fideler & Hasekorn, 1999; Roth & Tobin, 2002). In urban districts, teachers dealt with the similar issues as other schools; however, they were compounded by challenges of inadequate facilities, a diverse student population, fewer resources, overcrowded classrooms and an unstable teaching force from which to draw competent mentors (Fideler & Haselkorn, 1999). However, Fideler and Haselkorn (1999) reported retention rates of 93 percent for urban teachers participating in teacher induction programs.

Even though the concept of teacher induction has gained national attention, it has yet to be addressed in all fifty states. Neither a national model, a set of national

standards, nor guidelines formally exist (Fideler & Haselkorn, 1999; Snow, 2000). Further, program goals, purposes, components, implementation and funding sources varied from state to state (Snow, 2000).

Sweeny and DeBolt (2000), conducting an analysis of the status of beginning teacher induction programs, reported that 72 percent of the 50 states responded to a state-survey sponsored by the Association of Teacher Educators and the Kappa Delta Pi Commission on the Professional Support and Development for Novice Teachers. At that time, state induction programs were mandated in twenty-eight states. Pilot induction programs were planned in eleven states, while seven states were still developing statewide induction programs. Of those responding, 93 percent were financed through grants, professional development funds and legislated appropriations.

Few state legislatures have financed a teacher induction program for every eligible beginning teacher. Two states issued unfunded mandates for induction programs. Sweeny and DeBolt (2000) explained that a clear picture of the development of induction programs failed to exist. Over the past 30 years, programs have emerged and then disappeared usually due to inadequate funding (Sweeny & DeBolt, 2000; Weiss & Weiss, 1999). This varying degree of program assistance has resulted in a discontinuity of improving novice teachers' professional development and retention within the profession even though the number of teachers recruited into the teaching profession and participation in induction programs has increased (Ingersoll & Smith, 2004; Weiss & Weiss, 1999).

Researchers have reported that the number of teachers, who had participated in induction programs, has greatly increased since their inception (Ingersoll & Smith, 2004). In 1974, only 17 percent of teachers reported being involved in an induction experience (Fallon, 2004). In 1989, 44 percent participated in induction activities, while in 1993, 56 percent stated that they had been included in an induction or mentoring program (Darling-Hammond, 1997; Fallon, 2004). Induction programs in thirty states served 80 percent of novice teachers during 1999 (see Table 2.1) (Fallon, 2004; Ingersoll & Smith, 2004). Thus, illustrating the increasing number of novice teachers served by either mentoring or teacher induction programs.

Even though teacher induction programs have had a limited history, studies conducted in the last 40 years have dealt with attrition rates of novice teachers, issues confronting novice teachers, socialization of entry level teachers, purposes of induction, effects of induction programs and program components. Through research, losing young educators early in their career has come to national attention. These studies have prompted an increase in the number of teachers being mentored during the critical beginning years of their career. As a result of this research, effects of teacher induction programs have also been examined.

#### Issues Confronting Novice Teachers

When teachers began their careers, most are idealistic and have high expectations for the students they teach as well as for themselves (Bartell, 2005; Klug & Saltzman, 1990). Unlike other professions, beginning teachers enter their classrooms with the



same responsibilities as an experienced teacher (Bartell, 2005; Heidkamp, 1999; Huling-Austin, 1990). As in most professions, novice teachers differed in their prior knowledge, experiences, motivation and preparation levels that are brought to their initial teaching experiences (Bartell, 2005; Hertzog, 2002).

TABLE 2.1. Teachers Involved in Induction Programs

Year Participated	Teachers Involved in Induction Programs
1974	17%
1989	44%
1993	56%
1999	80%

Issues confronting a majority of beginning teachers have been well documented in the literature on induction of teachers (Bartell, 2005; Boreen & Niday, 2000; Conway et al., 2004; Ganzer, 2001; Gilles, et al., 2001; Hartzog, 2002; Ingersoll, 2002; Justice et al., 2003; Kent, 2000; Odell & Ferraro, 1992; Ponticelli & Zepeda, 1997; Stanulis et al., 2002; Veenman, 1984; Wilkinson, 1994). Since Veenman's (1984) synthesis of eighty-three studies focusing on the perceived concerns of beginning teachers, studies conducted more recently revealed similar results. The foremost issues confronting beginning teachers in current literature appeared to be classroom management (Boreen

& Niday, 2000; Conway et al., 2004; Ganzer, 2001b; Gilles et al.; Hertzog, 2002; Ingersoll, 2001, 2002; Justice et al., 2003; Kent, 2000; Odell & Ferraro, 1992; Patterson et al., 2003; Ponticelli & Zepeda, 1997; Stanulis et al., 2002; Wilkinson, 1994), relations with parents and communities (Boreen & Niday, 2000; Conway et al.; Gilles et al.; Kent, 2000; Odell & Ferraro, 1992; Patterson et al.; Ponticelli & Zepeda, 1997), motivating students (Bartell, 2005; Gilles et al.; Ingersoll, 2001, 2002; Kent, 2000; Patterson et al.; Wilkinson, 1994), classroom organization (Conway et al.; Ganzer, 2001b; Gilles et al.; Kent, 2000; Odell & Ferraro, 1992), planning lessons (Conway et al.; Ganzer, 2001b; Gilles et al.; Kent, 2000; Patterson et al.), insufficient materials and supplies (Ganzer, 2001b; Kent, 2000; Odell & Ferraro, 1992; Patterson et al.; Ponticelli & Zepeda, 1997), student's individual differences (Boreen & Niday, 2000; Kent, 2000; Gilles et al.; Hertzog, 2002), state and local standards and policies (Boreen & Niday, 2000; Gilles et al.; Odell & Ferraro, 1992; Stanulis et al.), relations with colleagues (Conway et al., Gilles et al.; Hertzog, 2002; Patterson et al.; Ponticelli & Zepeda, 1997) and time management (Ganzer, 2001b; Gilles et al.; Hertzog, 2002; Patterson et al.).

Inadequate guidance and support (Hertzog, 2002; Ingersoll, 2001, 2002; Justice et al., 2003; Ponticelli & Zepeda, 1997; Stanulis et al., 2002), was found to be a direct result of working in isolation (Boreen & Niday, 2000; Conway et al.; Ganzer, 2001b; Halford, 1999; Ingersoll & Kralik, 2004; Klug & Salzman, 1990; Stanulis et al., 2002; Wong, et al., 1999). Furthermore, novice teachers were often assigned to the most challenging teaching positions, taught large groups of students (Justice et al., 2003), traveled from classroom to classroom to teach, lacked a common preparation period with

experienced teachers working in the same subject or grade level, planned for multiple subject areas and taught courses in which they lacked content knowledge (Bartell, 2005; Ingersoll, 1999; Veenman, 1984). Furthermore, McKibben (2001) found that elementary teachers received and delivered an average number of 600 stimuli each hour. McKibben (2001) found that only air traffic controllers make more decisions during a similar amount of time. These inexperienced teachers were also expected to teach with the same expertise as a veteran teacher with 25 years of experience (Bartell, 2005; Joerger & Bremer, 2001; Hargreaves & Fullan, 1999; Heidkamp, 1999; Hertzog, 2002; Huling-Austin, 1986, 1990; Odell & Huling, 2000).

#### Effects of Teacher Induction Programs

Research has determined that the following positive outcomes resulted from implementing comprehensive teacher induction programs: increasing retention rates of novice teachers; enhancing existing teaching performance; higher levels of student achievement; providing personal support through the establishment of collegiality; increased awareness of the importance of continued professional development; improved ability to engage in reflective practice and critical examination of their instruction; increased levels of professional efficacy, job satisfaction and lower stress levels and less time and money expended on recruitment and hiring .

#### *Increased Teacher Retention Rates*

The most frequently reported effect of teacher induction programs has been an increase in the retention rate for novice teachers. The retention rate for teachers participating in induction programs has been reported to be greater than the retention rate

for teachers who failed to participate in such programs (Bartell, 2005; Brewster & Railsback, 2001; Darling-Hammond, 2005; Fitch, 1999; Fleishchmann et al., 2000; Fideler & Haselkorn, 1999; Gold, 1996; Grant, 2003; Haberman, 2000; Hendrick & Childress, 2002; Holloway, 2001; Ingersoll & Smith, 2004; Joeger & Bremer, 2001; Moon-Merchant & Carter, 2004; Odell & Ferraro, 1992; Olebe, 2001; Portner, 2001; Weitman & Colbert, 2003; Wojnowski et al., 2003; Wonacott, 2002).

Grant's (2003) study reported, "the quality of the induction, [and]...the components incorporated in the program...had a statistical significance to teacher retention" (p. 167). Gold (1996) agreed, "the first teaching experience was the most heavily weighed factor influencing teacher retention" (p. 554). Portner (2001) stated that of 100 mentored novice teachers, 96 percent stated that they would return for their second year of teaching, while only 80 percent of 100 unmentored teachers planned on returning.

Further, California's Beginning Teacher Support and Assessment (BTSA) program reported that 94 percent of beginning teachers, who completed a teacher induction program, returned for their second year of teaching, while 88 percent of those stayed after the second year (Fitch, 1999). In a subsequent study, BTSA affirmed that 89 percent of beginning teachers planned to return after their first year of teaching (Hendrick & Childress, 2002). Fideler and Haselkorn (1999) found that urban districts affirmed a 93 percent retention rate of teachers who participated in teacher induction programs. In a longitudinal study of a university-based teacher induction program,

Moon-Merchant and Carter (2004) reported a 94.2 percent retention rate of teachers, who had participated in an induction program and had completed five years of teaching.

Ingersoll and Smith (2004) analyzed data from the NCES Schools and Staffing Survey (SASS) and the Teacher Follow-up Study (TFS). After controlling for the variables of teachers' gender, age and race, school level, types of schools, community size and poverty level, the study found that the retention rate was dependent upon the number and types of support (Ingersoll & Smith, 2004). This study established that utilizing a greater number of supportive components reduced the rate of teacher turnover from 40 percent for teachers having no support to less than 20 percent for teachers who had up to eight components of support provided (Ingersoll & Smith, 2004).

The study determined that teacher induction programs offering packages of support such as: being assigned a mentor in the same subject area, having a common planning period, attending regularly scheduled collaborative seminars focusing on instructional topics important to novice teachers and receiving supportive communication were the "strongest factors in retaining teachers" (Ingersoll & Smith, 2004, p. 35).

While the retention rate in urban schools has been reported at less than 50 percent during the first three years of teaching for teachers not involved in an induction program, Haberman (2000) found that alternatively certified teachers serving urban schools while also involved in an induction program, had been retained at a rate of 94 percent. In a study of 89 responding urban districts, Fideler and Haselkorn (1999) reported that 57 percent of the districts participating in a national study retained 90 to

100 percent of novice teachers who participated in induction programs over a five-year period. Seventeen percent of the districts reported a retention rate of 70 to 89 percent (Fideler & Haselkorn, 1999). Only 5 percent of urban districts reported a loss of 30 to 50 percent of teachers in this national study (Fideler & Haselkorn, 1999).

According to Holloway (2001), 18 percent of teachers, who failed to participate in induction programs during the initial year of teaching, left the profession. Wojnowski et al. (2003) reported that teachers, who refrained from being involved in induction programs, were twice as likely to leave during their first three years of teaching. Novice teachers who participate in induction programs were more likely to be retained in the profession than those who failed to participate.

#### *Enhanced Teaching Performance*

Another frequently reported effect of participating in a teacher induction program was enhancing beginning teachers' existing teaching performance through the application of complex and varied instructional practices (Bartell, 2005; Brewster & Railsback, 2001; Darling-Hammond, 2001, 2005; Evertson & Smithey, 2001; Fideler & Haselkorn, 1999; Fleishchmann et al., 2000; Giebelhaus & Bowman, 2002; Gold, 1996; Grant, 2003; Joeger & Bremer, 2001; Loucks-Horsely et al., 1998; Klug & Salzman, 1990; Moon-Merchant & Carter, 2004; Moir & Gless, 2001; Nugent & Faucette, 2004; Odell & Ferraro, 1992; Olebe, 2001; Portner, 2001; Runyan, White, Hazel & Hedges, 1998; Villar, 2004; Weiman & Colbert, 2003; Weiss & Weiss, 1999; Wojnowski et al., 2003; Wonacott, 2002).

Klug and Salzman (1990) stated that novice teachers displayed continuous growth in teaching performance, classroom management and interpersonal skills during the course of a teacher induction program. Runyan et al. (1998) found that novice teachers appropriately utilized various innovative models of teaching, effectively applied questioning strategies, addressed students' learning styles and used instructional time well. Researchers noted that teachers enrolled in induction programs become more competent more quickly than novice teachers who were not enrolled in such a program (Darling-Hammond, 2001, 2005; Wojnowski et al., 2003; Villar, 2004). Beginning teachers acquired the skills of a fourth year teacher within one year of assistance (Darling-Hammond, 2001, 2005; Villar, 2004).

In a study of past participants of a university-based teacher induction program, 86.6 percent of the respondents reported above average ratings on state mandated summative evaluations administered by their supervisor (Moon-Merchant & Carter, 2004). Moreover, another 13 percent of the respondents declared being rated as "Satisfactory" or "Meeting Expectations" during the first five years of teaching (Moon-Merchant & Carter, 2004, p. 49).

Fleishchmann et al. (2000) conducted a study in which mentors noted a positive increase in the performance of new teachers over a two-semester period. Ten aspects of effective instruction were evaluated. Scores increased from 56 percent of the teachers demonstrating effective instruction to 77 percent (Fleishchmann et al.). Those who had been mentored implemented effective instructional practices that addressed the students' learning styles (Fleishchmann et al.). Furthermore, these teachers utilized state

mandated curriculum and assigned more challenging work to students including those representing diverse populations (Fleishchmann et al.). Since mentored teachers were able to handle classroom management issues, they implemented practices that extended student learning (American Federation of Teachers [AFT], 2000). This study also determined that as novice teachers gained experience, the need for mentoring decreased (Runyan et al.).

Evertson and Smithey (2001) determined that novice teachers, who were mentored, established classroom routines and were, therefore, more effective in organizing and managing instruction. They also found that these teachers provided justification for teaching specific lessons; utilized particular activities for instruction; paced and sequenced instruction; checked students' knowledge of concepts being taught; described and gave purposes for the lesson's objectives; provided and demonstrated practical examples and challenged students' thinking (Evertson & Smithey, 2001).

#### *Higher Levels of Student Achievement*

Higher levels of student achievement have been reported as an additional effect of novice teachers participating in induction programs. Sanders and Rivers (1996) stated, "teacher effectiveness is the single biggest factor influencing gains in student achievement" (p. 14). A stable faculty, positive learning environment and appropriate learning strategies addressing students' learning styles affected student achievement (Bartell, 2005; Brewster & Railsback, 2001). Thus, participation in teacher induction programs in which seminars addressed such topics appeared to positively affect both teacher retention and student achievement (Brenner, 2000; Fleishchmann et al., 2000;



Villar, 2004). Further, based upon student achievement data, Villar (2004) found that students' standardized test scores of teachers participating in induction programs were comparable to teachers who had taught from 3 to 9 years.

The researchers concluded that student achievement increased due to induction program participants assigning more challenging work to students representing diverse populations and utilizing state mandated curriculum to accomplish those goals (Fleishchmann et al., 2000). Fleishchmann et al. (2000) reported that students of mentored teachers increased the median percentiles on standardized tests. Students representing diverse populations that attended high poverty schools whose teachers were served by a mentor gained 11 points in reading, 17 points in language arts and 8 points in mathematics. Students, whose teachers were not mentored, gained 8 points in reading, 15 points in language arts and 10 points in mathematics. Utilization of effective teaching strategies by mentored teachers was surmised to have resulted in increased student achievement on the administered standardized tests (Ganser et al, 1999). Although the literature on the connection between teacher induction and student achievement was limited, several studies supported that tenet (Fleishchmann et al., 2000; Sanders & Rivers; 1996; Villar, 2004).

In contrast, student performance appeared to be negatively impacted by consistently high teacher turnover. AFEE (2004) stated that "schools with high rates of attrition cannot develop a strong nucleus of stable faculty to teach students to high standards or mentor new teachers to high quality" (p. 2). This contention was supported in a study conducted by Dolton and Newson (2003), which compared the rates of teacher

turnover and student performance. The researchers concluded that increased teacher turnover appeared to diminish teacher effectiveness, decrease the school organization's efficiency and management while resulting in an increase in students' behavioral problems (Dolton & Newson, 2003). Further, they found that "if teacher turnover increased by 10 percent, standardized tests scores declined by 2 percent in English and 2.5 percent in Math" (Dolton & Newson, 2003, p. 137). Students attending schools with a teacher turnover of 25 percent scored between 10 and 11 percent lower on standardized tests (Dolton & Newson, 2003). Brewster and Railsback (2001) also found that a high teacher turnover led to a less stable and less effective learning environment for students thus affecting student achievement.

#### *Providing Personal Support through the Establishment of Collegiality*

Providing personal support from mentors, colleagues and other novice teachers as well as collegial experiences were also found to have a positive effect on teachers participating in an induction program. Perez, Swain and Hartsough (1997) confirmed that beginning teachers preferred interpersonal, rather than reflective support. Building a strong trusting, interpersonal relationship between the mentor and the protégé appeared to be critical to the mentoring process (Gless & Moir, n.d.; Wing & Jinks, 2001). Novice teachers reported being satisfied with program offerings in which mentors provided personal support via a one-to-one relationship (Fideler & Haselkorn, 1999; Odell & Ferraro, 1992). One-to-one relationships were reported to impact retention through inclusion of the novice teacher within the school context as well as influence attitudes

and application of instructional strategies (Fideler & Haselkorn, 1999; Perez et al., 1997).

### *Collegial communities*

Through the organization of induction programs, supportive collegial communities were formed within the school setting (Bartell, 2005; Fallon, 2004; Fideler & Haselkorn, 1999; Giebelhaus & Bendixen-Noe, 2000; Grant, 2003; Odell & Ferraro, 1992). This opportunity was described as a “community of learners” (Lave, 1996; Lave & Wenger, 1991/2003). A study conducted by McCormack and Thomas (2001), stated that informal support from colleagues was highly valued. Novices, mentors and other experienced teachers met within the school setting as a community of learners ((Lave, 1996; Lave & Wenger, 1991/2003) to participate in a culture of ongoing professional learning (Bartell, 2005; Fallon, 2004; Fideler & Haselkorn, 1999; Giebelhaus & Bendixen-Noe, 2000; Grant, 2003; Odell & Ferraro, 1992).

### *External networks*

When beginning teachers were provided opportunities to collaborate with other novice teachers in an external network, competition changed to a more collaborative environment (Moskowitz & Stephens, 1997; Nugent & Faucette, 2004). Novice teachers solved problems in a more collaborative, cooperative environment and used democratic dialogue (Gless & Moir, n.d.; Joerger & Bremer, 2001; Nugent & Faucette, 2004) shared with a caring community or community of learners (Lave, 1996; Lave & Wenger, 1991/2003). Sharing instructional experiences while learning from one another was also valued in a study conducted by Borrego and Hirai (2004). Other types of support

provided through induction activities consisted of enhancing existing instructional and management skills, locating resources for classroom instruction and learning parent communication techniques which also affected the retention rate (Odell & Ferraro, 1992).

#### *Time to collaborate*

Certo and Fox (2002) reported that a strong presence of collegial experiences was a factor for retention. These experiences included time scheduled for teachers and staff to collaborate on lesson planning and developing units, sharing instructional materials and strategies as well as discussing students' work (Certo & Fox, 2002). This type of collaboration often resulted in positive changes within the school environment as beginning teachers shared innovative techniques while veteran teachers shared their experiences (AFEE, 2004; Weiss & Weiss, 1999). Interacting with a community of learners encouraged self and personal growth through social interaction (Lave & Wenger, 1991/2003; Vygotsky, 1978). Through support from administrators and collaboration between mentors and other colleagues, novice teachers' stress was reduced as job commitment and satisfaction increased; thus, affecting teacher retention (Gersten, et al., 2001).

#### *Increased Awareness of the Importance of Continued Professional Development*

As novice teachers participated in teacher induction programs, they became more aware of the need for life-long learning as a necessary component in becoming an expert teacher. Professional development seminars based on the essential tasks of teaching addressed beginning teachers' immediate needs and advanced their organizational,

managerial and instructional expertise (Evertson & Smithey, 2001; Fideler & Haselkorn, 1999; Joerger & Bremer, 2001; Ramsey, 2000). Even though some of the professional development topics were previously presented in undergraduate courses, novice teachers found them to be more meaningful as they began applying the strategies in their classrooms (McCormack & Thomas, 2003).

Professional development sessions included meaningful, learning opportunities concentrating on topics specific to the entry-level teacher (Joerger & Bremer, 2001). Training designed for whole faculties was found to be inappropriate in meeting the needs of novice teachers (Evertson & Smithey, 2001; Joerger & Bremer, 2001). Presenting essential information, before addressing less pressing concerns, appeared to increase the knowledge base of teaching for those enrolled in the teacher induction programs (Evertson & Smithey, 2001). Through the use of brainstorming, interactive techniques and problem-solving strategies, novice teachers were supported in establishing classroom procedures, developing effective instruction through lesson planning and becoming more knowledgeable of learner-centered teaching strategies (Bartell, 2005; Berliner, 1997; Brewster & Railsback, 2001; Evertson & Smithey, 2001; Fideler & Haselkorn, 1999; Fleishchmann et al., 2000; Joerger & Bremer, 2001; Nugent & Faucette, 2004).

Moir and Gless (2001) suggested that both the novice and the mentor recognize the complexity of developing high-quality teaching in a diverse society and the importance of increasing student achievement. To accomplish these goals, they advised that professional development be founded on “clearly articulated, achievable standards

of professional practice” (Moir & Gless, 2001, p. 113). These pre-designated goals directed the novices’ new learning and growth since they were integrated and demonstrated throughout the professional environment (Evertson & Smithey, 2001; Moir & Gless, 2001). Further, Gilles et al. (2001) and Joerger and Bremer (2001) suggested that professional development topics found in teacher induction programs accelerated the development of novice teachers.

*Ability to Engage in Reflective Practice and Critically Examine Their Work*

Novice teachers participating in a teacher induction program were more likely to reflect upon their teaching than those who were not enrolled in a program. Bartell (2005) compared the reflective activities required during preservice courses with those who were continued during the first years of teaching. She remarked that completing reflective activities during coursework appeared customary and as a requirement of the academic environment (Bartell, 2005). However, without the required activities and due dates, beginning teachers completed demanding daily routines without reflecting upon their experiences (Bartell, 2005). She surmised that given opportunities, guidance and time to reflect with others participating in an induction program, reflection occurred. This transpired through the encouragement of discussion and dialogue on teaching practices, beliefs and understanding in a supportive environment with others (Bartell, 2005; Vygotsky, 1978).

In a study conducted by Wing and Jinks (2001), beginning teachers and their mentors used the *California Formative Assessment and Support System for Teachers* (CFASST) as a guide to base their lesson cycle on planning, teaching and application.

Employing CFASST as a standard on which novice teachers constructed their instruction, Wing and Jinks (2001) reported that mentors, collecting data from observing the beginning teacher's instructional practice, used the information to promote reflective, constructive dialogue (Wing & Jinks, 2001). Mentors' comments and mediational questions were key factors in supporting beginning teachers in utilizing reflective strategies (Wing & Jinks, 2001). The dialogue between novices and mentors assisted them in analyzing successful and unproductive techniques, evaluating the effectiveness of their instructional practice and consider other possibilities of instruction (Wing & Jinks, 2001).

Nugent and Faucette (2004) stated that novice teachers became more self-reflective and open to constructive criticism the longer they were involved in a teacher induction program. Through planning, implementing, reflecting, revising and reteaching, both the novice and the mentor gained an increasing commitment to and awareness of increasing the quality of instruction (Nugent & Faucette, 2004).

Conversely, Perez et al. (1997) found that some reflective activities, such as journaling, clinical supervision, case studies and the integration of research, were perceived as least effective by beginning teachers. Fidler and Haselkorn (1999) reported that in their study of urban induction programs, reflective activities were also unsuccessful. Ten percent of beginning teachers felt that the induction program in which they were involved failed to encourage self-reflection on practice (Fidler & Haselkorn, 1999).

*Increased Levels of Professional Efficacy, Job Satisfaction and Lower Stress Levels*

Villar (2004) found that beginning teachers involved in teacher induction programs acquired positive levels of self-confidence, job satisfaction and stress reduction; thus improving the school's educational environment. Through involvement in an induction program, Ganzer et al., (1999) reported that beginning teachers were encouraged to develop a quality of independence and self-assurance that enabled them to live up to the high expectations expected by their mentors. Other researchers asserted that mentored beginning teachers felt more confident and capable of meeting the challenges of being a teacher. They also felt valued and as a powerful addition to the school in which they taught (Joeger & Bremer, 2001; Nugent & Faucette, 2004; Odell & Ferraro, 1992). Another indication of a successful induction program experience was teachers' perceiving themselves and their profession as being important as well as making a difference in their students' lives (Glover & Mutchler, 2000). In a study of urban induction programs, Fideler and Haselkorn (1999) found that 97 percent of participating teachers perceived that the induction program assisted them in developing self-confidence.

Job satisfaction also was linked to the positive learning climate found in some schools (Dolton & Newson, 2003; Villar, 2004). Certo and Fox (2002) found that the teacher's work environment clearly correlated to levels of teachers' job satisfaction. Collegial and administrative support (Ingersoll, 2001; Odell & Ferraro, 1992), relationships with students and their families, professional autonomy, challenge and opportunities for advancement were also related to positive working conditions (Certo &



Fox, 2002; Odell & Ferraro, 1992). A supportive school climate, positive relationships with students and their families, autonomy within the classroom and progressive career paths have been equated with job satisfaction (Certo & Fox, 2002; Ramsey, 2000).

Moon-Merchant and Carter (2004) reported that past participants of a university-based teacher induction program perceived their rate of job satisfaction as positively changed between their first year and fifth year of teaching. Eighty-one percent of the respondents rated their job satisfaction as above average after five years of teaching (Moon-Merchant & Carter, 2004).

In a study of special education teachers conducted by Gersten et al. (2001), stress related to employment was defined as “conflicting expectations, goals and directives; the severity of student’s needs, student behavior ... problems and bureaucratic requirements, such as rules, regulations and paperwork” (p. 556). The findings from the study of three urban districts supported the construct that a high level of stress resulted from a discrepancy between the teachers’ belief about their job description and the realities of their job’s requirements (Gersten et al., 2001). The stress due to job design played a pivotal role in determining to what extent working conditions influenced the decision to remain or leave the profession (Gersten et al.). High levels of stress emerged as a critical factor for the retention of special education teachers (Gersten et al., 2001).

Novice teachers assigned to the regular classroom often experienced the same types of stress (Bartell, 2005; Gersten et al.; Gold, 1996). Fidler and Haselkorn (1999) reported that 82 percent of novice teachers participating in urban induction programs perceived a reduction in stress and burnout. However, without an induction program

available to aid novice teachers to reflect on their practice, job satisfaction decreased, the level of stress increased and the rate of teacher attrition increased in both special and regular education teachers. Further, as less support from administrators was discerned and more regulatory conditions, or external controls, were apparent, teachers became less satisfied with their choice of profession (Eller et al., 2000).

#### *Less Time and Money Used for Recruitment and Hiring*

The cost of implementing a formal teacher induction program was less expensive than the outlay of time and money used for recruiting and hiring the replacements due to teacher attrition (Bartell, 2005; Berry, 2003; Berry & Hirsch, 2003; Brenner, 2000; Halford, 1999; Villar, 2004). In a study of the cost of teacher attrition, Brenner (2000) estimated that the state of Texas was losing “\$329 million each year” (p. 16) due to teacher turnover. Using a conservative model, the turnover cost was based on 25 percent of each beginning teacher’s average salary plus benefits (Brenner, 2000; Texas Center for Educational Research, 2000). The average salary was ascertained by the years of teaching experience. Therefore, the greater number of years of teaching experience, the greater the loss of revenue (Brenner, 2000; Texas Center for Educational Research, 2000). Benefits were estimated as an additional 30 percent of the novice teacher’s salary.

Additional revenue was lost in separation, hiring and training costs. Upon computation of these related costs, teacher attrition in Texas was estimated to be as much as \$2.1 billion per year (Brenner, 2000). However, Haberman (2004) and Huling

(1998) reported that this figure failed to include both the personal cost of college training as well as the taxpayers' support of institutions of higher education.

As noted in a study that applied a benefit-cost analysis to the impact of the program, "dollar for dollar in an intensive model of new teacher induction... pays \$1.37 for every \$1 invested" (Villar, 2004, p. 8). The two-year, comprehensive model included full release time for mentors, mentors being responsible for 15 novice teachers and professional development available to novice and mentor teachers (Berry, 2003; Villar, 2004). The costs consisted of mentor salaries, managerial and overhead costs, novice's personal time needed to participate in the program and professional development expenditures (Berry, 2003; Berry & Hirsch, 2003; Villar, 2004).

As a result of participating in teacher induction programs, teachers were retained at rates between 89 percent and 96 percent. Because beginning teachers' existing teaching performance was enhanced through the application of complex and varied instructional practices, student achievement increased. Furthermore, novice teachers guided and supported by colleagues became more accomplished teachers at a faster rate, than those who failed to participate in an induction program. Providing personal support through the establishment of collegiality within the school setting appeared to positively affect professional efficacy and job satisfaction as well as lower stress levels. As an additional product of engaging in reflective practice regarding their instruction, beginning teachers were more aware of the importance of continued professional development and reflection. Finally, a reduction in the teacher attrition allowed reallocation of resources previously spent on recruitment and hiring for instructional

activities. According to Brewster & Railsback (2001), induction programs offered benefits for novice teachers, mentors, students and schools.

Gless and Moir (n.d.) proposed that induction programs had the potential to build teacher leaders that would change school cultures as Banks (2001b) described in the Empowering School Culture and Social Structure Dimension. In this dimension, Banks (2001b) posited that a holistic perspective was necessary to restructure the school's culture and organization. Through the examination of school policies and politics, social climate, instructional practices, grouping and labeling practices, expectations for student achievement, student and community services and assessment practices, students from diverse ethnic and cultural groups became empowered (Banks, 2001d).

#### *Effects of Disorganized Teacher Induction Programs*

Negative aspects of disorganized teacher induction programs included inconsistent support that was dependent on the conscious needs of the novice (Lawson, 1992; Wong et al., 1999). For example, due to being confronted by so many issues, novice teachers were unable to identify the assistance needed (Gordon, 1991; Sweeny, 2001). In these cases, novice teachers failed to request support due to the double barrier of assistance (Huling-Austin, 1989, Newberry, 1977).

Other limitations of district mentoring programs included campus-based mentors being solely responsible for not only the new teacher's learning and emotional support, but also the achievement of the students in their classrooms (USDOE, 2002). Because most veteran teachers worked autonomously in a classroom isolated from other colleagues, they had few experiences in implementing mentoring activities or conducting

observations (Feiman-Nemser et al., 1999). Thus, when the principal paired mentors with beginning teachers, mentors were often inaccessible or not assigned to the same grade or discipline. This provided a further hindrance to sharing pedagogical content knowledge (Bartell, 2005; Brock & Grady, 1997; McCormack & Thomas, 2001; Odell, 1990).

At times, veteran teachers designated as mentors by their principals often lacked the willingness to mentor, lacked the subject expertise and time required to mentor a novice teacher (Bartell, 2005). Mentoring styles, knowledge of beginning teacher characteristics, the mentor's affective characteristics, the pairs' teaching and management styles and personalities failed to be considered when principals selected mentor teachers (Kajs, Coppenhaver & Flatt, 2001). Few experienced teachers, assuming the role of mentor, have had much experience with the activities of mentoring and conducting formative observations (Feiman-Nemser, 1996).

Without training in the novice's needs and characteristics, mentors often had unrealistic expectations of their protégé and used inadequate strategies when working with novice teachers (Wilkinson, 1994). The unique needs of the novice teachers failed to be addressed (Wilkinson, 1994). Therefore, beginning teachers continued to lack the guidance of a mentor to support and assist them in becoming effective teachers (Fideler & Haselkorn, 1999; Odell, 1990).

Moskovitz and Stephens (1997) recognized that successful teacher induction programs were a combination of intricately directed interventions. Rather than reproduce precise components of successful programs, those designing teacher induction

programs should develop a program that addresses challenging contextual issues confronting the novice teachers participating in the particular program. Unless this occurs, the program may fail to meet the needs of the participating novice teachers (Moskovitz & Stephens, 1997). Further, Ingersoll and Smith (2004) found that the more components that were available, the greater likelihood that the novice teacher would be retained in the profession.

#### Types of Teacher Induction Programs

As the concept of mentoring and induction has developed from the simple idea of experienced teachers befriending novice teachers to assist them through the initial year of teaching, so has the organizational scope of teacher induction programs. Horn et al. (2002) suggested that categories of mentoring were dependent upon the size of the school's faculty. Other researchers have defined induction programs as either informal or formal (Moskovitz & Stephens, 1997).

In a study of teacher induction programs in Arizona, Horn et al. (2002) found that informal mentoring occurred voluntarily in small districts with 20 or less faculty members. In this setting, more opportunities to interact existed. Using scaffolding, the more experienced teachers were able to extend the novice teacher's knowledge through social interaction (Vygotsky, 1978). Administrators were supportive, but did little to encourage the partnership. "Buddy systems" evolved between the veteran and beginning teachers (Ballantyne & Hansford, 1995; Moskovitz & Stephens, 1997). However, due to the limited number of new teachers hired within a small school district, professional

development seminars, mentoring and guidelines failed to be formally offered due to limited funding resources (Collins, 1999; Horn et al.).

Semi-formal induction programs served middle-sized districts. In these programs, administrators actively encouraged mentoring and assigned mentors to novice teachers (Horn et al., 2002). However, few mentoring guidelines and policies were offered. Mentors worked without compensation. A few programs of this size were funded, while others were not (Horn et al.).

In the larger districts with hundreds of faculty members, Horn et al. (2002) found the establishment of a greater number of formal programs. With specific guidelines and procedures in place to assist new teachers, programs were designed so that needed support was provided to novice teachers. Because large districts hired numerous new teachers annually, funding was made available to compensate mentors and support the program's components that had been proven to retain novice teachers (Horn et al.). The components often included professional development seminars, observations and follow up activities (Horn et al.). A primary purpose of formal programs was to communicate important information to novice teachers and assist them in becoming part of the school's professional community (Horn et al.).

#### *Informal Teacher Induction Programs*

Informal teacher induction programs or "buddy systems" were described at two levels (Ballantyne & Hansford, 1995; Moskowitz & Stephans, 1997). Seo, Bishop and Langley (2004) described informal mentoring as providing the novice a positive work climate. In the informal program, the novice teacher either self-selected a mentor or the

principal appointed a veteran teacher to assist the beginning teacher. Through the self-selection process, a beginning teacher asked for and received assistance from a more experienced colleague (Horn et al., 2002; Portner, 2001). A mentor was usually selected after the novice teacher determined which veteran teacher exhibited affective attributes such as approachability, friendliness, caring, flexibility and patience (Bartell, 2005; Carter & Strong, 2001).

If a mentor was appointed by the principal to assist a beginning teacher, the selection characteristics were primarily based on the mentor's years of teaching experience and the level of teaching competency (Gordon, 1991; Huling-Austin, 1989; Galvez-Hjornevik, 1985; Kajs et al., 2001; Zimpher & Rieger, 1988). However, this type of mentor selection was found to be inadequate (Bartell, 2005).

In both types of informal induction, interactions between the pair were spontaneous and assistance was usually given as the novice perceived a need for support (Moskovitz & Stephans, 1997; Newberry, 1977). Often in these informal partnerships, the teacher pairs' classrooms were located in close proximity, taught the same grade level or subject area and shared a common planning period (Gordon, 1991; Huling-Austin, 1989; Galvez-Hjornevik, 1985; Maloch, Flint, Eldridge, Harmon, Loven, Fine, Bryant-Shanklin & Martinez, 2003; Newberry, 1977). Informal or unstructured mentoring practices also included conversing with other teachers and peers in a community of learners (Lave & Wenger, 1996/2003; Wong et al., 1999). Neither level specified responsibilities, nor was mentor training required (Ballantyne & Hansford, 1995; Moskovitz & Stephans, 1997; Zimpher & Rieger, 1988).



### *Formal Teacher Induction Programs*

Based on the professional development provided to the novice teacher, Sweeny (2001) identified three types of formal induction programs: the basic orientation model, the instructional practice model and the school transformation model. Each contained the same essential elements; however, the latter two models included unique characteristics (Sweeny, 2001).

The Basic Orientation Model familiarized novice teachers with an introduction of district policies, individual campus procedures and possibly a tour of school campuses within a district (Horn et al., 2002; National Education Association [NEA], 2002; Robinson, 1998; Sweeny, 2001). Other information in this model included understanding district and school responsibilities (Horn et al., 2002). If mentors were assigned in this model, they served informally as guides to basic information regarding school procedures, culture and location of resources. Few seminars were available in this model that addressed instructional practice (NEA, 2002; Sweeny, 2001).

The Instructional Practice Model focused on similar issues as the basic orientation model with the addition of other components. These additions included linking the goals of the teacher induction program to existing state or local standards and assigning mentors to beginning teachers for a period of two or more years. Training mentors in assisting new teachers to bridge theory and practice, while guiding them in research-based classroom strategies was also included in this model (NEA, 2002; Sweeny, 2001). Through this model, beginning teachers were offered continued, applicable professional development (NEA, 2002; Sweeny, 2001).

In most formal induction programs, the principal purposefully assigned a mentor whose classroom was close in proximity to the novice teacher or taught at the same grade level or subject area as the novice teacher (Gordon, 1991; Huling-Austin, 1989; Galvez-Hjornevik, 1985; Maloch, et al., 2003). In these programs, mentor selection guidelines were followed. These guidelines consisted of teachers volunteering to become a mentor, demonstrating leadership skills and possessing a high level of content and pedagogical content knowledge. Further, these teachers exhibited expertise as an effective teacher and the ability to communicate and collaborate with others (Galvez-Hjornek, 1985).

Mentors were required to attend essential training in research-based practices proven to assist novice teachers (Huling-Austin, 1989; Lawson, 1992; Zimpher & Rieger, 1988). Release time was allocated for both the mentor and the novice teacher to observe each other's instructional practices and to attend professional development sessions together (Galvez-Hjornevik, 1985; Gordon, 1991; Huling-Austin, 1989; Maloch et al., 2003). While mentors initially provided immediate support, this diminished as novice teachers became more familiar with daily routines and gained experience in their classrooms (Maloch et al.). Through campus-based mentoring programs, such as those described in the orientation and instructional practice models, novice teachers were inducted into the status quo of the school. Other opportunities for increasing their knowledge of innovative teaching strategies were often unaddressed (Maloch et al.).

The School Transformation Model incorporated the both the orientation and instructional practice models. Additionally, in this model, systemic, school-wide

renewal efforts that promoted continuous improvement were tied to the goals of the teacher induction program (NEA, 2002; Sweeny, 2001). New teachers were engaged in school reform through the professional development of teachers as a community of learners (Lave & Wenger, 1996/2003; NEA, 2002, p. 2). Using data to assess the school politics and procedures, this model professed to systemically change the curriculum, connect teachers' professional development with student learning and transform the teacher evaluation system. The mentor's role changed from being a provider of advice and problem solver to modeling reflective thinking through the use of questioning and listening techniques (Boreen, Johnson, Niday & Potts, 2000; Robinson, 1998). While extremely rare, this model appeared to be more closely aligned with Banks' (2001d) dimension of Empowering School Culture and Social Structure.

#### Components of Teacher Induction Programs

The most commonly utilized teacher induction components offered in formal teacher induction programs included using experienced teachers as mentors, professional development seminars, opportunities for collegial collaboration and peer support, formative observations, feedback, orientation, administrative support, reflection, observing other teachers and programs purposes and goals. Ingersoll and Smith (2004) noted that incorporating several of the aforementioned components increased the retention rate 20 percent for teachers being supported by eight components. Other factors having a strong influence in retaining teachers were: being assigned a mentor in the same subject area, having a common planning period, attending regularly scheduled

collaborative seminars that focused on instructional topics important to novice teachers and receiving supportive communication (Ingersoll & Smith, 2004).

### *Using Experienced Teachers As Mentors*

Utilizing experienced teachers as mentors for novice teachers was selected as the most important characteristic of a teacher induction program (Carter, 2000; Joerger & Brewer, 2001; Moir & Gless, 2001) by 93 percent of urban programs (Fideler & Haselkorn, 1999). Wong et al. (1999) stated that when beginning teachers were asked to design a teacher induction program, they suggested novice teachers be formally mentored or part of an instructional team.

A mentor has been described as “a vehicle for addressing many tasks and issues facing beginning teachers” (Wong et al., p. 5). As noted in the socio-cultural theory, individuals construct knowledge through social and cultural contexts (Vygotsky, 1978). As novice teachers are mentored, a more experienced teacher guides the learning of the novice teacher. Through this collaboration, the novice teacher’s knowledge is enhanced (Vygotsky, 1978).

However, becoming a competent mentor entailed undergoing a selection process, possessing positive attributes, understanding the mentor’s roles and responsibilities and mentor training (Joerger & Bremer, 2001; Odell & Huling, 2000). Further, some mentors received support and compensation for their work (Bartell, 2005; Boreen et al., 2000; Brooks, 1999; Portner, 1998).

Specific criteria have been developed by teacher induction programs to select mentors. Veteran teachers, who competently taught students, had content knowledge,

were able to raise student achievement scores and experienced success in working with students representing diverse populations followed predetermined selection criteria and procedures to become mentor teachers (AFEE, 2004; Joerger & Bremer, 2001; Moir & Gless, 2001; Odell, Huling & Sweeny, 2000). Most programs preferred mentors who were willing to mentor, available to novice teachers as well as learn and apply the necessary mentoring skills (Bartell, 2005). Other mentor attributes found to be advantageous features included possessing a positive outlook, being trustworthy and tactful, maintaining openness, being committed to the profession, and experiencing success in teaching (Bartell, 2005). Fidler and Haselkorn (1999) reported that 70 percent of novice teachers were in a one-to-one mentoring relationship, while 59 percent received mentoring from a group of teachers.

The roles and responsibilities of the mentor and mentee were designated from the onset of the selection process (Fleishchmann, et al., 2000). In a study conducted by Odell and Ferraro (1992), categories of mentor support included: “emotional, instructional, resources, discipline, parental, management and system” (p. 202). Maynard and Furlong (1993) identified mentoring goals as providing information, demonstrating, counseling, coaching, encouraging reflection and providing access to resources. Minimum mentoring skills included: building and maintaining a relationship with the protégé based on trust, respect and professionalism; augmenting the novice teacher’s repertoire of teaching strategies; gathering data from observations conducted in the classroom; assisting the mentee in enhancing instructional practice through coaching; assisting the novice in diagnosing potential problems; and encouraging the novice to

reflect on decisions concerning other learning approaches (AFEE, 2004; Ganzer et al., 1999; Portner, 2001; Stanulis et al., 2002; Wong et al., 1999). Perez et al. (1997) found that “mentees preferred situation specific assistance” (p. 47). These roles and responsibilities were often addressed during mentor training seminars (Joerger & Bremer, 2001).

#### *Professional Development Seminars*

Feiman-Nemser et al. (1999) asserted that the goals of mentoring advanced beyond supporting new teachers emotionally; novice teachers must also be supported through professional development. During their first year of teaching, novices faced the tasks of teaching, while also learning to teach more effectively (Feiman-Nemser et al., 1999). To accomplish this goal, topics of concern relevant to novice teachers were addressed through this component of teacher induction programs via seminars, workshops and university coursework (Bartell, 2005; Ganzer, 2000b; Moon-Merchant & Carter, 2004; Veenman, 1984; Wong et al.). Eighty percent of the responding districts reported that professional development was required in their teacher induction programs (Fideler & Haselkorn, 1999).

#### *Professional development topics*

Wong et al. (1999) suggested that novice teachers be surveyed before professional development topics were selected. This process more accurately assured that their needs were met (Wong et al.). Professional development topics were addressed according to situational specific professional needs of the novice teacher (Runyan et al., 1998). Receiving information on these topics addressed the immediate,

identified concerns and assisted the entry-level teacher in solving problems presented in their classrooms (Runyan et al., 1998).

The training topics of professional development seminars were highly correlated with the issues perceived to impede the success of novice teachers in a study of urban districts (Fideler & Haselkorn, 1999). Ninety-one percent of the urban districts required orientation to district, state and federal policies; 90 percent offered instruction in classroom management techniques; 75 percent demonstrated instructional strategies; 73 percent discussed short and long range planning; 69 percent addressed student assessment; 67 percent shared available resources; 62 percent addressed the K-12 curriculum and described services for special education students; 60 percent discussed cultural diversity; 53 percent related techniques for parent involvement; 39 percent shared stress management techniques and discussed educational research; 25 percent addressed school and community violence, while 23 percent provided instruction in the application of strategies to teach English as a second language (Fideler & Haselkorn, 1999; Horn et al., 2002). It should be noted that the sessions failed include multicultural education or culturally responsive pedagogy as topics to be addressed.

When professional development topics addressed issues confronted and were found applicable to their classrooms, novice teachers perceived the seminars as beneficial, challenging and interesting (Bartell, 2005; Fideler & Haselkorn, 1999; Joerger & Bremer, 2001; Wong et al.). This was especially relevant when the seminars were limited to novice teachers (Bartell, 2005; Joerger & Bremer, 2001; Wong et al.). However, if the workshops failed to add to their general knowledge or solve issues

frequently encountered, novice teachers perceived little value in attending the seminars (Wong et al.).

### *Seminars*

Horn et al. (2002) stated that 51 percent of induction programs sponsored by a school district provided professional development seminars for new teachers. However, only 21 percent of these programs offered professional development topics specific to novice teachers. Fideler and Haselkorn (1999) reported that 59 percent of responding urban districts provided demonstration lessons. Beginning teachers attending professional development designed for veteran teachers was found to be ineffective (Horn et al., 2002).

Several teacher induction programs utilized a model of staff development devised by Joyce and Showers (1980, 2002). This model utilized direct instruction to present the information, demonstrated the instructional strategy and finally members of small groups practiced the modeled strategy (Joyce & Showers, 2002). To accommodate different learning styles and assist in the transfer of interactive learning techniques, seminars utilized the novice teachers' prior knowledge and experiences, incorporated manipulatives, integrated expert group techniques and cooperative learning methods (Bartell, 2005; Desimone, Porter, Garet, Yoon & Birman, 2002).

As small groups of novice teachers worked together in a community of learners, they considered ideas, expanded them and then discussed the implementation of various techniques in their classrooms (Bartell, 2005; Lave & Wenger, 1991/2003). Through observing modeled teaching strategies and participation in the activities, the beginning



teacher monitored and participated in the sample activities to better understand the learning activities experienced by the students in their classrooms (Driscoll, 2002; Moon-Merchant & Carter, 2004).

Further, these seminars engaged novice teachers in problem solving and reflection as they sought pedagogical methods to assist them in learning to teach complex concepts, while providing a context for further learning (Bartell, 2005). Participating in professional development training was found to improve the novice teachers' skills in increasing student learning (AFEE, 2004). These modeled techniques also addressed the learning styles of students representing diverse populations served in urban schools (Gay, 2000; Irvine, 2003).

Novices teaching at urban schools and enrolled in an induction program were able to transfer the knowledge, skills, beliefs and attitudes to the classroom under the guidance of a mentor (Desimone et al., 2002; Feiman-Nemser et al., 1999; Matus, 1999; Moir & Gless, 2001; O'Neill, 2004). Further, the concepts presented were often implemented immediately after the seminar within the novice teachers' classroom instruction (Matus, 1999). Due to the practicality of the information presented in the seminars, many novices increased their instructional effectiveness, were effective in their classroom management skills, built relationships with students, motivated their students during classroom instruction as well as exhibited interest and sensitivity to student needs (Fideler & Haselkorn, 1999; Matus, 1999).

Excluding professional development within the induction year of teaching left the novice's learning to chance (Feiman-Nemser et al.). Assigning untrained mentors to

guide the novice in effective teaching strategies often replicated only the methods utilized by the mentor (Ballantyne & Hansford, 1995). Thereby limiting the development of the novice teacher as well as the mentor.

Further, mentors often were confined by time constraints. Not only were they responsible for the learning of a classroom of students, but also for supporting the novice teacher (Wing & Jinks, 2001). Mentors reported that methods used to support novice teachers required additional time since they were dealing with novice teachers' survival (Wing & Jinks, 2001). Foster (2004) found that untrained mentors were unable to explain their practices in the rule-bound manner required by novice teachers. Due to the aforementioned practices, the issues of school reform failed to be sufficiently addressed (Ballantyne & Hansford, 1995; Moir & Gless, 2001). Programs that trained novice teachers in applying teaching practices that addressed the learning styles of all students enhanced the level of student achievement through improvement in instructional strategies (Darling-Hammond & Sykes, 2003; Feiman-Nemser, 2000; Recruiting New Teachers, Inc. 2000a).

#### *Opportunities for Collegial Collaboration and Peer Support*

Researchers have determined that psychological and instructional support provided to novice teachers from a mentor, peers or colleagues during their first years of teaching directly influenced their retention within the profession (Gold, 1996; Halford, 1999; Huling-Austin, 1989; Odell, 1990; Recruiting New Teachers, Inc., 2000a; Williams & Williamson, 1996). Members of a support group at the school where the novice teacher was assigned provided psychological support through regularly scheduled

peer support meetings (Bartell, 2005; Fideler & Haselkorn, 1999; Gold, 1996; Wong et al., 1999). Through these meetings, novices learned while interacting socially with others (Lave & Wenger, 1991/2003).

Although Joerger and Bremer (2001) found on-going support as one of the four most important elements of a teacher induction program, Fideler and Haselkorn (1999) reported that less than one-third of the responding urban districts provided psychological support for beginning teachers. Psychological support, a form of therapeutic guidance, helped shape the novices' personal and professional self-esteem, increased their ability to handle stress and transmitted the culture of teaching (Gold, 1996; Huling-Austin, 1989; Odell, 1990; Stansbury & Zimmerman, 2000).

#### *Mentor support*

In a majority of studies examined, mentors provided emotional support to novice teachers (Fideler & Haselkorn, 1999; Horn, et al., 2002; O'Neill, 2000). Gold (1996) described this type of support as “therapeutic... in meeting the individual’s psychological needs” and “a critical factor in assisting new teachers” (p. 562). Emotional support included “trust, respect” and being accepted by colleagues (Gold, 1996, p. 562). One-to-one mentoring was defined as developing a trusting and confidential relationship. Additionally, the mentor understood the challenges faced by beginning teachers and listening empathetically to meet their emotional needs (Gold, 1996; Stansbury & Zimmerman, 2000). The mentor functioned as a confidant and assured novice teachers that the experiences confronting them were normal (Stansbury &

Zimmerman, 2000). Further, the mentor was trained to guide the novice in problem solving by increasing their knowledge through scaffolding (Vygotsky, 1978).

### *Peer support*

Peer support was accessed at the school site or through external networking (Gold, 1996; Halford, 1999; Huling-Austin, 1990; Odell, 1990; Williams & Williamson, 1996). Communities of practice were developed through dialogue between peers within the induction program provided by the district (Feiman-Nemser et al., 1999; Lave, 1996; Wenger & Snyder, 2000). Novice teachers relied on their peers for ideas, techniques and affirmation in a non-judgmental environment (Bartell, 2005; Stanulis et al., 2002).

By sharing teaching experiences in peer support sessions, new teachers solved common problems, gained a deeper understanding of themselves as teachers and were encouraged to make necessary changes (Bartell, 2005; Joerger & Bremer, 2001; Nugent & Faucett, 2004; Stanulis et al., 2002). Peer meetings also allowed novice teachers to feel part of a group, thus retarding feelings of isolation (AFEE, 2004; Bartell, 2005; Rogers & Babinski, 1999; Stanulis et al., 2002; Wong et al., 1999). Further, sessions of peer support sessions provided candid and sincere dialogue from peers experiencing similar challenges as in a community of learners (Lave & Wenger, 1991/2003; Matus, 1999; Rogers & Babinski, 1999). As complex-teaching situations occurred more frequently, novice teachers required additional assistance (Wilkinson, 1994).

Sharing successes experienced in the classroom and receiving positive comments from a peer group boosted the novice teacher's self-esteem and sense of efficacy. This aided them in transferring learned teaching strategies to classroom instruction (Fieman-

Nemser et al., 1999; Ponticelli & Zepeda, 1997; Scherer, 1999; Stanulis et al., 2002).

Through support groups, novice teachers experienced professional growth as they developed their own concepts of teaching (Matus, 1999; Stanulis et al., 2002).

#### *External support network*

Participating in an external support network outside the school was found to be beneficial (Joerger & Bremer, 2001; Wong et al.). During monthly meetings of an external support network, members of a learning community comprised of novice teachers discussed ideas for school improvement and shared concerns, while feeling that their views were confidential (AFEE, 2004; Lave & Wenger, 1991/2003; Maloch et al., 2003; Moon-Merchant & Carter, 2004; Wong et al., 1999). AFEE (2004) found that novice teachers more readily shared confidential information with those who had no influence upon “personnel decisions” at their schools (p. 15).

#### *Collegial support*

When collegial support was offered through teacher induction programs, novice teachers viewed teaching as a collaborative endeavor (Bartell, 2005). They often relied on colleagues for external confirmation of “being a good teacher” (Perez et al., 1997, p. 48). Providing time and opportunities for frequent meetings of a community of learners fostered collegial conversations and encouraged veteran teachers to view the induction of novice teachers as a collective responsibility of faculty and administrators (Bartell, 2005; Brock & Grady, 1997; Lave & Wenger, 1991/2003; Perez et al., 1997; Wong et al., 1999). Collaborative meetings encouraged utilizing a common professional language as effective practices were described (McCormack & Thomas, 2003). Because

veteran teachers provided support, encouragement and possible solutions to problems based on years of teaching experience, novice teachers felt a sense of belonging (McCormack & Thomas, 2003). This practice further dispelled the sense of isolation experienced by many beginning teachers (Brock & Grady, 1997; Wong et al.).

According to Kardos (2002), almost 75 percent of first year teachers in a study conducted in New Jersey were assigned mentor teachers who had an average of 17 years of experience. Ninety-six percent of these mentors taught at the same school as the novice, 81 percent taught the same subject and 68 percent taught the same grade level (Kardos, 2002). More than 50 percent of the mentors met with their mentee at least once a week, while 90 percent met once a month. Maloch et al. (2003) reported that 73 percent of the reading specialization teachers and 37 percent of the general education teachers reported creating or being part of a learning community within their school (Maloch et al., 2003; Wong et al, 1999).

### *Formative Observations*

Formative observations were also included as part of formal teacher induction programs. Induction programs that conducted formative observations utilized predetermined teaching standards as benchmarks to measure classroom teaching behaviors (Giebelhaus & Bendixen-Noe, 2000; Interstate New Teacher Assessment and Support Consortium [INTASC], 2005; Moir & Gless, 2001; Moon-Merchant & Carter, 2004; Olebe, 1999). Instructional support, or formative observations, conducted by a mentor, concentrated on enhancing the novice's existing teaching skills within a contextualized setting (Angelle, 2002; Gold, 1996; Moon-Merchant & Carter, 2004;

Olebe, 1999; Reiman & Peace, 2002). Formative observations were defined by AFEE (2004) as “regular, guided reflections that evaluate how well teaching practices lead to student learning” (p. 14). Further, the beginning teacher’s professional development goals were identified (Giebelhaus & Bendixen-Noe, 2000).

Upon entering the classroom, beginning teachers were expected to perform as well as veteran teachers (Feiman-Nemser et al., 1999; Huling, 1989; Odell, 1989; Veenman, 1984). However, few were able to perform at an advanced, or expert, level during their initial year of teaching (Hargreaves & Fullan, 1999; Huling-Austin, 1986; Odell & Huling, 2000). Novice teachers needed support from an experienced teacher to learn strategies that assisted them in transmitting their expertise in content knowledge into a comprehensive form understood by their students (Feiman-Nemser, 1998; Gold, 1996). When novice teachers received instructional support from their mentors, they practiced and implemented researched-based teaching concepts within their classrooms that had previously been presented during the professional development sessions (Feiman-Nemser, 2000, 2001; Feiman-Nemser et al., 1999; Gold, 1996; Reiman & Peace, 2002).

This “thoughtful, complex practice” was referred to as “educative mentoring” (Feiman-Nemser, 2000, p. 4). “Educative mentoring...incorporated a clear vision of the types of teaching practices novices needed to learn and the characteristics of effective teaching” (Feiman-Nemser, 2000, p. 4). Novices needed assistance to become more aware of “the salient features of a lesson” (Feiman-Nemser, 1998, p. 71). These observations served to highlight areas of strength as well as those that needed further

development (AFEE, 2004). Utilized in a formative sense, these periodic, scheduled observations shaped the novice teachers' professional development of classroom teaching behaviors (Feiman-Nemser et al., 1999). While the beginning teacher operated at an independent level, with the assistance of a trained, experienced teacher, the novice could reach a higher cognitive level as explained through the sociocultural theory (Vygotsky, 1978). The novices' skills were challenged and supported as they attempted to incorporate new strategies within their instruction through the zone of proximal development (Vygotsky, 1978). At the same time that new learning occurred, novice teachers were encouraged to replace previously utilized techniques with newly accomplished skills (Reiman & Theis-Sprinthall, 1998).

Desimone et al. (2002) found that as teachers participated in professional development focusing on specific instructional practices, the transfer and application of those research-based practices increased in their classroom practice. The transfer of new learning to classroom practice also increased when the mentor observed the novice teacher applying the new skill within classroom instruction and then assisted the novice teacher in conducting an analysis of the instruction (Joyce & Showers, 2002).

Mentors participating in a formal induction program received training in conducting observations that used standards as benchmarks for exhibiting teaching expertise (Boreen & Niday, 2000; Fideler & Haselkorn, 1999; Fleischman, et al., 2000; Ganzer, et al., 1999; O'Neill, 2004; TSBEC, 1998). Because mentors collected data every two to three weeks through formative observations, areas of strength and those that needed further development were established based on pre-determined assessment



standards (Brock & Grady, 1997; Moir & Gless, 2001). The data was then utilized to plan future professional development of the individual novice teacher (Feiman-Nemser, 2000). Wong et al. (1999) reported that beginning teachers would seek clarification, or further explanation of standards as necessary. As soon as the standards were explained, they developed a plan to accomplish them (Wong et al.).

However, not all teacher induction programs included formative observations as part of their formal program. In a study conducted by Kardos (2002), 97 percent of novice teachers stated that they had been observed in their classrooms. Of these, 81 percent noted that their principals had conducted the observations. However, only 17 percent reported being observed by their mentor (Kardos, 2002). Kardos (2002) surmised that novice teachers failed to receive the periodic feedback based on formative observations necessary to assist them in improving their instructional skills. Fideler and Haselkorn (1999) reported that 67 percent of respondents regarded formative observations as integral to support and coaching novice teachers. However, only 16 percent reported including formative observation as part of their teacher induction program (Fideler & Haselkorn, 1999). Joeger and Brewer (2001) found that formative observations were considered the fifth most important component in an induction program.

### *Feedback*

During individualized conferences, novice teachers were provided feedback regarding their instruction based on the data collected during formative observations through the use of reflective questioning (Bartell, 2005; Joyce & Showers, 2002;

McCormack & Thomas, 2003; Wong et al., 1999). The purpose of the mentor and beginning teacher analyzing the data collected was to improve instructional practice and establish short and long-term professional goals (McCormack & Thomas, 2003). Regular, systematic feedback that included clear expectations and a means to achieve those competencies assisted the novice teacher in meeting the pre-determined teaching standards (McCormack & Thomas, 2003; Wong et al.). Furthermore, when provided the opportunity to revise a lesson based on reflective feedback, the novice teacher more successfully advanced to a deeper level of understanding of the concept; thus, increasing teacher performance (Driscoll, 2002).

#### *Instructional practice*

Novice teachers desired specific individualized feedback regarding their classroom performance (Bartell, 2005). They had difficulty in identifying the particular assistance they needed or determining the reasons for encountering certain problems (Bartell, 2005). Mentors assisted novices in examining the data collected during the formative observation (Bartell, 2005; McCormack & Thomas, 2003; Wong et al., 1999).

As the novice teacher instructed students, the mentor scripted the lesson to collect performance data within the contextualized setting of the teacher's classroom (Reiman & Peace, 2002). The mentor looked for indicators of effective teaching, such as instructional clarity, voice projection, classroom organization, classroom management, time management, classroom climate and others (Nugent & Faucette, 2004). From this data, the mentor used reflective dialogue to assist the novice in self-

critiquing the data during a post-conference meeting (Joyce & Showers, 1980, 2002; Odell, 1989).

When novice teachers critiqued the data collected alone, they operated at an independent level (Vygotsky, 1978). However, when the mentor and novice critically examined the data to determine the areas of strength and those that needed improvement through constructive criticism and supportive feedback (Gold, 1996; Joyce & Showers, 2002; Odell, 1989). Using scaffolding techniques, the mentor assisted the novice to reach a higher cognitive level as expressed in the socio-cultural theory (Vygotsky, 1978). Further, mentors assisted the novice in solving problems and implementing research-based instructional strategies that enhanced their instructional performance (Bartell, 2005; Moon-Merchant & Carter, 2004; Vygotsky, 1978).

When conducting post-conferences, mentors utilized non-direct, collaborative or directive conferencing techniques (Brock & Grady, 1997; Gordon, 1991; Wing & Jinks, 2001). Non-direct techniques were used with highly motivated novice teachers who were able to independently solve problems (Brock & Grady, 1997; Gordon, 1991; Wing & Jinks, 2001). When beginning teachers were motivated, but had limited skills in problem solving, yet needed the mentor's advice, a collaborative approach was employed. In this approach, both participants identified the issues, engaged in problem analysis and brainstormed possible solutions to the problem. From this list of possible solutions, a strategy was selected to implement a plan of action (Brock & Grady, 1997; Gordon, 1991; Wing & Jinks, 2001). In the directive conferencing technique, the novice teacher lacked the skills needed to recognize or solve problems confronting them. In this

case, the mentor presented the perceived problem to the novice. The novice was then directed to engage in an action plan with the mentor to address the problem (Brock & Grady, 1997; Gordon, 1991; Wing & Jinks, 2001). Through post-conferences, the mentor asked questions, gave suggestions and possible solutions. Mentors adapted different conferencing techniques to support the needs of the individual novice teacher (Wing & Jinks, 2001).

Novice teachers were supported as they attempted to incorporate new strategies within their instruction (Moon-Merchant & Carter, 2004; Vygotsky, 1978). As new skills were accomplished, previously utilized techniques were replaced (Reiman & Theis-Sprinthall, 1998). Consequently, it was more likely that the new skill became part of the teacher's repertoire of strategies when it was applied within classroom instruction (Joyce & Showers, 1988; Reiman & Theis-Sprinthall, 1998). Using these techniques enabled the novice teacher to advance beyond contemplating daily routines and procedures to thoroughly analyzing the connections between teaching and learning in situational specific classroom activities (Ballantyne & Hansford, 1995; McCormack & Thomas, 2003; Perez et al., 1997).

#### *Short and long-term professional goals*

Joerger and Bremer (2001) reported that some teacher induction programs used professional development plans, such as California's Individual Induction Plan (Olebe, 1999) and the Inductee Self-Assessment (Fideler & Haselkorn, 1999). These individualized plans outlined the novice teacher's short-term, intermediate and long-term professional goals. These pre-determined goals addressed developing instructional

skills, attending professional development seminars and participating in professional organizations (Joerger & Bremer, 2001). Further, strategies were planned to accomplish those goals (Joerger & Bremer, 2001; Olebe, 1999). Incorporating a growth plan that included benchmarks during the first year of teaching assisted the novice in meeting the pre-determined teaching standards (Stansbury & Zimmerman, 2000; Wong, et al., 1999).

Through collecting data from formative observations, mentors guided novice teachers to reflect and critique their instructional performance. Using these techniques, novice teachers were afforded opportunities to enhance their instructional practice by establishing short and long-term professional goals.

### *Orientation*

To competently work within a school district, new teachers were acquainted with federal, state, school district and campus guidelines through an orientation (Joerger & Bremer, 2001). The orientation impacted the teachers' ability to function effectively within the required parameters of the school district (Joerger & Bremer, 2001). Orientation was once recognized as the sole component of an induction program; however, recently it has been regarded as a beginning exercise in the professional development component of an induction period (Brock & Grady, 1997).

Most orientations occurred in August and September and lasted from a one-half day to a seven-day session (Fideler & Haselkorn, 1999; Horn et al., 2002). During the period of orientation, plans for the teacher induction program and professional development topics in which novice teachers would participate were planned and

discussed by mentors and central office personnel (Fideler & Haselkorn, 1999; Joerger & Bremer, 2001).

Horn et al. (2002) noted that 97.8 percent of the surveyed districts offered orientation for their beginning teachers and 81 percent either invited or required attendance. Fideler and Haselkorn (1999) reported that 91 percent of responding urban districts conducted an orientation to acquaint new teachers to the district, the system policies and required district paperwork. Further, 86 percent familiarized novice teachers with campus policies and paperwork specific to the school (Fideler & Haselkorn, 1999).

#### *Administrative Support*

Novice teachers reported administrative support as being an important component of an induction program (Bartell, 2005; Wong et al., 1999). Since administrators were viewed as supervising instruction and controlling their future employment, novice teachers wanted to know their administrators' expectations (Brock & Grady, 1997). Just as orientation meetings outlined major district goals, novice teachers desired to be acquainted with campus guidelines and administrator expectations in classroom management, assessment, instructional strategies and student achievement. Bartell (2005) found that administrators kept faculty members focused on the school's mission through planning and leading professional development sessions (Brock & Grady, 1997; Wong et al.). The administrator's understanding and supporting induction program goals was deemed important for consistency with the program goals and promoting a vision of teaching (Bartell, 2005). Joerger and Bremer (2001) suggested

that the district induction programs keep the novice teacher's administrator abreast of the purposes and goals, requirements and proposed researched-based instructional practices. Further, Brock and Grady (1997) recommended that administrators encourage continuing and open communications with beginning teachers, while being supportive of mentoring activities (Bartell, 2005). Including the administrator in teacher induction program goals, keeping them abreast of novice teachers' needs and mentor training promoted administrator support.

Administrators are regarded as an integral component of a teacher induction program because they controlled the number of preparations a teacher is assigned, classroom location assigned and the number of extracurricular activities sponsored by the novice teacher (Brock & Grady, 1997; Huling-Austin, 1990). Further, administrators are also responsible for matching the mentor with the novice, allocating time for mentors to communicate, conduct observations and provide feedback to the beginning teacher in formal induction programs (Bartell, 2005). For these reasons, administrative support is regarded as important to a teacher induction program.

If less administrative support and autonomy are discerned, teachers become less satisfied with their working conditions (Eller, et al., 2000). Ingersoll (2001) reported that 25 percent of teachers, who transferred to a different district or school, and 18 percent, who left the profession, cited a lack of administrative support as the reason for leaving high-poverty, urban schools.

### *Reflection*

Reflection has been defined as developing critical thinking skills to examine one's life or work (Valli, 1997). Placed in an educational setting, reflection is used by teachers to assess their own progress during daily instruction to develop further skills as an educator and to analyze their students' development (Borrego & Hirai, 2004; Boreen, et al., 2000). Reflection is also a necessary component in assisting novices to develop professionally (Schön, 1987; Halpern, 2000). As new teachers closely examine their practices through structured reflection, they perceive patterns of classroom events, enhance discourse with colleagues and recognize that teaching requires ongoing professional growth (Boreen et al., 2000; Danielson & McGreal, 2000). To accomplish this task, multiple techniques were used (Bartell, 2005; Valli, 1997).

According to Valli (1997), reflective techniques used by novice teachers were classified as technical, reflection-on-action, reflection-in-action and deliberative. Using technical reflection, specific teaching behaviors were measured against pre-determined standards. Teachers examined their instruction and compared it to research-based teaching behaviors, teaching skills and the application of those skills (Valli, 1997). "Standards provided a set of expectations and common language for discussing excellence in teaching" (Bartell, 2005, p. 131).

Through reflection, novice teachers considered the effectiveness of the strategies utilized and then decided whether other methods were more appropriate (Bartell, 2005; Borrego & Hirai, 2004; Moir & Gless, 2001; Valli, 1997). With their mentor's assistance, novice teachers participated in "reflection-in-action" and "reflection-on-



action” (Schön, 1987, p. 26). As novice teachers began teaching, mentors formulated and asked open-ended questions to assist them in analyzing their instructional practice (Bartell, 2005; Boreen et al., 2000). Through the use of this technique, novice teachers became more aware of their instruction and learned to improve their practice (Bartell, 2005; Boreen et al.).

“Reflection-in-action” was defined as specific to time and context “during which we can still make a difference to the situation at hand” (Schön, 1987, p. 26). This strategy served “to reshape what we are doing, while we are doing it” (Schön, 1987, p. 26). Novice teachers utilized “reflection-in-action” as they gained more experience through teaching and listening to their students’ responses (Schön, 1987, p. 26). Over time they learned to improvise and change their instruction through experiencing positive or negative “surprises” from daily dialogue interchanges (Schön, 1987, p. 26).

Implementing “reflection-on-action” required the novice teacher to contemplate past events (Schön, 1987, p. 26). Recalling previously exhibited teaching behaviors or analyzing data collected during classroom observations assisted novice teachers in critiquing past performance (Fenwick, 2004; Schön, 1987). Information from other sources such as the novice’s prior knowledge, personal beliefs and values, research-based instruction and advice from experienced colleagues were also used to assess the data (Valli, 1997). Through the use of deliberative reflection, decisions were made based on the data analysis and information from other sources that affected the novice teacher’s future instruction (Valli, 1997).

As novice teachers progressed through the induction period, they shaped and

“refined their competence, performance and effectiveness” through reflective activities (Mager, 1992, p. 20). Using the modeled processes under the guidance of a mentor and colleagues, beginning teachers incorporated the allocated time and opportunities to consider their actions and the educational impact on their students (Bartell, 2005). As reflective activities were practiced, novice teachers recognized differences in pedagogical and content knowledge (McCormack & Thomas, 2003). The novice teachers’ professional development was enhanced as the variances in knowledge decreased (Borrego & Hirai, 2004). Because these methods were utilized, novice teachers progressed in their instructional skills and developed an educational vocabulary through this period more quickly than those who failed to use these techniques (McCormack & Thomas, 2003).

Reflection was accomplished through activities such as listening to informative speakers, completing journal entries, critiquing audio and videotapes, observing master teachers, participating in collegial discussions, conferencing with mentors, having access to educational literature and conducting action research (Bartell, 2005; Farrell, 1998; McCormack & Thomas, 2003; Moon-Merchant, 2004). Through these activities, entry-level teachers considered their own practice and acquired new ideas from peers and mentors. As novice teachers participated in their new roles as teachers through active learning, concerns were analyzed and reflected upon through contextualized settings (Reiman & Peace, 2002).

Foster (2004) conducted a study in a high poverty, urban school that examined improvement in student achievement and teachers’ instructional skills. The study

required five cohorts of novice teachers to observe master teachers work with students in an after-school program for twenty-four weeks (Foster, 2004). Students participating in the after-school program were members of the novice teachers' classes (Foster, 2004).

The master teacher utilized the "students' identities, interests, background and cultural background to entice them into self-regulated, disciplined study and problem solving" (Foster, 2004, p. 402). The interdisciplinary units included reading, writing, math and science activities. Working in a cohort, novice teachers participated in reflective activities, such as observing the master teacher, taking notes of the observation, team-teaching with the master teachers in both large and small groups of students, tutoring individual students and participating in a study group (Foster, 2004). Further, they keep a journal of reflections on the observed teaching techniques as well as reading and responding to research articles (Foster, 2004).

The students in the after-school program met two hours a day, three days a week. For an hour following the after-school program, cohorts of novice teachers met with the master teacher to discuss the teaching strategies and student behaviors. As the after-school program progressed, the novice teachers observed positive changes in the students' behaviors from those exhibited in the classrooms. Later these student behaviors transferred to the regular classroom (Foster, 2004). As novice teachers implemented similar techniques within their classrooms, they reconsidered the students' abilities and discovered talents and characteristics previously unnoted. Foster (2004) found that there was a change in classroom teaching behaviors. Novice teachers reduced the physical proximity between themselves and the students, implemented hands-on

activities, utilized cooperative learning activities, built on the students' prior knowledge, permitted discussion between the students and implemented more writing activities.

Foster (2004) found that

teacher learning is enhanced and facilitated...when teachers are given sustained opportunities to experiment with and receive advice on innovations; are given the chance for in-depth learning, inquiry and reflection; are able to collaborate with professional peers inside and outside of school and have access to external researchers (p. 403).

Novice teachers who failed to engage in reflective practices often experienced high levels of stress (Claycomb, 2000; Darling-Hammond & Sykes, 2003). Because novice teachers were engaged in instructing their students to achieve pre-determined objectives, controlling the classroom and staying on schedule, they were often unable to consider alternatives to their teaching. High levels of stress might have been alleviated through contact with a mentor (Bartell, 2005). Without mentor guidance, novice teachers, working in isolation, utilized only their prior experiences and intuition to confront issues (Bartell, 2005). Because they failed to comprehend issues to examine their practice, teaching became routine and prior learned reflective practices were often discarded. This situation appeared to limit further professional development and possibly led novices to abandon the profession (Bartell, 2005; Claycomb, 2000; Darling-Hammond & Sykes, 2003).

*Observing Other Teachers*

When given opportunities and time to observe other teachers, novice teachers were able to focus on skills in which they needed assistance (Bartell, 2005; Brock & Grady, 1997; Fideler & Haselkorn, 1999; Wong, et al., 1999). Novice teachers monitored demonstrations of classroom instruction conducted by their mentors and others participating in team teaching (Fleishman et al., 2000). In some cases, they shared co-teaching responsibilities with an experienced teacher (Fleishman et al.). Through monitoring and participating in these demonstrations, novice teachers were able to ascertain the importance of designing classroom instruction based on student needs (Moir & Gless, 2001). Additionally, as novice teachers observed more experienced teachers, their repertoire of knowledge of instructional strategies increased (Angele, 2002). They also utilized this experience as self-assessment (McCormack & Thomas, 2003). Further, through these observations, beginning teachers monitored the veteran teacher routinely managing daily challenges (Angelle, 2002).

Fideler and Haselkorn (1999) found that many of the responding urban districts encouraged novice teachers to observe “exemplary teachers at work” (p. 50). Eighty percent of the programs promoted observations within the same school, while 55 percent supported novice teachers observing at a different school site (Fideler & Haselkorn, 1999). McCormack and Thomas (2003) found that when the novice teacher and mentor jointly observed another teacher, together they were able to reflect on the instruction. Further, this activity assisted the novice teacher in determining their future instructional and professional goals (McCormack & Thomas, 2003).

### *Program Purpose and Goals*

Quality induction programs have clearly stated purposes and goals to provide a comprehensible plan based on state standards and expectations for beginning teachers, mentors and administrators (Bartell, 2005; Seo et al., 2004). Even though the standards were provided by state educational agencies, the implementation of the induction program standards was locally determined to meet the needs of the community (Bartell, 2005; Odell & Huling, 2000; Olebe, 2001).

In their study of urban schools, Fideler and Haselkorn (1999) found that between 92 and 96 percent of the respondents rated the following teacher induction program goals as important to very important: “build a sense of professionalism, possess a positive attitude; provide personal support; promote collaboration among teachers; improve new teachers’ knowledge, skills, performance; develop inductee self-confidence; and ease the transition into becoming a teacher” (p. 41). Further, they found that between 86 and 90 percent of the programs included the following goals: “encourage application of theory to practice; encourage reflection into practice; acculturate inductees to school system values; prevent teacher isolation; reduce stress and burnout; introduce inductees to school system’s culture, norms and procedures” (Fideler & Haselkorn, 1999, p. 41).

### Mentoring

Although the concept of mentoring has been utilized during contemporary educational research, the term has its origination in Homer’s poem, *The Odyssey* (Galvez-Hjornevik, 1985; Gold, 1996). In this Greek myth, Odysseus entrusted the

protection and education of his son, Telemachus, to an older, yet faithful friend, Mentor. While Odysseus fought in the Trojan War, Mentor became a teacher, adviser, friend and surrogate father to Telemachus.

Other well-known mentor-protégé pairs included Socrates and Plato, Freud and Jung, Lorenze de Medici and Michelangelo, Haydn and Beethoven and Merlyn and King Arthur (Roche, 1979). From these mutually respectful relationships came the essence of mentoring as emotional, yet educational, interactions between a more experienced person and one who was less knowledgeable. In this educational interchange, the protégé's growth and development was the responsibility of the mentor (Gold, 1996). While Homer's definition of "mentor" described the more experienced teacher influencing the intellectual, personal and spiritual aspects of a protégé's life, the definition used to mentor novice teachers was limited to professional development (Dexter, 2000). Further, while mentoring was often described as a one-on-one relationship, it also conveyed the relationship between a team of colleagues (Wong et al.).

### Training

An essential element of an induction program was the need for mentors to be trained to effectively assist entry-level teachers by providing appropriate support, socialization into the profession, guidance and using data collection for feedback to novice teachers (Joerger & Bremer, 2001; Halford, 1999; Huling-Austin, 1989; Moir & Gless, 2001; Odell et al., 2000; TSBEC, 1998; Wong et al., 1999). While mentors possessed a repertoire of successful techniques, they needed to learn technique used to

transfer that expertise to novice teachers (Kardos, 2002). Initial training topics often included being aware of the concerns of beginning teachers, being acquainted with situated cognition, the socio-cultural theory and adult learning theory; utilizing mentoring roles and responsibilities, implementing appropriate communication skills, demonstrating effective teaching strategies, applying the clinical supervision model, conducting observations, collecting data during observations, using strategies for diagnosing problems, utilizing active listening and conferencing skills, guiding the novice in reflecting on practice and understanding professional rights and responsibilities (Boreen & Niday, 2000; Fideler & Haselkorn, 1999; Fleischman, et al., 2000; Ganzer et al., 1999; O'Neill, 2004; Stansbury & Zimmerman, 2000; TSBEC,1998). In addition to training specific to mentoring novice teachers, mentors were apprised of the professional development instruction of the novice teachers and received the same training materials that novices received (Joerger & Bremer, 2001). This assisted the mentor in being aware of the skills that were being taught. Continuing professional development for mentors and novice teachers kept both groups informed of the current researched strategies proven to be effective in assisting novice teachers (Joerger & Bremer, 2001; Odell et al., 2000).

Giebelhaus and Bowman (2002) conducted a study in which two groups of mentors involved in an induction program were trained in general principles and practices of mentoring and supervision. One group received additional training in guiding the interactions of novice teachers. These mentors were taught to develop teachers' pedagogical skills through structuring discussions on teaching and learning



(Giebelhaus & Bowman, 2002). Novice teachers, who were assigned to the mentors and received additional training, demonstrated more detailed planning, conducted more effective classroom instruction and employed a higher level of reflection on practice, than did teachers whose mentors had received basic mentor training (Giebelhaus & Bowman, 2002). Furthermore, teachers enrolled in an induction program needing additional assistance, received support much sooner than those who failed to participate in induction programs (Bartell, 2005; Giebelhaus & Bowman, 2002; Portner, 2001).

### Support

Facets of support for mentors included regularly scheduled meetings, release from regular duties to assume new roles and continued professional development. Recurrent scheduled meetings provided support from other mentors who were experiencing the same challenges (O'Neill, 2004; Riggs & Sandlin, 2002). Through a community of learners, discussions of successful mentoring strategies assisting novice teachers in solving problems provided support to the participating mentors (Boreen et al., 2000; Brooks, 1999; Feiman-Nemser, 1996; Huling-Austin, 1989; Lave & Wenger, 1991/2004; Portner, 1998). Through these gatherings, they also focused on further developing their own expertise in mentoring and teaching (Bartell, 2005).

Releasing mentor teachers from their regular classroom duties to guide a group of novice teachers has been reported to be an effective approach in establishing a successful teacher induction program (Joerger & Bremer, 2001; O'Neill, 2004). During the novice teachers' first semester of teaching, mentors were arduously involved in guiding and supporting them (Ballantyne & Hansford, 1995). Releasing mentors from

classroom duties allowed them to have more time to support novices at their schools through informal conversations addressing immediate problems (Bartell, 2005; Joerger & Bremer, 2001). Frequent informal meetings during and after school assisted the novices in communicating their needs so that mentors were available to provide the necessary support (Bartell, 2005). As the year progressed, the mentor's support faded as in cognitive apprenticeship unless the novice teacher needed specific assistance (Lave & Wenger, 1991/2003).

#### Incentives

Several teacher induction programs reporting compensating the mentors through stipends as well recognition of their assistance in guiding novice teachers (Bartell, 2005). Other incentives for participating as a mentor included additional professional development, release time, tuition free graduate courses, fiscal resources, reduced workload and being assigned fewer extracurricular activities (Fideler & Haselkorn, 1999). According to Fideler and Haselkorn (1999), of the ten urban districts that reported mentor incentives, 38 percent provided professional development, while 36 percent allocated release time. Only 25 percent of the districts reported that mentors received a stipend for their supportive duties, while 2 percent reported mentors received a reduced workload. Twenty-two percent received no compensation for their time and efforts dedicated to the development of novice teachers (Fideler & Haselkorn, 1999). While mentoring assisted in the retention of teachers and improved practice, fiscal resources failed to be allocated in a majority of teacher induction programs for this vital element.

## Benefits

Not only has mentoring positively affected novice teachers' classroom teaching behaviors, but mentors have also benefited (Riggs & Sandlin, 2002; Wong et al.). Mentors were able to observe a variety of teaching strategies since they were no longer assigned to a specific classroom (Moir & Gless, 2001). This experience permitted them to validate their own practice, become more reflective in their own practice, utilized observed practices that improved student achievement and experienced greater job satisfaction (AFEE, 2004; Moir & Gless, 2001; Weasmer & Woods, 2003). Furthermore, they learned to better address individual students' needs, more clearly articulate actions taken and supply reasoning for decisions made based on expertise developed throughout their career (Moir & Gless, 2001; Riggs & Sandlin, 2002; Weasmer & Woods, 2003). As their understanding of research-based instructional practice increased, mentors became more enthusiastic regarding their profession (Riggs & Sandlin, 2002).

## Summary

Psychological support provided through individual and group sessions, instructional support supplied through professional development and formative observations (Gold, 1996), supplying constructive criticism through educative mentoring (Feiman-Nemser, 2000) and employing reflective activities (Schön, 1987; Danielson & McGreal, 2000) within each component appeared to be essential components for the novice teacher's developing classroom teaching behaviors during the critical initial years of teaching. These components were implemented in teacher induction programs

through situated cognition. The cognitive apprenticeship model enhanced the novice teacher's instructional practices more effectively than those learned through trial and error (Darling-Hammond, 2000; Feiman-Nemser, et al., 1999). As teachers were retained in the profession and practiced strategies that better educated students, especially those representing diverse populations, greater experience was gained; thus affecting student achievement (Darling-Hammond & Sykes, 2003).

### CHAPTER III

#### METHODOLOGY

This longitudinal trend study (Gall, Borg & Gall, 1996) of a university-based teacher induction program was conducted in the southwestern United States. The area was composed of one urban city, suburban areas, small towns and ranching communities. Tourism, refineries, light manufacturing and trade fueled the economic development of the area. Higher education was available through a mid-sized regional university and a community college (Corpus Christi Regional Economic Development Corporation, 2004).

#### Demographics of the Study

This longitudinal trend study was conducted in a 68 square mile urban district established in the early 1900s. Sixty-two campuses serve 39,200 students. The student population of this urban district includes 19,603 students attending 46 elementary schools and 18,976 students being served by 17 secondary schools. The independent school district also developed 6 special campuses that serve specific diverse populations (Brief Facts, 2004).

The student population of the elementary schools is composed of 75 percent Hispanic American, 19 percent European American, 6 percent African American, 1.86 percent Asian American and .21 percent Native American. The secondary student population consists of 70.5 percent Hispanic American, 22 percent European American, 6 percent African American, 1.39 percent Asian American and .33 percent Native American (Brief Facts, 2004). Table 3.1 explains that 55 percent of the district's

elementary and secondary student populations are eligible for free or reduced meals, while 56.7 percent are economically challenged. Almost 10 percent of the district's students have Limited English Proficiency (Brief Facts, 2004).

The district employs 2,498 teachers. Of those, 51 percent were European American, 45 percent were of Hispanic American descent, 3 percent represented African American and 1 percent denoted other ethnicities (see Table 3.2).

TABLE 3.1. Ethnicity of Urban District's Student Population

Student Population	Elementary	Secondary
Hispanic	75%	71%
European American	19%	22%
African American	6%	6%
Asian American	1.86%	1.39%
Native American	.21%	.33%

Within this district, 44 percent of the teachers have attained their master's degree with 4 percent earning one or more teaching permits. The teacher to student ratio was 1:16.2. Veteran teachers taught an average of 14.4 years, while 23 percent of the teachers hired in this district have five or fewer years of experience. The teacher turnover rate is 11 percent per year (Texas Education Agency [TEA], 2002). However,

many of the urban novice teachers employed in this district participated in the university-based teacher induction program.

TABLE 3.2. Ethnicity of Urban District's Teacher Population

Ethnicity of Teachers	% of Teachers
European American	51%
Hispanic American	45%
African American	3%
Other	1%

#### Description of the University-based Teacher Induction Program

The need to support beginning teachers during their first years of teaching came to national attention in the 1980s. To ease the transition from “a student of teaching to a teacher of students”(Huling-Austin, 1990, p. 539), the Holmes Group (1986) recommended support programs be instituted during the induction year of teaching, while the Carnegie Forum (1986) advocated the development of graduate classes focusing on the development of professional curriculum.

A comprehensive statewide induction plan was established in 1987 through state legislative bill requiring a mentor be assigned to every entry-level teacher beginning in the 1990-91 school year (Advisory Committee on Teacher Induction, 1989). Due to this unfunded mandate, the statewide emphasis on induction became primarily an assistance

model for beginning teachers. Diverse models were developed to meet the needs of different areas of the state. As a result, a university-based teacher induction program was established in September 1991 at a mid-sized regional university in the southwest United States. The vision of this university-based teacher induction program was to support novice teachers emotionally, instructionally and promote life-long learning. Further, the purpose of the university-based teacher induction program was to enhance the teachers' existing skills, while aiding them in the effective application of content knowledge and pedagogical skills necessary to become successful teachers and improve student achievement (Feiman-Nemser et al., 1999; Huling-Austin, 1990).

Salient features of successful campus-based mentoring programs were researched. Attributes proven to be effective for mentoring novice teachers and feasible to integrate within university coursework were determined. The plan included: assigning a university employed mentor to a small group of novice teachers, allocating time for the mentor to assist the mentee, scheduling weekly peer support meetings for novice teachers, presenting professional development instruction based on the concerns of beginning teachers (Veenman, 1984), conducting formative observations and providing feedback. Reflective activities were incorporated within each component. Time was provided in the weekly class meetings for additional opportunities for peer and mentor support and reflection.

The university-based teacher induction program worked collaboratively with local school districts to assist the beginning teachers. Communication was established between superintendents and principals of local independent school districts and the



program coordinator. Presentations describing the program were given at local and state conferences. Undergraduates, student teachers and graduate students were also apprised of the program. Furthermore, program participants received up to nine graduate credit hours toward a masters' degree.

### Program Goals

The goals of the university-based teacher induction program were:

1. to promote the personal well-being of the beginning teacher;
2. to improve effective teaching behaviors;
3. to increase knowledge and application of learner-centered strategies;
4. to support the novice teacher throughout the beginning year of teaching through continual contact with trained university mentors; and
5. to increase the retention of promising first year teachers (Huling-Austin, 1986; Odell, 1990).

The overarching objective of this university-based induction program was to assist novice teachers in becoming effective educational professionals and thereby increase student achievement (Gay, 2000; Huling-Austin, 1989; Irvine, 2003; Odell, 1990). Continually monitoring and adjusting the program's curriculum to meet the needs of each cohort entering the program was the guiding philosophy in the development of the university-based teacher induction program. Not only were the concerns that most beginning teachers experience addressed, but individual and contextual needs were also

discussed (Wilkinson, 1994). Flexibility was incorporated to meet constantly changing needs and concerns of the each cohort (Huling-Austin, 1986, 1990; Hunt, 1974).

#### Components of the University-based Teacher Induction Program

The conceptual framework of the university-based teacher induction program was composed of an integrated triad. Activities of each component of the triad were interwoven within the other two. Additionally, reflective techniques were employed within each component of the triad (see Figure 3.1). The interrelated components along with mentor training were necessary to support beginning teachers as they began their journey toward becoming a career professional. The integrated triad included:

- a) weekly peer support sessions facilitated by university mentors,
- b) professional development on identified topics of concern and research-based teaching practices, and
- c) formative observations and conferences that addressed the individual teacher's strengths and areas needing to be enhanced (Galvez-Hjornevik,

1985). Each component of the integrated triad was integral to the university based teacher induction program (see Figure 3.1).

#### *Peer Support Sessions*

The first section of the integrated triad was a weekly peer support session. An essential component for creating a positive induction experience for new teachers was support from peers and the mentor (Halford, 1999). Being a member of “a community of practice” (Wenger & Snyder, 2000), or peer support group, allowed teachers to

interact with others to cooperate, problem solve and develop trusting relationships (Smith, 2003) within a safe environment (Portner, 2001).

Peer support sessions were established on the codes of trust, respect and confidentiality. Developing a trusting relationship through psychological support assisted in shaping the novice's self-esteem and ability to handle stress (Abell, Dillon, Hopkins, McInerney & Obrien, 1995; Gold, 1996; Kelchtermans & Ballet, 2001). Supporting beginning teachers was incorporated as a form of therapeutic guidance as well as to overcome the isolation of teachers (Gold, 1996).

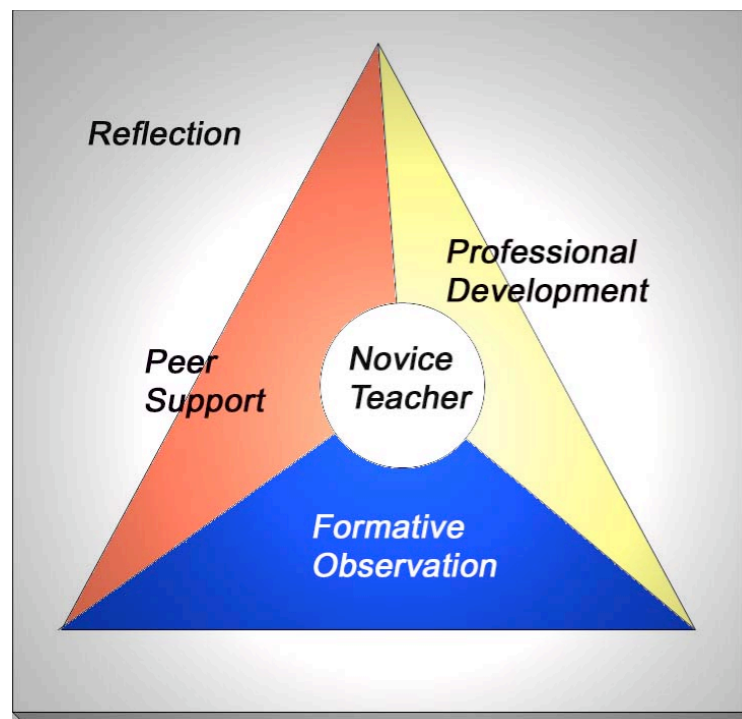


FIGURE 3.1. Conceptual Framework of the Integrated Triad of  
The University-based Teacher Induction Program

To build self-confidence and a high sense of teacher efficacy, the induction teacher model was oriented toward self-assessed needs and concerns (Gold, 1996). Through dialogue of situated learning between the peer group members facilitated by the mentor (Feiman-Nemser et al., 1999; Putnam & Borko, 2000; Vygotsky, 1978), novices had opportunities to “voice their concerns, share their joys and frustrations and help one another deal with problems” (Rogers & Babinski, 1999, p. 38).

In the regularly scheduled weekly meetings, teachers were grouped in communities of practice with peers who taught similar grade levels or disciplines (Lave & Wenger, 1991/2003). Through reflective dialogue, these meetings assisted entry-level teachers to concentrate on their concerns and find possible solutions. The sessions supported them to implement innovative teaching strategies within their classrooms and to grow professionally. The concerns voiced during the support sessions were also addressed during the formative observation conducted by the university mentor. Through questioning and feedback techniques used during the conference, the individual’s successes and concerns were addressed. Additionally, the successes observed during the observation were shared during the next peer support session. Sharing positive comments with the peer group boosted the novice teacher’s self esteem and sense of efficacy (Bandura, 1994).

### *Professional Development*

Continuing professional development was the second component of the integrated triad. While mentors were needed to assist the beginning teacher confront problems and concerns, the goals of mentoring advanced beyond supporting new

teachers emotionally. The teacher induction program assisted them in developing professionally (Feiman-Nemser et al., 1999). During their first year of teaching, novices were faced with the task of accomplishing two jobs: teaching and learning to teach more effectively (Feiman-Nemser et al.). Supporting beginning teachers emotionally, without including professional development within the induction year of training, left the novice's learning to chance (Feiman-Nemser et al.).

Gold (1996) and Pascopella (2004) emphasized the importance of incorporating research-based practices to enhance the instructional practice of novice teachers. Therefore, in this model, instruction-related support through weekly professional development seminars assisted the novice to enhance their knowledge, skills and strategies necessary to be successful within the classroom. This was accomplished by applying professional development topics to the content areas they teach. Shulman (1987) described this as pedagogical content knowledge. Topics of concern, research-based practices and critical components of culturally responsive pedagogy were addressed through the professional development curriculum. Other topics discussed included lesson planning, instructional strategies, federal and state policies, ethics and professionalism and developing relationships and communicating with parents, students, administrators and colleagues. Relevant materials focusing on professional development were developed and made available to the participants and their mentors.

Through participating in cooperative learning activities, using manipulatives, associating prior experiences with new learning and contributing to expert groups, the beginning teacher observed and participated in modeled techniques through cooperative

groups (Slavin, 2001). Experiencing sample activities and relating the learning principles to their practice allowed the novice teacher to observe and practice the skill before applying the learner-centered activity within their classroom (Joyce & Showers, 2002; Putnam & Borko, 2000).

By including the professional development component within the integrated triad, novice teachers were encouraged to transfer innovative strategies that enhanced their classroom instructional skills (Feiman-Nemser et al., 1999). These modeled techniques were also appropriate in addressing the learning styles of students representing diverse populations (Gay, 2000). Because teaching techniques were constantly changing, the professional development curriculum of the teacher induction program was dynamic and adjusted to meet the needs of the current participants (Huling-Austin, 1990; Hunt, 1974; Reiman & Theis-Sprinthall, 1998).

#### *Formative Observations*

The third piece of the integrated triad consisted of mentors conducting formative observations that addressed the beginning teacher's individual strengths and areas to develop within their classroom instruction. This component utilized the Teacher Induction Program Formative Observation Instrument (TIPFOI), an instrument similar to the summative evaluation instrument used by the teacher's supervisor (Appendix A). The TIPFOI measured instruction strategies, classroom management and organization, presentation of subject matter and learning environment.

Through observations and coaching, university mentors assisted the beginning teacher in incorporating the practices modeled during the professional development

sessions within their teaching (Gold, 1996; Joyce & Showers, 1980; 2002). These practices helped teachers transmit content knowledge into a comprehensive form understood by their students (Gold, 1996). Guidance provided to novice teachers when applying innovative strategies has been termed as “educative mentoring” by Feiman-Nemser (2001a). “Educative mentoring” is described as “a thoughtful, complex practice that incorporates a clear vision of the types of teaching practices novices needed to learn and the characteristics of effective teaching” (Feiman-Neimser, 2000, p. 3, 2001).

The university-based mentor, who also facilitated the weekly support meetings, observed participants in their classroom a minimum of three times during the first semester of the program and twice during the second semester. The Teacher Induction Program Formative Observation Instrument [TIPFOI] was used to measure the novice teacher’s performance within his or her classroom compared to pre-determined standards (Appendix A). By serving the dual role of facilitator and observer, the mentor became aware of the teacher’s concerns discussed in the peer support sessions and was able to observe the problem in context through formative classroom observations. The beginning teacher’s second observation was videotaped by the mentor and was immediately returned at the end of the instructional period for the mentee to critique. The third observation was completed before the end of the first semester. If both mentor and mentee felt that the teacher’s skills needed further development, the teacher and mentor agreed that additional formative observations would be conducted during the semester.

After conducting an observation, the university-based mentor and the mentee conferred in a post-conference to identify the salient features of the lesson. The discussion included the objectives accomplished, strengths of the lesson and areas in which instruction could be enhanced. The mentor and mentee collaboratively established clear teaching goals and provided a plan to augment the novice's teaching practices (Feiman-Nemser et al., 1999). As a result, entry-level teachers became aware of their instructional strengths and changes that should be made (Olebe et al., 1999). Through this experience, the teacher's individual practice was enhanced as the mentor provided diagnostic and descriptive feedback based on the information collected during the observation (Loucks-Horsely, Hewson, Love & Stiles, 1998; Portner, 2001). Through such a discussion, the novice teacher became more aware of the teaching behaviors observed during classroom instruction (Loucks-Horsely et al., 1998). For this assistance to be beneficial, mentors explained the reasoning behind the possible solutions to the problem (Wilkinson, 1994). This process enabled the novice teachers to grow and develop their own style of teaching (Feiman-Nemser, 2000). Successes were also shared with the novice's administrator either through an informal conference or note from the university-based mentor.

All novice teachers participating in the initial semester of the program were encouraged to continue the second semester. Those that returned the second semester were observed twice during the semester. The first observation conducted during the second semester was videotaped.



Upon entering the classroom, beginning teachers were expected to perform as well as veteran teachers (Huling-Austin, 1990). However, few were able to perform at an advanced level during their initial year of teaching (Bartell, 2005; Hargreaves & Fullan, 1999; Heidkamp, 1999; Hertzog, 2002; Huling-Austin, 1986; 1990; Odell & Huling, 2001). Therefore, the formative observation component was deemed a critical component in the university-based teacher induction program.

### *Reflection*

Reflective activities pervaded each component of the integrated triad. Those activities served as a catalyst for novice teachers in developing confidence and self-motivation through assessing their progress (Futrell, 1999; Smith, 2003). Entry-level teachers reflected on their practice (Schön, 1987), acquired new ideas from peers and developed educational vocabulary through sharing ideas and discussing practices during weekly support sessions (Boreen et al., 2000; Smith, 2003).

Learning research-based strategies presented during professional development seminars that addressed varied learning styles of students assisted beginning teachers to design appropriate instruction for their classrooms. Through these seminars, novice teachers became aware of the pre-determined standards used for formative observations conducted by their mentors and also used for evaluation by their administrators. As they instructed their classrooms, they were then able to apply those standards and modify instruction as they were teaching or “reflect in practice” (Schön, 1987). Technical reflection was used as they observed master teachers (Valli, 1997). As they observed teaching practices of veteran teachers, they compared the instruction to the same pre-

determined standards used in their formative observations (Valli, 1997). If deemed appropriate via the standards and their needs, novice teachers then applied the observed strategies within their classrooms (Boreen et al., 2000). Reflection was also promoted through requiring such structured activities as journaling and applying modeled activities within their instruction (Danielson & McGreal, 2000).

Reflection-on-action and technical reflection served as a means for improving classroom practices (Valli, 1997). In post-conferences, the mentor and the mentee used data collected from the classroom observation to critique the classroom instruction based on pre-determined standards used in the TIPFOI (Schön, 1987; Valli, 1997). Through conferencing with their mentors, novice teachers learned whether the teaching method applied was appropriate for teaching the objective or if another strategy would have been more effective (Bartell, 2005; Borrego & Hirai, 2004; Danielson & McGreal, 2000; Feiman-Nemser, 2000; Feiman-Nemser et al., 1999; Moir & Gless, 2001; Valli, 1997). As the mentor and mentee used reflection-on-action to discuss instructional practices, novices learned the practice of reflecting while they were teaching or applying reflection-in-practice (Schön, 1987).

Using focused questions, the novice completed reflective activities in the form of self-critiques of audio and videotaped instruction. These self-critiquing exercises allowed novice teachers to compare the videotapes with pre-determined standards of good teaching. Through these exercises, participants noted patterns of classroom events, areas of growth and those areas needing improvement exhibited within their instruction. Self-critiques assisted the beginning teachers in examining their professional growth

within the first year of teaching and assisted them in coping with the complexity of teaching. Learning to reflect and applying those skills assisted them in recognizing that learning to teach was an ongoing professional growth process.

### *University-based Mentors*

The university-based mentors were integral to the integrated triad model of the university-based teacher induction program. They received training, facilitated the peer support sessions, were made aware of the information novice teachers' received at the professional development seminars and completed formative observations. Through conversations in the peer support sessions and conferences after the formative observations, they helped the novice teachers to reflect on their practice (Schön, 1987).

University mentors were trained in adult learning (Knowles, 1998), situated cognition and socio-cultural theories (Lave, 1996; Lave & Wenger, 1991/2003; Vygotsky, 1978). Furthermore, mentor training included skills used to identify the needs and concerns of novice teachers, build relationships with the novice teacher, conduct formative observations, collect data from those observations and apply conferencing skills.

An essential element of the teacher induction program was training mentors to effectively assist entry-level teachers (Halford, 1999; Huling-Austin, 1989; TSBE, 1998). Mentor training was usually conducted during the beginning of the school year. Initial training topics included theories of adult learning, situated cognition and socio-cultural theories, phases of the beginning teacher's initial year of teaching, concerns of beginning teachers, culturally responsive pedagogy and clinical supervision. Monthly

mentor meetings supplied support for all mentors, allowed discussion of successful mentoring strategies and assisted in solving problems the novices confronted (Boreen et al., 2000; Brooks, 1999; Portner, 1998; Feiman-Nemser, 1996; Huling-Austin, 1989). Additionally, after each mentor meeting, the mentor discussed each beginning teacher's progress with the program coordinator.

While mentors in a traditional campus-based program were usually assigned to the same campus as the novice teacher, the university-based teacher induction program coordinator screened and hired recently retired master teachers (Galvez-Hjornevik, 1985). Utilizing retired master teachers provided the university-based teacher induction program with a readily available group of experienced teachers who had a flexible time schedule. The university-based mentor also had experiences in similar grade level and/or subject area in which the novice teacher taught.

After receiving training, university-based mentors were responsible for 8 to 12 mentees teaching at similar grade levels. They served in the roles of facilitating the peer support group as well as observing beginning teachers and providing constructive feedback. In this study, employing retired teachers as university-based mentors eliminated the need for campus-based mentors to be solely responsible for the emotional and instructional development of the entry-level teacher (NEA, 1998).

Of the ten most frequently listed components, this university-based induction program was based on nine of those. Establishing program purposes and goals, securing administrative support, using experienced retired teachers as mentors, providing professional development seminars, offering opportunities for collegial collaboration and

support, conducting formative observations, providing feedback on classroom observations, requiring reflective activities and observations of other teachers were characteristics included in the teacher induction program. Only orientation to the district or school campus failed to be addressed. However, novice teachers were encouraged to participate in campus orientations at their assigned schools to become familiar with their school campuses and cultures. Therefore, nine of the ten most frequently elements found in teacher induction programs were incorporated within this university-based teacher induction program. Additionally, 94 percent of the participants in the university-based teacher induction program have remained in teaching after five years (Moon-Merchant & Carter, 2004).

#### Population

Because the shortage of qualified teachers was most acute in urban schools (Darling-Hammond & Sykes, 2003; Carter & Larke, 1995), the target population for this study was urban novice teachers participating in a university-based teacher induction program located in the southwestern United States. The population of novice teachers in the study had been assigned to their first paid teaching assignment as teachers of record within an urban school district during their first two years of teaching.

#### Sample

The sample population for this study included members of five cohorts of urban teachers, who participated in either a one-semester or a two-semester university-based teacher induction program. Of the 145 urban novice teachers participating in the program, 120 entered during the fall semester, while 25 entered during the spring

semester of the academic years of 1994-95, 1995-96, 1996-97, 1997-98 and 1998-99. These cohorts were observed during their first year of teaching using the Teacher Induction Program Formative Observation Instrument (TIPFOI). The TIPFOI measured the classroom teaching behaviors of urban novice teachers during their first year of teaching. Therefore, the final observation of first semester participants occurred during December or May, while the final observation of two-semester participants also occurred during May or December depending upon when they entered the program. Participants were able to enter in either September of the fall semester or January of the spring semester.

The cohorts were then surveyed after the spring semester of their fifth year of teaching using the Teacher Induction Program Participant Survey (TIPPS). Because a different sample participated in the university-based teacher induction program each year, the number of participants of each sample differed at each data collection point in this longitudinal trend study (Gall, Borg & Gall, 1996). Furthermore, an aspect of this study was based on a voluntary sample of those who returned the Teacher Induction Program Participant Survey (TIPPS) five years after participation. Because the willingness of each participant to return the questionnaire was unpredictable, this was a non-probability sampling (Gall, Borg & Gall, 1996).

Of the 145 participants in a university-based teacher induction program, 63 (or 43 percent) participated in a one-semester program, while 82 (or 57 percent) were two-semester participants. Of the one-semester participants 54 (or 86 percent) were female and 9 (or 14 percent) were male. Further, 46 (or 73 percent) taught at the elementary

level. Of those 41 (or 89 percent) were female and 5 (or 11 percent) were male. Seventeen (or 27 percent) taught at the secondary level. Of these, 13 (or 76 percent) of the one-semester participants were female, while 4 (or 24 percent) were male (see Table 3.3).

Of the 82 (or 57 percent) two-semester participants, 68 (or 83 percent) were female, while 14 (or 17 percent) were male. Elementary teachers numbered 46 (or 56 percent). Of those 45 (or 98 percent) were female and 1 (or 2 percent) were male. Thirty-six (or 44 percent) of the two-semester participants were secondary teachers. Of those, 23 (or 64 percent) were female, while 13 (or 36 percent) were male. Of the total number of participants, 122 (or 84 percent) were female, while 23 (or 16 percent) were male (see Table 3.3).

According to the researchers, 88 percent of teachers working in urban schools were female (Arekere, 2004; Meek, 1998; National Center for Educational Statistics [NCES], 1999; Scherer, 1999; USDOE, 1997; Weiner, 1999). The sample of this study appeared to be representative of the gender of urban teachers. One-semester participants serving in urban schools comprised of 86 percent female, while 83 percent female teachers who were two semester participants also taught in urban schools.

Of the 145 urban novice teachers participating in a university-based teacher induction program, 63 (or 43 percent) participated in a one-semester program. One-semester participants included 33 (or 52 percent) European Americans. Of those, 30 (or 91 percent) were female and 3 (or 9 percent) were male. Thirty (or 48 percent) of the participants were Hispanic Americans. Females represented 24 (or 80 percent) of the

Hispanic American teachers, while 6 (or 20 percent) were male. No other ethnic groups were represented in the one-semester program (see Table 3.4).

TABLE 3.3. Length of University-based Teacher Induction Program, School Level Taught and Gender of Participating Urban Novice Teachers

Program	Grade Level	Total	%	Female	%	Male <i>n</i>	%
Length		<i>n</i>		<i>n</i>			
One-semester		63	43	54	86	9	14
Participants							
	Elementary	46	73	41	89	5	11
	Secondary	17	27	13	76	4	24
Two-semester		82	57	68	83	14	17
Participants							
	Elementary	46	56	45	98	1	2
	Secondary	36	44	23	64	13	36
Total <i>n</i>		145	100	122	84	23	16

Eighty-two (or 57 percent) of the urban novice teachers participated in the two-semester program. Of those participants, 44 (or 54 percent) were European American. Thirty-six (or 82 percent) were female, while 8 (or 18 percent) were male. Hispanic



American participants numbered 33 (or 40 percent). In this subsample, 27 (or 82 percent) were female and 6 (or 18 percent) were male. A total of four (or 5 percent) African American female teachers participated in the two-semester program, while one female teacher (or 1 percent) represented other ethnic groups (see Table 3.4).

Researchers reported that 88 percent of teachers in urban schools were of European American descent (Fideler & Haselkorn, 1999; Meek, 1998; NCES, 1999; Scherer, 1999; USDOE, 1997; Weiner, 1999). However, in this study, European American teachers, who were also one-semester participants, represented 33 (or 52 percent) of the urban teachers, while 30 (or 48 percent) were Hispanic Americans. Within the two-semester participants, 44 (or 54 percent) were European American and Hispanic American teachers represented 33 (or 40 percent) of the teachers. Four (or 5 percent) of the urban teachers in this study were African American and 1 (or 1 percent) represented other ethnicities (see Table 3.4). The higher percentage of Hispanic American teachers appeared to be reflective of the student population of this urban district (see Table 3.1). The student population of this urban district was 72 percent Hispanic American, while the European American student population was 21 percent.

Sample for Data Collection Period I

Of the sample of 145 teachers in this longitudinal trend study, 63 (or 43 percent) participated in a one-semester program. Of these, 54 (or 86 percent) were female, while 9 (or 14 percent) were male. Of one-semester participants, 41 (or 65 percent) taught in high poverty schools. Of those 34 (or 83 percent) were female, while 7 (or 17 percent)

TABLE 3.4. Length of University-based Teacher Induction Program, Ethnicity  
and Gender of Participating Urban Novice Teachers

Program Length	Ethnicity	Total <i>n</i>	Total %	Female <i>n</i>	%	Male <i>n</i>	%
One-semester Participants		63	43	54	44	9	14
	European American	33	52	30	91	3	9
	Hispanic American	30	48	24	80	6	20
	African American	0		0		0	
	Other	0		0		0	
Two-semester Participants		82	57	68	83	14	17
	European American	44	54	36	82	8	18
	Hispanic American	33	40	27	82	6	18
	African American	4	5	4	100	0	
	Other	1	1	1	100	0	
Total <i>n</i>		145	100	122	84	23	16

were male. Twenty-two (or 35 percent) taught in low poverty schools; 20 (or 90 percent) were female and 2 (or 10 percent) were male (see Table 3.5).

TABLE 3.5. Length of University-based Teacher Induction Program,  
Socio-economic Level of the School and Gender of Participating Urban Novice Teachers

Program Length	School's Socio-economic Level	Total <i>n</i>	Total %	Female <i>n</i>	%	Male <i>n</i>	%
One-semester		63	43	54	86	9	14
Participants							
	High Poverty	41	65	34	83	7	17
	Low Poverty	22	35	20	90	2	10
Two-semester		82	57	68	83	14	17
Participants							
	High Poverty	51	62	39	76	12	24
	Low Poverty	31	38	29	43	2	14
Total n		145	100	122	84	23	16

Two-semester participants numbered 82 (or 57 percent). Sixty-eight (or 83 percent) were female and 14 (or 17 percent) were male. Fifty-one (or 62 percent) taught in high poverty schools. Of those, 39 (or 76 percent) were female and 12 (or 24 percent) were male. Only 31 (or 38 percent) taught in low poverty schools. Of these, 29 (or 43 percent) were female and 2 (or 14 percent) were male (see Table 3.5).

As noted by researchers, novice teachers were often assigned to high poverty schools (Fideler & Haselkorn, 1999; Foster, 2004; National Center for Education Statistics [NCES], 1999). This sample also supported that research. Sixty-five percent of urban novice teachers who were one-semester participants were assigned to high poverty schools, while 51 percent of the two-semester participants taught in high poverty schools (see Table 3.5).

#### Sample for Data Collection Period II

Of the 145 participants in the university-based teacher induction program, 82 responded to the Teacher Induction Program Participant Survey (TIPPS) five years after program participation. Of those, 29 (or 35 percent) were one-semester participants and 53 (or 65 percent) were two-semester participants. Within the sample of one-semester participants, 17 (or 20 percent) taught at high poverty schools, while 12 (or 15 percent) taught at low poverty schools. Of the two-semester participants, 32 (or 40 percent) taught at high poverty schools and 21 (or 26 percent) taught at low poverty schools. The total number of urban novice teachers assigned to high poverty schools was 49 or 60 percent, while 33 or 40 percent taught at low poverty schools (see Table 3.6).

Researchers reported that a majority of urban novice teachers were assigned to high poverty schools (Dolton & Newson, 2003; Fideler & Haselkorn, 1999; NCTAF, 2003). This study's sample included 49 (or 60 percent) of the responding urban novice teachers that taught at high poverty schools; thus, reflecting samples of previous studies (see Table 3.6).

Of the 82 (or 57 percent) of the responding participants to the TIPPS, 29 (or 35 percent) of the respondents taught at the elementary level, while 53 (or 65 percent) were assigned to the secondary level. Of the one-semester participants, 18 (or 22 percent) taught at the elementary level, while 11 (or 13 percent) taught at the secondary level. Two-semester participants consisted of 32 (or 39 percent) teaching at the elementary level, while 21 (or 26 percent) taught at the secondary level (see Table 3.7).

TABLE 3.6. Length of University-based Teacher Induction Program  
and the Schools' Socio-economic Level of Participating  
Urban Novice Teachers Responding to the TIPPS

Program Length	Totals		High Poverty Schools		Low Poverty Schools	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
One-semester Participants	29	35	17	20	12	15
Two-semester Participants	53	65	32	40	21	26
Total	82	100	49	60	33	40

TABLE 3.7. Length of University-based Teacher Induction Program  
and the Grade Level Taught by Participating  
Urban Novice Teachers Responding to the TIPPS

Program Length	Totals		Elementary Level		Secondary Level	
	n	%	n	%	n	%
One-semester Participants	29	35	18	22	11	13
Two-semester Participants	53	65	32	39	21	26
Total	82	100	50	61	32	39

While this sample of secondary teachers has not been separated by subject area, studies have found secondary teacher shortages in math, science, English and social studies for urban schools (Fuller & Alexander, 2004; Claycomb, 2000; Ingersoll, 2001).

#### Instruments

Two instruments, the Teacher Induction Program Formative Observation Instrument (TIPFOI) (Appendix A) and the Teacher Induction Program Participant Survey (TIPPS), (Appendix G), were used to gather data for the study. The TIPFOI, a formative observation instrument was analogous to the Texas Teacher Appraisal System

(TTAS), a state mandated, summative evaluation instrument used by the teacher's supervisor (Barnes, 1987). The TIPFOI is a list of pre-determined standards based on the same criterion including instructional strategies, classroom management and organization, presentation of subject matter and learning environment. The data collected during the novice teachers' observation of classroom teaching behaviors were compared with the standards listed on the TIPFOI and used while urban novice teachers participated in a university-based teacher induction program during their first year of teaching.

The second instrument, the Teacher Induction Program Participant Survey (TIPPS), was used to determine the retention rate of past participants after five years of teaching and their perceptions of the components of a one-semester and a two-semester university-based teacher induction program during their fifth year of teaching. The TIPPS was administered during the past participants' fifth year of teaching since national studies had determined the rate of teacher retention during that period of the teacher's career was 46 percent (Fideler & Haselkorn, 1999; Haberman, 2000; Ingersoll, 2001).

#### Pilot Studies

Two pilot studies were conducted to develop the instruments used in this study. Since the TIPFOI was analogous to the TTAS, the Texas Education Agency (TEA) conducted the first pilot study. TEA initiated the development and implementation of the TTAS (Barnes, 1987; TEA, 1984). In 1985-86, TEA conducted a pilot study using TTAS in six small, middle, and large school districts within the state of Texas before it

became the primary evaluation instrument used by the state to evaluate teachers (Barnes, 1987; TEA, 1984).

#### Teacher Induction Program Formative Observation Instrument

In a pilot study of the TIPFOI, observations of three cohorts of teachers participating in a university-based teacher induction program during 1991-92, 1992-93 and 1993-94 were conducted. Participating teachers were observed a minimum of three times during the first semester and twice during the second semester of the teacher induction program. The scores from each observation were recorded for future analysis.

#### Teacher Induction Program Participant Survey

To develop the Teacher Induction Program Participant Survey (TIPPS) used in this study, a needs assessment of recent graduates from the College of Education from a mid-sized regional university in the southwestern section of the United States was conducted. During May 1991, a letter (Appendix B) and open-ended needs assessment (Appendix C) were sent to all beginning teachers that had completed their first year of teaching. The open-ended needs assessment requested that participants list areas in which they felt they needed additional assistance during their first year of teaching. The return rate of the open-ended needs assessment was 20 percent.

The responses from this needs assessment were used to develop a pilot survey of the questionnaire eventually used in this study. A draft of the questionnaire to be used in the pilot study was submitted to a jury of experts at the university. The experts gave suggestions for instrument revision. Revisions were made. In April 1994, a letter (Appendix D) and the amended questionnaire (Appendix E) were sent to the



participating cohorts in 1991-92, 1992-93 and 1993-94 who had participated in a one-semester or a two semester university-based teacher induction program.

The letter (Appendix D) explained the need for the confidential information, the importance of participating in the study and the directions for completing the questionnaire. A pre-addressed, stamped envelope and a questionnaire were included with the letter. The three-page, 33-item questionnaire (Appendix E) consisted of open-ended questions as well as Likert-scaled items. Participants were asked to indicate the strategies they continued to consistently use and were presented during their participation in the university-based teacher induction program. They were also asked to rate their effectiveness.

Furthermore, they were to indicate the classroom teaching behaviors they were continuing to consistently exhibit within their classrooms. They were also asked to report the results of their summative evaluations conducted by their administrators and specify school leadership activities in which they had been involved. Members of the cohorts were asked to return the completed survey in a pre-addressed stamped envelope. The return rate was 50 percent of the 108 questionnaires.

Upon return of the pilot study questionnaires, a revised survey was developed. Consequently, it was submitted to a different jury of experts. Based on the responses, additional revisions were suggested, made and implemented in the TIPPS for this longitudinal trend study.

## Reliability of the Instruments

Data analysis was conducted on both instruments using Statistical Package for the Social Sciences (SPSS) computer software. Estimates of reliability were determined for each of the two instruments used in this study. The Texas Education Agency (TEA) established reliability of the TTAS through interrater reliability. Different observers in various sized school districts throughout Texas conducted observations using this instrument. Two or three trained observers collected data while observing the classroom teaching behaviors of selected teachers within small, medium and large school districts across the state. This method yielded consistency among the observers that used the instrument. Interrater reliability was established with a 10 percent agreement among the observers.

Interrater reliability of the TIPFOI was also established for this study as mentors viewed the same teacher conducting a lesson during an instructional period. The results of the mentors' observations were compared. Since the observation scores were within 10 percent of agreement, interrater reliability was established for its use in the university-based teacher induction program. This process occurred annually.

The second instrument, the TIPPS, employed Likert-scale type items; therefore, Chronbach's alpha was used to estimate the internal consistency of the survey items. To establish internal consistency, predetermined items related to each program component were tested for accuracy in measuring the construct. Reliability was established at .89 for the responses. Additionally, reliability was also established for each component. The alpha for questions regarding peer support was established at .74, while the

standardized item alpha was .77. The alpha for professional development was ascertained at .81 and the standardized item alpha was .84. The alpha for responses regarding formative observations was determined to be .85 and the standardized item alpha was .84.

#### Validity of the Instruments

Between 1985 and 1987, the TEA established the validity of the TTAS. According to Rogers (personal communication, June 14, 2002), the TTAS was deemed a “comprehensive, standards-based evaluation that included consideration of content, instruction, student participation and progress”. The TIPFOI included the same criteria as the TTAS and was used to observe beginning teachers in this study during the initial year of teaching. It measured the same indicators used by the beginning teacher’s supervisor when conducting a summative evaluation.

The external validity of the TIPPS used in the study was established through a series of steps that included an open-ended needs assessment, juries of experts, a pilot study of the questionnaire and two revisions of the questionnaire. The amended questionnaire, the TIPPS, a six-page, Likert-scale instrument, consisting of approximately fifty items, was used in this study. The jury of experts approved the face and content validity of the survey. Internal validity was regulated through the listing of limitations found in the study.

#### Research Design

This descriptive statistical research design was a longitudinal trend study (Gall, Borg & Gall, 1996). A longitudinal trend study is defined as “describing change by

selecting a different sample at each data collection point from a population that does not remain constant” (Gall, Borg & Gall, 1996, p. 377). Archival data was used to describe the effects of observation scores of classroom teaching behaviors of one-semester and two-semester participants of a university-based teacher induction program. Archival data has been defined as “existing sources of data currently available in the files or archives of a school, college or other agencies and institutions or of individual staff members” (Calhoun, 1994, p. 53). This longitudinal trend study (Gall, Borg & Gall, 1996) of participating urban novice teachers utilized archival data of observation scores of classroom teaching behaviors to determine the teacher quality of past participants of a university-based teacher induction program based on pre-determined standards used during the program.

Additionally, the perceptions of participants of a one-semester and a two-semester university-based teacher induction program were also analyzed in a second data collection period through the use of the Teacher Induction Program Participant Survey (TIPPS). The respondents rated their perceptions regarding the components of peer support sessions, professional development seminars and formative observations (Isaac & Michael, 1997; Menard, 2002; Taris, 2000).

#### Data Collection

To answer the research questions driving this longitudinal trend study (Gall, Borg & Gall, 1996), pre-existing data were examined. Because the samples included urban novice teachers that participated during different years, this study was determined to be a longitudinal trend study (Gall, Borg & Gall, 1996). Data were collected during

two collection periods: the novice teachers' first year of teaching and the responding past participants' fifth year of teaching.

To answer the first two research questions, the first data collection period established the observable, classroom teaching behaviors exhibited by the beginning teacher participating in the university-based teacher induction program during their first year of teaching as measured by the TIPFOI. Archival observational data were collected from urban novice teachers enrolled in a university-based teacher induction program during 1994-95, 1995-96, 1996-97, 1997-98 and 1998-99 academic years.

#### Teacher Induction Program Formative Observation Instrument

The observational data addressed in research questions 1 and 2 were collected using the TIPFOI during the beginning teacher's first year of teaching. Novice teachers participated in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program. Novice teachers participating in a one semester the university-based teacher induction program were observed three times. Those that participated in a two-semester induction program were observed a total of five times. Data from the first, middle and last observations were collected from those who participated in a one-semester university-based teacher induction program. Data from the first, middle and last observations were collected from participants enrolled in a two-semester university-based teacher induction program.

The third and fourth research questions were answered by data collected during the second data collection period. This period occurred during the program participants' fifth year of teaching, 1998-99, 1999-00, 2000-01, 2001-02, and 2002-03. Participants of

five cohorts were asked to complete and return a survey of their perceptions of the university-based teacher induction program components.

#### Teacher Induction Program Participant Survey

Through the administration of the TIPPS, data were also collected five years after urban teachers participated in either a one-semester or two-semester university-based teacher induction program. Data from the TIPPS were used to answer research questions 3 and 4. The decision to administer the TIPPS after participants had completed five years of teaching was based on research stating that 46 percent of beginning teachers abandoned the profession within the first five years after beginning their career (Ingersoll, 2001), yet Fideler and Haselkorn (1999) reported a 93 percent retention rate of those involved in a teacher induction program. Administering the TIPPS at this period in the participant's career would measure the effectiveness of the program components as perceived by the respondents.

A letter (Appendix F) explaining the importance of the study and the need for the confidential information was mailed to participating teachers of the 1994-95, 1995-96, 1996-97, 1997-98 and 1998-99 cohorts during the participants' fifth year of teaching. The letter was accompanied by a self-addressed, stamped envelope and a six-page, 50-item Likert-scaled TIPPS and mailed to those participants in 1998-99, 1999-00, 2000-01, 2001-02, 2002-03 (Appendix G). Data were collected from members of the cohorts that were contacted and responded to the TIPPS. Therefore, volunteer subjects completed and returned the questionnaires (Gall, Borg & Gall, 1996). Non-respondents were first contacted via a postcard regarding the importance of completing and returning the

questionnaire. A follow-up telephone call was then made to participants who failed to respond to the postcard.

### Data Analysis

Data analysis was conducted using Statistical Package for the Social Sciences (SPSS) computer software. Research questions one and two examined a sample of 145 urban novice teachers who were observed during their initial year of teaching using the TIPFOI. To answer research questions three and four, the TIPPS was mailed to the 145 past participants of the university-based teacher induction program. After five years of teaching, 82 (or 56.5 percent) responded to the survey.

As discussed in the Definitions of Terms, urban novice teachers participating in a one-semester university-based teacher induction program were referred to as *one-semester participants*, while novice teachers participating in a two-semester university-based teacher induction program were referred to as *two-semester participants* to clarify the procedures described in Data Collection and Data Analysis. The procedures for analyzing the data collected are explained after each research question.

### Procedure

Before conducting tests to examine each research question, a repeated measures analysis of variance (ANOVA) was conducted to determine whether growth in the observation scores of classroom teaching behaviors occurred for teachers participating in a university-based teacher induction program. The macro means of the first, middle and final observation scores of all one-semester participants and two-semester participants were calculated to determine significant growth over time.

*Research Question 1*

Is there a statistically significant difference between the observation scores of classroom teaching behaviors of urban novice teachers who participated in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program?

To determine whether a statistically significant difference existed between classroom teaching behaviors of urban novice teachers participating in a one-semester university-based teacher induction program and classroom teaching behaviors of novice teachers participating in a two-semester university teacher induction program, the means and standard deviations of the first, middle and last observation scores of classroom teaching behaviors were calculated during their participation (Pallant, 2001/2004).

Since the one-semester participants were exposed to the same conditions over time as were the two-semester participants, statistical significance was determined through conducting a repeated measures ANOVA comparing the means of the observation scores of classroom teaching behaviors of the TIPFOI (see Appendix A). The significance was calculated by conducting a Wilks Lambda Test. Using the scores of the first, middle and last formative observations of classroom teaching behaviors of one-semester participants and two-semester participants, the change in classroom teaching behaviors of one-semester participants and two-semester participants were compared.



*Research Question 2*

Is there a statistically significant difference between the observation scores of classroom teaching behaviors of urban novice teachers who participated in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program related to the socio-economic level of the school or the grade level taught?

To establish whether a significant change occurred over time in relation to the socio-economic level of the school and the grade level taught, a split-plot analysis of variance (SPANOVA) was conducted. The macro means and standard deviations of one-semester participants' and two-semester participants' observation scores of classroom teaching behaviors were compared using a between groups analysis and a within group tests related to socio-economic level of the school and the grade level taught.

*Socio-economic level of the school*

The SPANOVA compared two different groups, the one-semester participants and the two-semester participants (independent variables - between subjects), the socio-economic level of the school (independent variables - within subjects) and the first, middle and final observation scores of classroom teaching behaviors (dependent variables). A Wilks-Lambda Test was also used to report the existence of a statistically significant difference between the one-semester participants and two-semester participants, who taught at either high or low poverty schools.

*Grade level*

An additional SPANOVA compared the two different groups, one-semester participants and two-semester participants (independent variable – between subjects), elementary or secondary level (independent variable – within subjects) and the first, middle and final observation scores of classroom teaching behaviors (dependent variables). A Wilks-Lambda Test comparing the means of the observation scores was also used to report the existence of a statistically significant difference between the one-semester participants and two-semester participants who taught at either the elementary or secondary level.

*Research Question 3*

Which program component, as perceived by urban novice teachers, participating in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program, was identified as most effective after teaching five years?

Of the 145 participants in the university-based teacher induction program, 82 or 57 percent returned the TIPPS. Upon receipt of the TIPPS, the frequency of respondents who continued to teach five years after participation was calculated.

To determine which program component was perceived as most effective by novice urban teachers, the macro means of the perceptions of urban novice teachers related to peer support, professional development and formative observation were calculated separately. The macro means of the perceptions of each component were then

compared to determine the component that received the highest mean score. In addition, the mean and standard deviations were graphed as to how the responses were skewed.

#### *Research Question 4*

Is there a statistically significant difference in the effectiveness of program components, as perceived by urban novice teachers five years after participating in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program, related to the socio-economic level of the school or the grade level taught?

To determine whether a statistically significant difference existed between the one-semester and two-semester past participants' perceptions of program components in relation to socio-economic level of the school and grade level taught, Kruskal Wallis Tests, non-parametric tests, were conducted. Because the past participants' perceptions of the program components of the university-based teacher induction program were skewed, a Kruskal Wallis Test, was used to calculate the level of statistical significance.

#### *Socio-economic level of the school*

The Kruskal Wallis Test was used to compare the means of three or more groups. The means of the past participants' perceptions of peer support, professional development and formative observation (dependent variables) were compared with the one-semester and two-semester participants' perceptions (independent variables) and the socio-economic level of the school (independent variables). A statistically significant difference in the effectiveness of program components as perceived by urban novice

teachers five years after participating in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program related to the socio-economic level of the school was tested using the Kruskal Wallis Test.

Using the Kruskal Wallis Test, the participants were first separated into groups of one-semester participants and two-semester participants. Then they were divided into those participants who taught at either high or low poverty schools. The Kruskal Wallis Test then compared means of the past participants' perceptions of peer support, professional development and formative observation related to socio-economic level of the school to determine a statistically significant difference among the variables (Pallant, 2001/2004, p. 263).

#### *Grade level*

The Kruskal Wallis Test was used to compare the means of three or more groups. The means of the past participants' perceptions of peer support, professional development and formative observation (dependent variables) were compared with the one-semester and two-semester participants' perceptions (independent variables) and the grade level taught (independent variables). A statistically significant difference in the effectiveness of program components as perceived by urban novice teachers five years after participating in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program related to the grade level taught was also tested using the Kruskal Wallis Test.

Using the Kruskal Wallis Test, the participants were first separated into groups of

one-semester participants and two-semester participants. Then they were divided into those participants who taught at either elementary or secondary level. The Kruskal Wallis Test then compared means of the perceptions of past participants of peer support, professional development and formative observations related to the grade level taught to determine a statistically significant difference among the variables (Pallant, 2001/2004, p. 263).

### Summary

This chapter described the demographics of the community in which the longitudinal trend study took place and a description of the university-based teacher induction program. Archival data was used in this descriptive statistical research design of a longitudinal trend study. The pilot studies were discussed in addition to the development of the instruments and their utilization within the study. The procedures used to collect and analyze the data of the study were also described.

## CHAPTER IV

### RESULTS AND ANALYSIS

In this longitudinal trend study (Gall, Borg & Gall, 1996) of urban novice teachers who participated in a one-semester university-based teacher induction program or a two-semester university-based teacher induction program, data analysis was conducted using Statistical Package for the Social Sciences (SPSS) computer software. Research questions one and two examined the observation scores of classroom teaching behaviors of a sample of 145 urban novice teachers, while participating in a university-based teacher induction program during their initial year of teaching. As noted in the methodology, 63 (or 43 percent) urban novice teachers participated in a one-semester program, while 82 (or 57 percent) participated in a two-semester program. The first data collection period examined the observable, classroom teaching behaviors exhibited by urban novice teachers as measured by the Teacher Induction Program Formative Observation Instrument (TIPFOI). Data from observation scores of classroom teaching behaviors were collected from urban novice teachers who were either one-semester participants or two-semester participants enrolled during 1994-95, 1995-96, 1996-97, 1997-98 and 1998-99 academic years.

Research questions three and four dealt with urban novice teachers, who participated in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program, and responded to the Teacher Induction Program Participant Survey (TIPPS) during the second data collection period. The second period of data collection occurred during the program participants' fifth year

of teaching, 1998-99, 1999-00, 2000-01, 2001-02 and 2002-03. Participants were asked to complete and return the TIPPS of their perceptions of the program components of peer support, professional development and formative observations. Of the 145 participants of the university-based teacher induction program, 82 (or 56.5 percent) responded to the TIPPS five years after participating. Of those respondents, 29 (or 35 percent) participated in a one-semester program, while 53 (or 65 percent) enrolled for a two-semester program.

The instruments were appropriate for this study. Each instrument was administered at different phases within the teachers' career, the first and fifth years of teaching. The TIPFOI was similar to the summative evaluation instrument used by the novice teacher's supervisor, while the TIPPS was designed to solicit perceptions of program components from teachers who had participated in the university-based teacher induction program during their fifth year of teaching. The procedures used to examine the data follow each research question.

Before conducting tests to examine each research question, a repeated measures analysis of variance (ANOVA) was conducted to establish a growth in the observation scores of classroom teaching behaviors over time. A Wilks Lambda Test reported a statistical significance of .00 with  $p < .05$  with a large effect size of .27 (Pallant, 2001/2004). Therefore, since a statistically significant difference was determined demonstrating growth, the remaining tests examining the study's research questions were conducted.

### Research Question 1

Is there a statistically significant difference between classroom teaching behaviors of urban novice teachers who participated in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program?

To answer the first research question of this descriptive study, the means and standard deviations of the first, middle and final observation scores of classroom teaching behaviors were calculated for the 63 one-semester participants. The means and standard deviations of the first, middle and final observations of classroom teaching behaviors were also computed for 82 two-semester participants. Data was collected from both groups using the TIPFOI (see Appendix A).

Sixty-three one-semester participants teaching in urban schools scored an observation mean of classroom teaching behaviors of 87.95 on their first observation with standard deviation of 10.59. On the middle observation, this same group scored a mean of 92.00, with a standard deviation of 10.01. The final observation mean of one-semester participants was calculated at 93.25 with a standard deviation of 8.69 (see Table 4.1).

The 82 two-semester participants scored an observation mean of classroom teaching behaviors of 85.49 on the first observation with a standard deviation of 16.23. Additionally, this group scored a mean of 93.38 on the middle observation with a standard deviation of 8.78. On the final observation, the two-semester participants also scored a mean of 95.28 with a standard deviation of 5.30 (see Table 4.1).



TABLE 4.1. Means and Standard Deviations of Observation Scores of Classroom Teaching Behaviors of One-semester Participants and Two-semester Participants

	First			Middle		Final	
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
One-semester participants	63	87.95	10.59	92.00	10.01	93.25	8.69
Two-semester participants	82	85.49	16.23	93.38	8.78	95.28	5.30

As the mean of the observation scores of classroom teaching behaviors of one-semester and two-semester participants increased, the standard deviations decreased. Thus, suggesting a closer distribution of scores as the participants progressed through the program. While the observation scores increased at a similar rate, it appears that the range of the standard deviations was greater for the two-semester participants than the one-semester participants.

A one-way repeated measures ANOVA was used to compare these means. A Wilks Lambda Test was used to establish a statistical significant difference among the first, middle and final observations for one-semester and two-semester participants. Using a Wilks Lambda Test,  $p = .10$  at  $p < .05$ . Therefore, it appears that there was no statistical significant difference between observation scores of classroom teaching

behaviors of one-semester and two-semester participants. The partial eta squared effect size was .03. This further established that no statistically significant difference was found (Pallant, 2001/2004, p. 216).

Based on the aforementioned statistical tests, observation scores of classroom teaching behaviors were not affected by the length of the one-semester or two-semester university-based teacher induction program. Using the pre-determined standards as a basis for the observation scores of classroom teaching behaviors, both one-semester and two-semester participants' scores increased, while the standard deviations decreased. While both groups experienced growth over time as noted by higher observation scores of classroom teaching behaviors as, it appeared that the scores became more consistent due to less distribution of both groups' observation scores of classroom teaching behaviors.

Enhancing the participants' teaching performance and instructional effectiveness were important effects of a teacher induction program noted in the research literature (Bartell, 2005; Brewster & Railsback, 2001; Darling-Hammond, 2001; 2005; Evertson & Smithey, 2001; Fideler & Haselkorn, 1999; Fleishchmann et al., 2000; Giebelhaus & Bowman, 2002; Gold, 1996; Grant, 2003; Joeger & Bremer, 2001; Loucks-Horsely, et al., 1998; Klug & Salzman, 1990; Moon-Merchant & Carter, 2004; Moir & Gless, 2001; Nugent & Faucette, 2004; Odell & Ferraro, 1992; Olebe, 2001; Portner, 2001; Runyan et al., 1998; Villar, 2004; Weiman & Colbert, 2003; Weiss & Weiss, 1999; Wojnowski et al., 2003; Wonacott, 2002).

Researchers noted that teachers participating in induction programs became more competent more quickly than novice teachers who were not involved in such programs (Darling-Hammond, 2001; 2005; Wojnowski et al., 2003; Villar, 2004). Evertson and Smithey (2001) determined that novice teachers, who were mentored, established classroom routines and were, therefore, more effective in organizing and managing instruction. They also found that these teachers provided justification for teaching specific lessons, utilized particular activities for instruction; paced and sequenced instruction; checked students' knowledge of concepts being taught; described and gave purposes for the lesson's objectives; provided and demonstrated practical examples and challenged students' thinking (Evertson & Smithey, 2001).

Klug and Salzman (1990) stated that novice teachers displayed continuous growth in acquiring instructional skills when involved in a teacher induction program. Other researchers reported that novice teachers engaged in teacher induction programs demonstrated instructional skills that addressed students' learning styles, were more effective in organizing and managing instruction and appropriately utilized innovative models of teaching (Evertson & Smithey, 2001; Klug & Salzman, 1990; Runyan et al., 1998).

### Research Question 2

Is there a statistically significant difference between classroom teaching behaviors of urban novice teachers who participated in either a one semester university-based teacher induction program or a two-semester university-based

teacher induction program based on the characteristics related to socio-economic level of the school or the grade level taught?

To establish whether a significant growth occurred over time in relation to the socio-economic level of the school and the grade level taught, a SPANOVA was conducted. The macro means and standard deviations of one-semester participants' and two-semester participants' observation scores of classroom teaching behaviors were calculated compared using a between groups analysis and a within group tests related to socio-economic level of the school. The Mauchly's Test for Sphericity calculated a significance value of .00 indicating that the data violated the assumption of sphericity. To compensate for this violation, the multivariate statistics were examined using a Wilks Lambda Test.

#### Socio-economic Level of the School

The SPANOVA test compared two different groups, one-semester participants and two-semester participants (independent variable - between subjects), the socio-economic level of the school (independent variable - within subjects) and the first, middle and final observation scores of classroom teaching behaviors (dependent variables).

One-semester participants teaching in high poverty schools had a mean of 88.63 with a standard deviation of 10.57 for their first observation. The same group had a middle observation score of 91.49 with a standard deviation of 10.99. The one-semester participants' final mean score was 93.29 with a standard deviation of 9.52. The one-semester participants teaching at low poverty schools had a mean of 86.68 with a

standard deviation of 10.75. This same group's mean of the middle observation was 92.95 with a standard deviation of 8.09. The mean of the final observation of one-semester participants teaching at low poverty schools was 93.18 with a standard deviation of 7.09 (see Table 4.2).

Two-semester participants teaching in high poverty schools had a mean of 86.36 with a standard deviation of 12.09 for their first observation. The same group had a middle observation score of 93.18 with a standard deviation of 8.78. The two-semester participants' final mean score was 95.20 with a standard deviation of 5.15. The two-semester participants teaching at low poverty schools had a mean of 84.10 with a standard deviation of 21.67. This same group's mean of the middle observation was 93.65 with a standard deviation of 9.04. The mean of the final observation of two-semester participants teaching at low poverty schools was 95.42 with a standard deviation of 5.70 (see Table 4.2).

Upon analysis of the means of the observation scores of classroom teaching behaviors of one-semester and two-semester participants using a between subjects test of the SPANOVA, the mean of the observation scores of classroom teaching behaviors increased, while the standard deviation decreased. Thus, the observation scores of classroom teaching behaviors appeared to be more closely distributed as participants progressed through the university-based induction program. It was also noted that the two-semester participants assigned to teach at low-poverty schools had a greater range of standard deviations from the first observation score of classroom teaching behaviors to the final observation score (See Table 4.2).

TABLE 4.2. Observation Scores of Classroom Teaching Behaviors of  
One-semester Participants and Two-semester Participants  
Related to the Socio-economic Level of the School

Semester	<i>N</i>	Socio- economic Level of the School	First Observation		Middle Observation		Final Observation	
			<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1	63	High Poverty	88.63	10.57	91.49	10.99	93.29	9.52
		Low Poverty	86.68	10.75	92.95	8.09	93.18	7.09
2	82	High Poverty	86.36	12.09	93.18	8.78	95.20	5.15
		Low Poverty	84.10	21.67	93.65	9.04	95.42	5.70

A Wilks Lambda Test was also used to determine the existence of a statistically significant difference between the one-semester participants and two-semester participants who taught at either high or low poverty schools. The Wilks Lambda Test reported  $p = .92$  with a partial eta squared effect size of .00. Therefore, at  $p < .05$ , no statistically significant difference was found in the observation scores of classroom teaching behaviors based on the socio-economic level of the school.

Through an examination of observation scores of classroom teaching behaviors of one-semester participants or two-semester participants, who taught at high or low poverty schools, no statistically significant difference was found. Therefore, the socio-

economic level of the school appeared not to have had an effect on the observation scores of classroom teaching behaviors of either the one-semester or two-semester participants.

#### Grade Level

An additional SPANOVA compared the macro means and standard deviations of one-semester participants' and two-semester participants' observation scores of classroom teaching behaviors using a between groups analysis and a within group test related to the grade level taught.

One-semester participants teaching at the elementary level had a mean of 89.39 with a standard deviation of 10.29 for their first observation. The same group had a middle observation score of 93.04 with a standard deviation of 9.74. The one-semester participants' final mean score was 93.87 with a standard deviation of 9.23. The one-semester participants teaching at the secondary level had a mean of 84.06 with a standard deviation of 10.70. This same group's mean of the middle observation was 89.18 with a standard deviation of 10.50. The mean of the final observation of one-semester participants teaching at the elementary level was 91.59 with a standard deviation of 7.01 (see Table 4.3).

Two-semester participants teaching at the elementary level had a mean of 87.61 with a standard deviation of 11.68 for their first observation. The same group had a middle observation score of 92.91 with a standard deviation of 8.80. The two-semester participants' final mean score was 96.30 with a standard deviation of 4.85. The two-semester participants teaching at the secondary level had a mean of 82.78 with a

standard deviation of 20.52. This same group's mean of the middle observation was 93.97 with a standard deviation of 8.83. The mean of the final observation of two-semester participants teaching at secondary level was 93.97 with a standard deviation of 5.62 (see Table 4.3).

TABLE 4.3. Observation Scores of Classroom Teaching Behaviors of One-semester Participants and Two-semester Participants Related to the Grade Level Taught

Semester	Level Taught	First Observation		Middle Observation		Final Observation		
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
		<i>N</i>						
1	Elementary	63	89.39	10.29	93.04	9.74	93.87	9.23
	Secondary		84.06	10.70	89.18	10.50	91.59	7.01
2	Elementary	82	87.61	11.68	92.91	8.80	96.30	4.85
	Secondary		82.78	20.52	93.97	8.83	93.97	5.62

Upon examination of the means of the observation scores of classroom teaching behaviors of one-semester and two-semester participants, it was observed that as the means of the observation scores of classroom teaching behaviors increased, the standard deviations decreased. Thus, the observation scores of classroom teaching behaviors appeared to be more closely aligned as participants progressed through the university-



based teacher induction program. Through the examination of the means and standard deviations of the observation scores, it was noted that the two-semester participants who taught at the secondary level had a greater range in the standard deviations between means of the first and final observation scores (see Table 4.3).

A Wilks Lambda Test was also used to determine the existence of a statistically significant difference between the one-semester participants and two-semester participants who taught at elementary or secondary levels. The Wilks Lambda Test established  $p = .29$  with a partial eta squared effect size of  $.02$ . Therefore, it appears that the grade level taught failed to effect the observation scores of classroom teaching behaviors since no statistically significant difference was established at  $p < .05$ .

Through an examination of observation scores of classroom teaching behaviors of one-semester participants and two-semester participants, who taught at either the elementary or secondary level, no statistically significant difference was found. Further, the grade level taught by the one-semester and two-semester participants appeared to have had no effect on the observation scores of classroom teaching behaviors of either group of participants in the university-based teacher induction program.

Based on the aforementioned statistical tests, socio-economic levels of the schools nor the grade level at which the urban novice teacher taught effected the observation scores of classroom teaching behaviors of one-semester participants or two-semester participants of a university-based teacher induction program. Using the pre-determined standards as a basis for the observation scores of classroom teaching behaviors, both one-semester and two-semester participants experienced growth over

time as noted by higher observation scores of classroom teaching behaviors. Upon further examination, it was noted that as mean of the observation scores increased, the standard deviations decreased. Therefore, it appeared that the means of the observation scores appeared to be more consistent due to less distribution within the scores.

The consistency of program components in providing psychological and instructional support for urban novice teachers appears to have assisted the novice teacher in attaining growth over time regardless of whether the novice teacher was assigned to a high or low poverty school or taught at the elementary or secondary level. Of the ten most frequently listed components of teacher induction program, the university-based induction program contained nine. Only orientation to the school district and campus failed to be addressed in the university-based teacher induction program. However, participating novice teachers were encouraged to participate in campus orientations at their assigned schools or find a more experienced teacher on the school's campus to familiarize themselves with the school culture.

Establishing program purposes and goals, securing administrative support, using experienced retired teachers as mentors, providing professional development seminars, offering opportunities for collegial collaboration and support, conducting formative observations, providing feedback on classroom observations, requiring reflective activities and observations of other teachers were characteristics included in the university-based teacher induction program. Integrating the characteristics of effective teacher induction programs within the program components of the university-based

teacher induction program appeared to provide strategies that addressed issues confronting urban novice teachers.

### Research Question 3

Which program component, as perceived by urban novice teachers, participating in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program, was identified as most effective after teaching five years?

Research questions three and four focused on the perceptions of 82 (or 57 percent) of the urban novice teachers, who participated in a university-based teacher induction program during their initial year of teaching and also responded to the TIPPS (see Appendix G). This occurred during the second data collection period, the participants' fifth year of teaching. Of the respondents, 29 (or 35 percent) participated in a one-semester program, while 53 (or 65 percent) participated in a two-semester program.

Participants were asked to complete and return a survey, the TIPPS, denoting whether they were continuing to teaching after five years. Through a frequency test, it was determined that 77 (or 94 percent) of the respondents were retained within the educational profession during their fifth year of teaching, while 5 participants (or 6 percent) had elected to remain home with young children. Of those retained within the profession, 71 (or 87 percent) were continuing to teach, 3 (or 4 percent) were employed as school district consultants, 2 (or 2 percent) were serving as librarians and 1 (or 1 percent) was an administrator.

Further, they were to rate their perceptions of the program components of peer support, professional development and formative observation. Table 4.4 lists the questionnaire items and reliability that measured the components of the university-based teacher induction program as perceived by the urban novice teachers' responding to the TIPPS.

TABLE 4.4. Survey Items Corresponding with Program Components and Reliability

Component	Survey Items	Reliability
Peer Support	9k, 13a, 13f, 13g, 13h, 13i, 13j	.74
Professional Development	6a, 6b, 6c, 6d, 7a, 7b, 7d, 7e, 7f, 9b, 9e, 9f, 9g, 9i, 9j, 9l, 13b, 13c, 13d, 13e, 13l.	.81
Formative Observations	7a, 7b, 7d, 7e, 7f, 9b, 13e, 13k	.85

Other tests were conducted to ascertain the most effective program component as perceived by past participants of a university-based teacher induction program. To determine which program component was perceived as most effective by novice urban teachers who were one-semester participants or two-semester participants, the macro means of the perceptions of urban novice teachers related to peer support, professional development and formative observation were calculated separately. In addition, the mean and standard deviations were graphed as to how the responses were skewed.

The macro means of the past participants' perceptions of each component were compared to determine the component receiving the highest mean score. The mean of the perceptions of the peer support component for one-semester participants was found to be 4.02 with a standard deviation of 0.74. The mean of perceptions of peer support of the two-semester participants was found to be 4.16 with a standard deviation of 0.73. The mean of the perceptions of the professional development component for one-semester participants was found to be 3.88 with a standard deviation of 0.49. The mean of the perceptions of the professional development for two-semester participants was found to be 3.95 with a standard deviation of 0.49. The mean of the perceptions of the formative observation component for one-semester participants was found to be 4.19 with a standard deviation of 0.56. The mean of the perceptions of formative observations for two-semester participants was found to be 4.33 with a standard deviation of 0.51 (see Table 4.5).

According to the responses on the TIPPS, past participants of both the one-semester and two-semester university-based teacher induction programs rated formative observation as the most effective component followed by peer support and professional development respectively (see Table 4.5).

Past participants perceiving formative observation as the most effective component of the university-based teacher induction program appeared to be a result of the one-to-one social interaction (Vygotsky, 1978) and support received from the mentor through educative mentoring (Feiman-Nemser, 2000). The conferences held

immediately after the observation gave the novice feedback on the data collected by the mentor during the formative observation. Through sharing the data with the novice

TABLE 4.5. Means and Standard Deviations of Responding One-semester or Two-semester Participants' Perceptions of the Components of a University-based Teacher Induction Program

Semesters Participated	Program Component	Mean of Participants' Perceptions	Standard Deviation
1	Peer Support	4.02	0.74
	Professional Development	3.88	0.49
	Formative Observation	4.19	0.56
2	Peer Support	4.16	0.73
	Professional Development	3.95	0.49
	Formative Observation	4.33	0.51

teacher, the mentor dealt with the individual's strengths and worked with the novice teacher to construct a plan for further development. The novice teacher's knowledge level was enhanced as the more experienced teacher guided the novice to solve more complex problems (Vygotsky, 1978). As a trusting relationship was formed, the mentor and novice teacher developed a rapport that assisted and challenged the novice in

improving their instructional practice and relationships with their students and colleagues.

#### Formative Observation

##### *One-semester Past Participants' Perceptions of Formative Observations*

Using the results from the Kolmogorov-Smirnov Test, normality was established at 0.12 for one-semester participants' perceptions of formative observations. The perceptions one-semester participants of formative observation were negatively skewed at -.77. However, the curve was less peaked at .424 (see Table 4.6 and Figure 4.1). When the normal probability plot (Normal Q-Q Plot) was examined, the observed values for the one-semester participants' perceptions of the effectiveness of formative observation "were plotted against the expected value from the normal distribution" (Pallant, 2001/2004, p. 59).

TABLE 4.6. One-semester and Two-semester Past Participants' Perceptions of the Effectiveness of Formative Observation

Semester	Kolmogorov-Smirnov Test Results (p < .05)	Curve	Skewness	Kurtosis	
1	.12	Normal	-.78	.42	Less peaked
2	.00	Negatively skewed	-1.28	1.86	Peaked

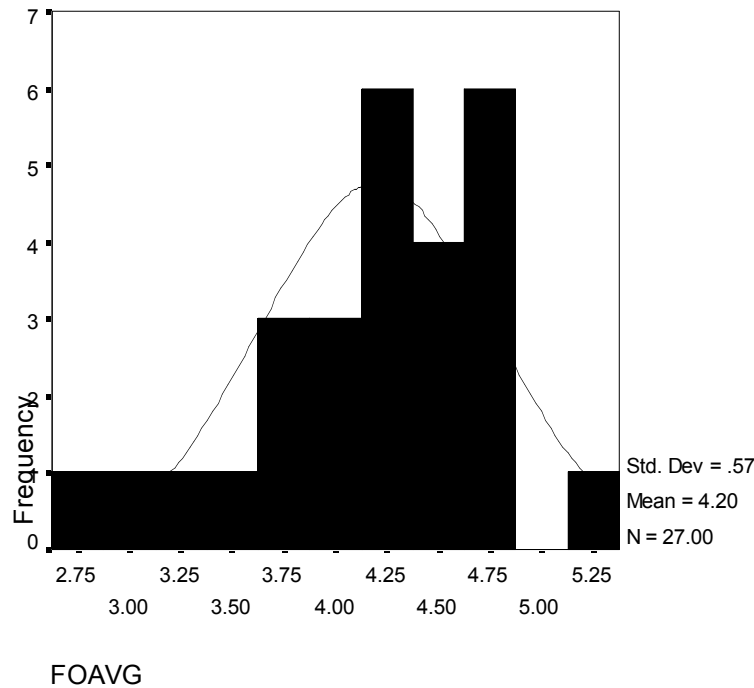


FIGURE 4.1. One-semester Past Participants' Perceptions of the Effectiveness of Formative Observation

The observed values of the Normal Q-Q Plot for one-semester participants' perceptions of the effectiveness of formative observation-were aligned in close proximity to the line of expected value. However, since some of the values were plotted in the negative range, a slight negative skewness of the normal curve was further supported (see Figure 4.2). Based on the results of the Kolmogorov-Smirnov Test and the Normal Q-Q Plot, the one-semester participants' perceptions of the effectiveness of formative observation appeared to have a slight negative skewness of the normal curve.



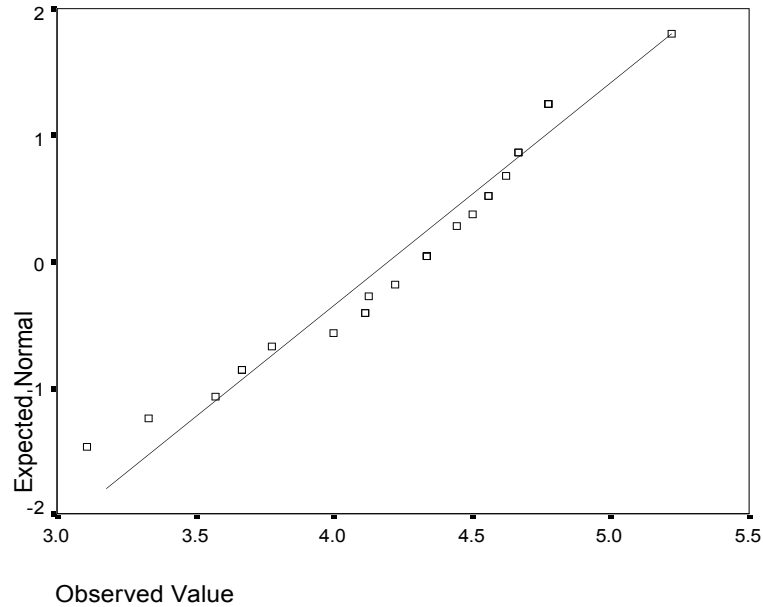


FIGURE 4.2. Normal QQ Plot of One-semester Past Participants' Perceptions of the Effectiveness of Formative Observation

#### *Two-semester Past Participants' Perceptions of Formative Observation*

Using the results from the Kolmogorov-Smirnov Test, for two-semester participants' perceptions of the formative observation component, normality failed to be established since the curve was negatively skewed at -1.28. The curve of the perceptions of formative observation was peaked at 1.86 (see Table 4.6 and Figure 4.3).

When the Normal Q-Q Plots were examined, the observed value for the one-semester and two semester perceptions of formative observation “were plotted against the expected value from the normal distribution” (Pallant, 2001/2004, p. 59).

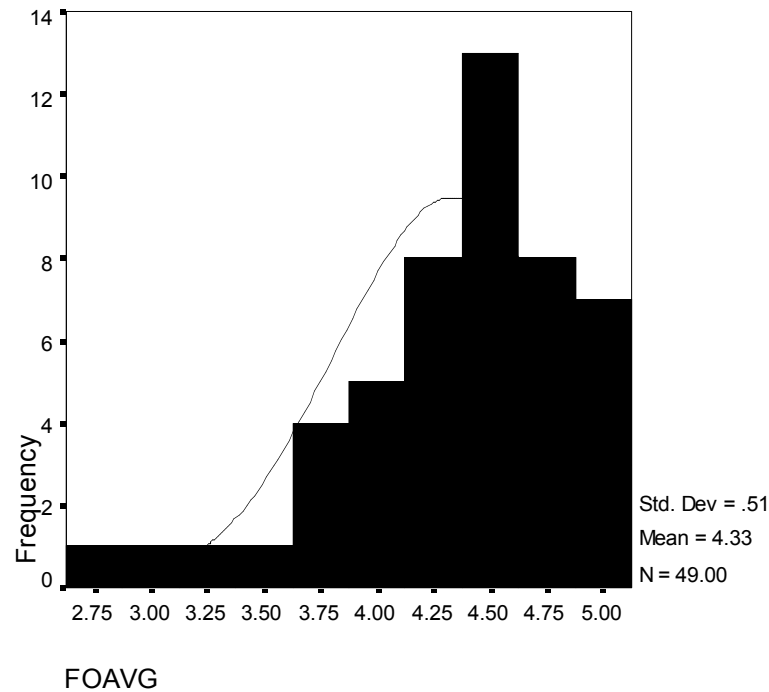


FIGURE 4.3. Two-semester Past Participants' Perceptions of the Effectiveness of Formative Observation

The observed values of the Normal Q-Q Plot for two-semester participants' perceptions of formative observation were aligned in close proximity to the line of expected value. However, since most values were in the negative range, the negative skewness of the normal curve was further supported through the Normal Q-Q Plot (see Figure 4.4).

Both Figures 4.3 and 4.4 suggested a negative skewness of the perceptions of the two-semester participants' perceptions of formative observation as a result of the Kolmogorov-Smirnov Test for normality. The negative skewness depicted a clustering

of high scores of the two-semester participants' perceptions of formative observation. The same pattern also was noted on the Normal Q-Q Plot. A majority of the indicators on the Normal Q-Q Plot were perceived in the negative range (see Figure 4.4).

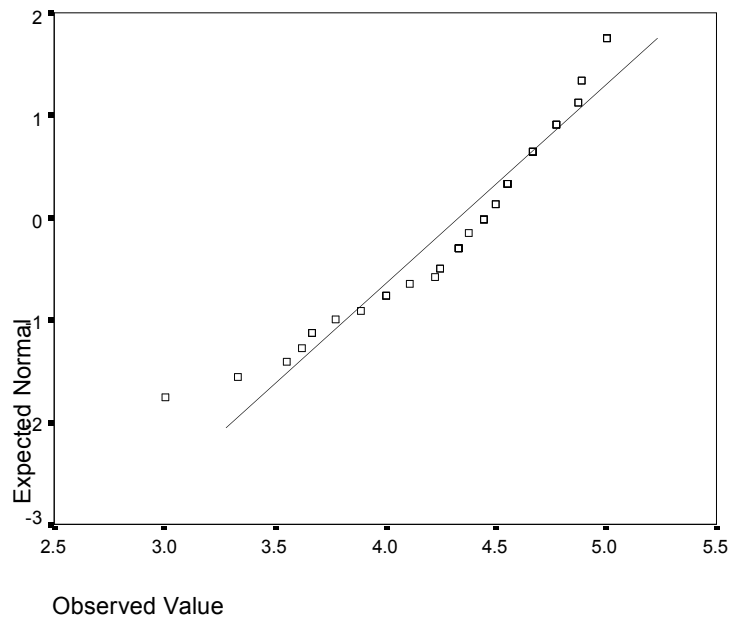


FIGURE 4.4. Normal Q-Q Plot of Two-semester Past Participants' Perceptions of the Effectiveness of Formative Observation

Joerger and Brewer (2001) found that formative observations were considered the fifth most important component in a teacher induction program. While 67 percent of the respondents in an urban study regarded formative observations as integral to the support and guidance of novice teachers, only 16 percent reported including formative observation as part of their teacher induction program (Fideler & Haselkorn, 1999).

Formative observation, or educative mentoring (Feiman-Nemser, 2000), was defined as regularly scheduled, reflective activities that guided and supported the novice teacher in evaluating their instructional practices (AFEE, 2004) through social interaction in one-to-one mentoring (Vygotsky, 1978). Additionally, formative observations served to highlight areas of strength as well as areas that needed further development. Through the formative observation component, novice teachers obtained assistance from an experienced, trained mentor to implement pedagogical content knowledge (Shulman, 1987) within their classroom instruction (Brock & Grady, 1997; Moir & Gless, 2001).

#### Peer Support

##### *One-semester Past Participants' Perceptions of Peer Support*

The Kolmogorov-Smirnov Test was used to assess the normality of the distribution of scores based on the standard deviations previously computed. Using the results of the participants' perceptions of peer support from the Kolmogorov-Smirnov Test, normality failed to be established at .01 for the one-semester participants. Instead for one-semester participants, the perceptions of the effectiveness of peer support were negatively skewed at -1.32. However, the curve was peaked at 1.56 (see Table 4.7 and Figure 4.5).

To examine the Normal Q-Q Plots, the one-semester participants perceptions of peer support “were plotted against the expected value from the normal distribution” (Pallant, 2001/2004, p. 59). The observed values for the one-semester participants' perceptions of peer support were aligned in close proximity to the line of expected value.

TABLE 4.7. One-semester and Two-semester Past Participants'

## Perceptions of the Effectiveness of Peer Support

Semester	Kolmogorov-Smirnov Test Results	Curve	Skewness	Kurtosis	
1	.013	Curve negatively skewed	-1.32	1.56	Peaked
2	.017	Curve negatively skewed	-0.90	0.37	Less peaked

$p < .05$

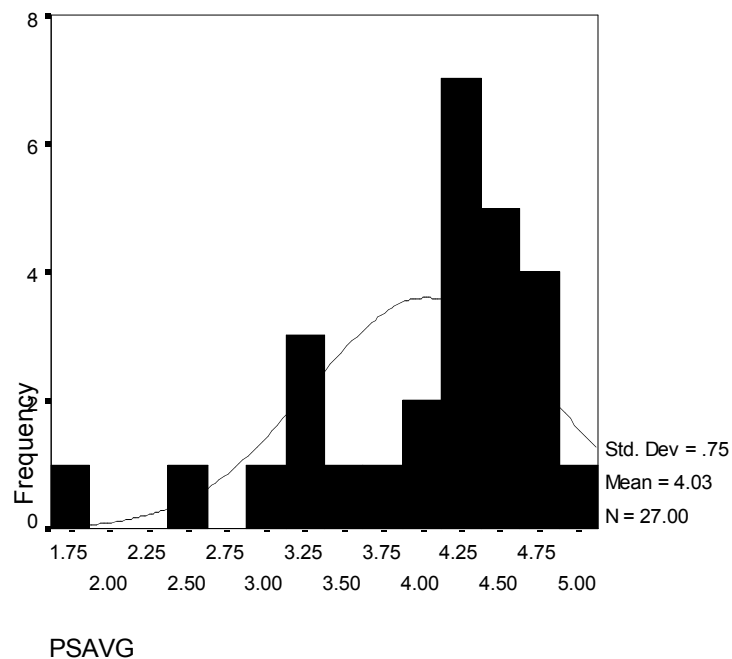


FIGURE 4.5. One-semester Past Participants' Perceptions of the Effectiveness of Peer Support

However, since most values were in the negative range, the negative skewness of the normal curve was further supported through the Normal Q-Q Plot (see Figure 4.6).

Figures 4.5 and 4.6 both indicated a negative skewness of as a result of the Kolmogorov-Smirnov Test for normality. The negative skewness depicted a clustering of high scores of the one-semester participants' perceptions of peer support. The same pattern also was noted on the Normal Q-Q Plot. Many of the indicators on the Q-Q Plot were perceived in the negative range.

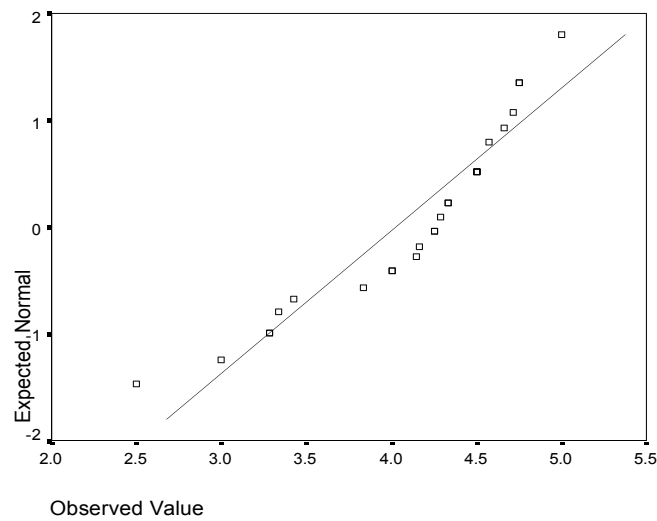


FIGURE 4.6. Normal Q-Q Plot of One-semester Past Participants' Perceptions of the Effectiveness of Peer Support

*Two-semester Past Participants' Perceptions of Peer Support*

Using the results of the participants' perceptions from the Kolmogorov-Smirnov Test, normality, determined at .02 for two-semester participants, also failed to be established for the effectiveness of the peer support component. The curve of the perceptions of peer support were negatively skewed at .90 and slightly peaked at .37 (see Table 4.7 and Figure 4.7).

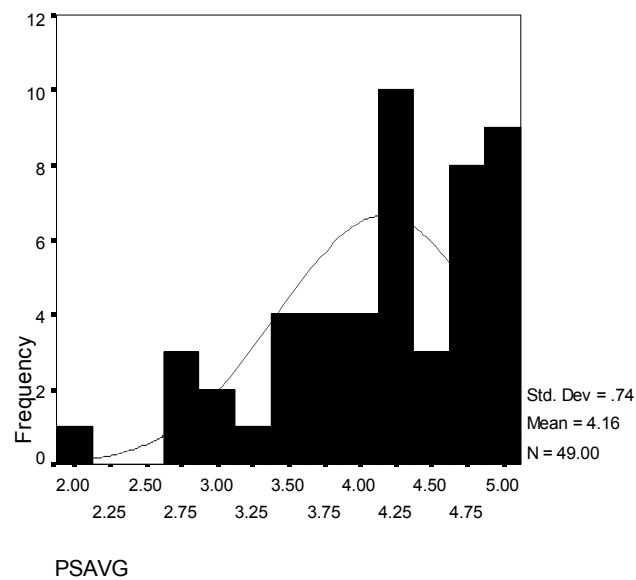


FIGURE 4.7. Two-semester Past Participants' Perceptions of the Effectiveness of Peer Support

When the Normal Q-Q Plot was examined, the observed values for the two-semester participants' perceptions of the effectiveness of peer support "were plotted against the expected value from the normal distribution" (Pallant, 2001/2004, p. 59). While many observed values for the two-semester participants' perceptions of the effectiveness of peer support were aligned near the line of expected value, most values were in the negative range. Therefore, the negative skewness of the normal curve was further supported through the Normal Q-Q Plot (see Figure 4.8).

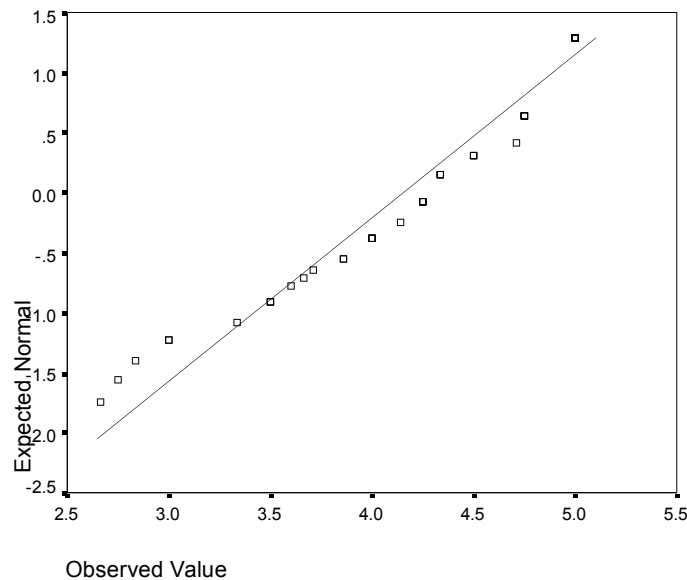


FIGURE 4.8. Normal Q-Q Plot of Two-semester Past Participants' Perceptions of the Effectiveness of Peer Support



Both Figures 4.7 and 4.8 signified a negative skewness of the perceptions of the two-semester participants' perceptions of peer support as a result of the Kolmogorov-Simirnov Test for normality. The negative skewness depicted a clustering of high scores of the two-semester participants' perceptions of peer support.

The same pattern also was noted on the Normal Q-Q Plot. A majority of the indicators on the Q-Q Plot were perceived in the negative range. Both one-semester and two semester past participants recognized peer support as the second most important component of the university-based teacher induction program.

On-going support of novice teachers was found to be one of the four most important components within a teacher induction program (Joerger & Bremer, 2001). Psychological support can take the form of peer support, collegial support, mentor support or support from an external network (Gold, 1996; Joerger & Bremer, 2001; Wong et al., 1999). Support can be exhibited through a one-on-one session or through a community of learners (Lave & Wenger, 1991/2004).

The principal function of support was to share ideas, teaching techniques and provide affirmation in a non-judgmental environment (Bartell 2005; Stanulis et al., 2002). Through sharing teaching experiences, novice teachers solved common problems, gained a deeper understanding of themselves as teachers and allocated time to reflect upon classroom teaching behaviors (Bartell, 2005; Joerger & Bremer, 2001; Nugent & Faucett, 2004; Stanulis et al., 2002). Psychological support incorporated into the induction program as a form of therapeutic guidance assisted the novice's personal and professional self-esteem, increased their ability to handle stress and transmitted the

culture of teaching (Gold, 1996; Huling-Austin, 1989; Odell, 1990; Stansbury & Zimmerman, 2000).

#### Professional Development

##### *One-semester Past Participants' Perception of Professional Development*

The results of the Kolmogorov-Smirnov Test indicated that normality was established at .200 by one-semester participants with a skewness of -.30 for the effectiveness of professional development component. The distribution was peaked at 1.25 (see Table 4.8 and Figure 4.9).

TABLE 4.8. One-semester and Two-semester Past Participants' Perceptions of the Effectiveness of Professional Development

Semester	Kolmogorov-Smirnov Test Results (p < .05)	Curve	Skewness	Kurtosis	
1	.20	Normal	-.30	1.25	Peaked
2	.20	Normal	-.30	0.009	Slightly Peaked

When the Normal Q-Q Plot was examined, the observed values for the one-semester participants' perceptions of the effectiveness of professional development

“were plotted against the expected value from the normal distribution” (Pallant, 2001/2004, p. 59). The observed values of the Normal Q-Q Plot for one-semester participants’ perceptions of the effectiveness of professional development were aligned near or on the line of expected value; thereby further suggesting a normal curve (see Figure 4.10).

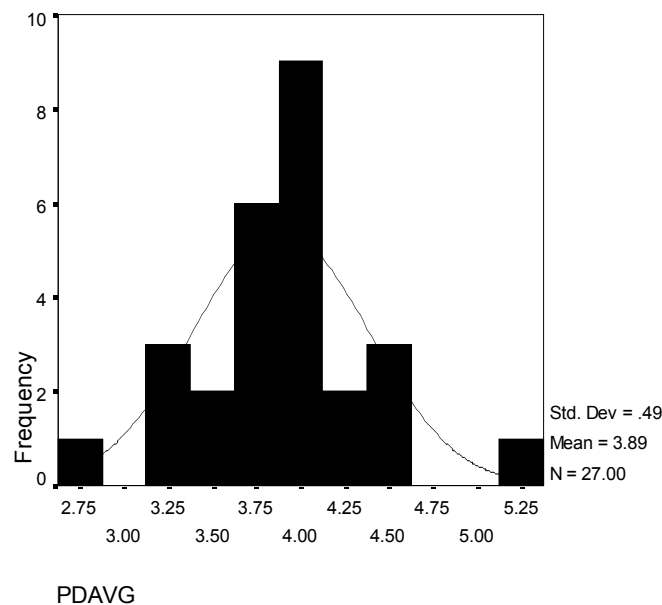


FIGURE 4.9. One-semester Past Participants’ Perceptions of the Effectiveness of Professional Development

#### *Two-semester Participants’ Past Perceptions of Professional Development*

The results of the Kolmogorov-Smirnov Test indicated that normality was also established at .20 by two-semester participants with a skewness of -.30 for the

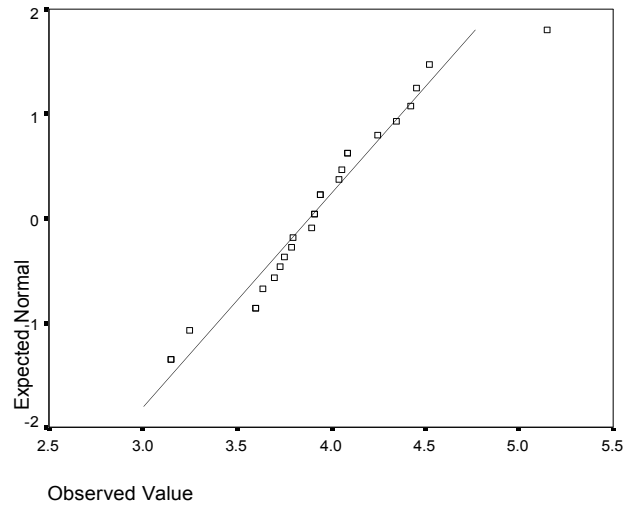


FIGURE 4.10. Normal Q-Q Plot of One-semester Past Participants' Perceptions of the Effectiveness of Professional Development

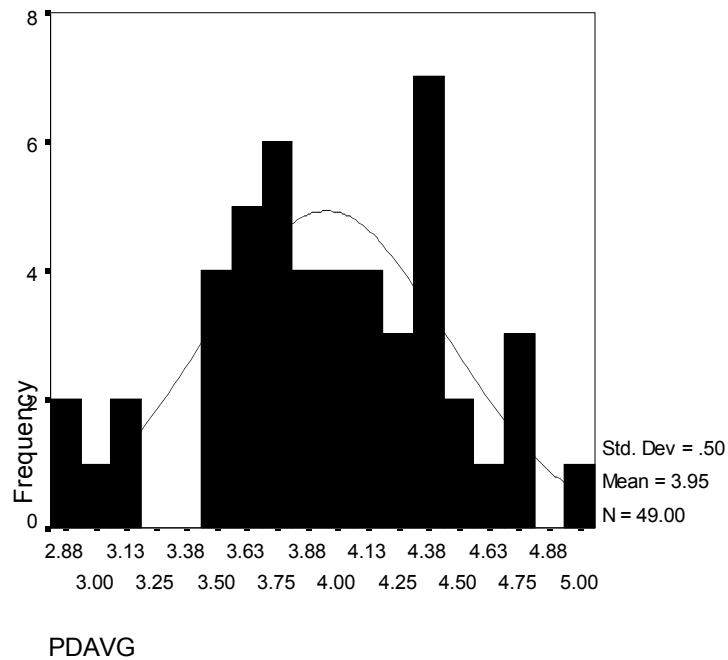


FIGURE 4.11. Two-semester Past Participants' Perceptions of the Effectiveness of Professional Development

effectiveness of professional development component. The curve was slightly peaked with a kurtosis of .009 (see Table 4.8 and Figure 4.11).

When the Normal Q-Q plots were examined, the observed values for the two-semester participants' perceptions of the effectiveness of professional development "were plotted against the expected value from the normal distribution" (Pallant, 2001/2004, p. 59). The observed values of the Normal Q-Q Plot for two-semester participants' perceptions of professional development were clustered and equally distributed along the line of expected value. The values supported a normal curve (see Figure 4.12).

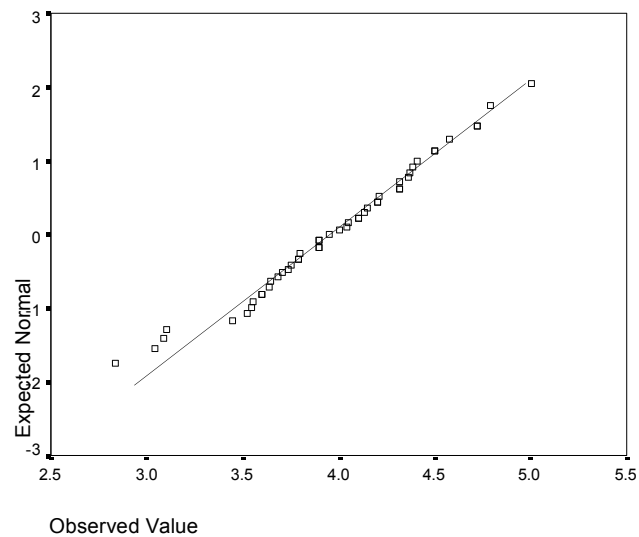


FIGURE 4.12. Normal Q-Q Plot of Two-semester Past Participants' Perceptions of the Effectiveness of Professional Development

Based on the results of the Kolmogorov-Smirnov Test and the Normal Q-Q Plot, the two-semester participants' perceptions of the effectiveness of professional development appeared to be normally distributed. Both one-semester and two-semester past participants rated professional development as the third most effective of the three program components.

Feiman-Nemser, et al. (1999) noted that merely supporting beginning teachers emotionally, without including professional development within the induction year of training, left the novice's learning to chance (Feiman-Nemser et al.). Gold (1996) and Pascopella (2004) emphasized the importance of incorporating research-based practices to enhance the instructional practice of novice teachers. While most districts provided professional development seminars, only 21 percent of the programs offered training on topics specific to the needs of the novice teacher (Horn et al., 2002). Fideler and Haselkorn (1999) found that professional development training topics were highly correlated with the issues perceived to hinder the success of the novice teachers in a study of urban induction programs.

In professional development seminars, groups of novice teachers worked together in a community of learners to consider strategies, discuss their application and then modify them to meet specific needs of their classroom (Joyce & Showers, 2002; Lave & Wenger, 1991/2004). When novice teachers perceived professional development seminars as beneficial, challenging and interesting when the information being presented added to their general knowledge and assisted in solving problems frequently encountered (Bartell, 2005; Fideler & Haselkorn, 1999; Joerger & Bremer,

2001; Wong et al, 1999). If these conditions failed to be met, then novice teachers perceived little or no value in attending (Wong et al.). It should be noted that most of the professional development sessions lacked the inclusion of multicultural education or culturally responsive pedagogy within the professional development topics to be discussed; thereby, negating topics that would be beneficial to urban novice teachers.

#### Research Question 4

Is there a statistically significant difference in the effectiveness of program components, as perceived by urban novice teachers five years after participating in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program, related to the socio-economic level of the school or the grade level taught?

To determine whether a statistically significant difference existed between the one-semester and two-semester past participants' perceptions of the program components and either socio-economic level of the school or grade level taught, Kruskal Wallis Tests were conducted.

#### Socio-economic Level of the School

A significant difference in the effectiveness of program components of peer support, professional development and formative observation as perceived by urban novice teachers five years after participating in either a one-semester or a two-semester university-based teacher induction program related to the socio-economic level of the school where participants taught was tested using the Kruskal Wallis Test.

The Kruskal Wallis Test compared means of the perceptions of past participants

of peer support, professional development and formative observations. Participants included either one-semester participants or two-semester participants, who taught at either high or low poverty schools (Pallant, 2001/2004, p. 263). After separating the participants into groups of one-semester low poverty, one-semester high poverty, two semester low poverty and two semester high poverty, the means of past participants' perceptions of each program component were calculated according to whether the teacher taught in a high or low poverty school (see Table 4.9).

TABLE 4.9. Statistical Significance of One-semester or Two-semester Past Participants' Perceptions of the University-based Teacher Induction Program Components Related to Socio-economic Level of the School and Grade Level Taught

Variables	Peer Support Sig.	Professional Development Sig.	Formative Observation Sig.
Socio-economic Level of the School	.80	.32	.35
Grade Level Taught	.81	.40	.61

Using the Kruskal Wallis Test, the mean of the one-semester or two-semester past



participants' perceptions of peer support was compared with the socio-economic level of the school in which the participants taught. Statistical significance was found to be  $p = .80$  for peer support at  $p < .05$ . Therefore, no statistically significant difference was found when comparing the one-semester or two-semester past participants' perceptions of the peer support component with the socio-economic level of the school in which they taught (see Table 4.9).

Further, when the mean of the one-semester or two-semester past participants' perceptions of professional development was compared with the socio-economic level in which the participants taught,  $p = .32$  when  $p < .05$ . Therefore, no statistically significant difference was found when comparing the one-semester or two-semester past participants' perceptions of the professional development component with the socio-economic level of the school in which they taught (see Table 4.9).

Finally, the mean of the one-semester or two-semester past participants' perceptions of formative observation was compared with the socio-economic level of the school in which they taught.  $P = .35$  when  $p < .05$ . Again, no statistically significant difference was found when comparing the one-semester or two-semester past participants' perceptions of the formative observation component with the socio-economic level of the school in which the participants taught (see Table 4.9).

## Grade Level

A significant difference in the effectiveness of program components of peer support, professional development and formative observation as perceived by urban novice teachers five years after participating in either a one-semester or a two-semester university-based teacher induction program related to the grade level taught was tested using the Kruskal Wallis Test.

The Kruskal Wallis Test compared means of the perceptions of past participants of peer support, professional development and formative observations. Respondents were either one-semester participants or two-semester participants, who taught at either the elementary or secondary level (Pallant, 2001/2004, p. 263). After separating the participants into groups of one-semester elementary level, one-semester secondary level, two semester elementary and two semester secondary, means of past participants' perceptions of each program component were calculated according to whether the teacher taught at the elementary or secondary level.

Using the Kruskal Wallis Test, the mean of the one-semester or two-semester past participants' perceptions of the peer support component was compared with the grade level in which the participants taught. Statistical significance was found to be  $p = .81$  for peer support at  $p < .05$ . Therefore, no statistically significant difference was found when comparing the one-semester or two-semester past participants' perceptions of the peer support component with the grade level in which participants taught (see Table 4.9).

Further, when the mean of the one-semester or two-semester past participants' perceptions of the professional development component was compared with the grade level in which the participants taught,  $p = .40$  when  $p < .05$ . Therefore, no statistically significant difference was found when comparing the one-semester or two-semester past participants' perceptions of professional development with the grade level in which participants taught (see Table 4.9).

Finally, the mean of the one-semester or two-semester past participants' perceptions of the formative observation component was compared with the grade level the participants taught.  $P = .61$  when  $p < .05$ . Again, no statistically significant difference was found when comparing the one-semester or two-semester past participants' perceptions of the formative observation components with the grade level in which the participants taught (see Table 4.9).

Because no statistical significant difference was found at  $p < .05$  in the one-semester or two-semester past participants' perceptions of the peer support, professional development and formative observation components according to the socio-economic level of the school or the grade level taught, no further testing was conducted (Pallant, 2001/2004, p. 264).

### Summary

This chapter reported the results of a longitudinal trend study using archival data collected during two periods. The first data collection period occurred during the participants' first year of teaching, while second set of data was collected during the

participants' fifth year of teaching. Significant differences in the observation scores of classroom teaching behaviors of one-semester participants and two-semester participants were examined in relation to socio-economic level of the school and the grade level taught.

Further, the study examined the perceptions of past participants' of the effectiveness of the program components of a university-based teacher induction program. Perceptions of urban novice teachers, who had participated in a one-semester program or a two-semester university-based teacher induction program during their first year of teaching, were examined during their fifth year of teaching. Further, these perceptions were calculated in relation to the socio-economic level of the school and the grade level taught.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

More than two million teachers will be needed to teach future leaders by 2012 (NCTAF, 2003) and replace retiring teachers and serve the escalating diverse student enrollment (Darling-Hammond & Sykes, 2003). The attrition rate of novice teachers nationally has been more than 45 percent during the first five years of their career (Ingersoll, 2001). As a result, a shortage of certified teachers has existed, especially in urban schools that serve a diverse student population (Darling-Hammond & Sykes, 2003). Nationally, programs that support novice teachers have been inconsistent in their inclusion of components and duration (Sweeny & DeBolt, 2000). Mentoring programs have focused on developing the skills of both the mentor and the novice teacher, while induction programs concentrated on enhancing the instructional skills and retention of novice teachers (Fideler & Haselkorn, 1999). In addition, few institutions of higher education have been solely responsible for supplying novice teachers with psychological and instructional support through a comprehensive university-based teacher induction program. Little research has been conducted on classroom teaching behaviors of urban novice teachers or past participants' perceptions of the effectiveness of components of a formal university-based teacher induction program. Therefore, it is critical to examine the classroom teaching behaviors of urban novice teachers and the effectiveness of the program components perceived by past participants of a one-semester or a two-semester university-based teacher induction program.

The purpose of this longitudinal trend study (Gall, Borg & Gall, 1996) was to

examine the effectiveness of a one-semester university-based teacher induction program and a two-semester university-based teacher induction program based on the observation scores of classroom teaching behaviors exhibited by one-semester participants and two-semester participants during their first year of teaching. The archival data of observation scores of classroom teaching behaviors were collected from 145 urban novice teachers participating in a university-based teacher induction program during the academic years of 1994-95, 1995-96, 1996-97, 1997-98 and 1998-99. Additionally, the observations scores of classroom teaching behaviors were also studied in relation to the socio-economic level of the school and the grade level taught.

Further, the study analyzed the past participants' perceptions of the university-based teacher induction program components by one-semester participants and two-semester participants during their fifth year of teaching. In addition, the past participants' perceptions of a one-semester or a two-semester university-based teacher induction program during their fifth year of teaching were also investigated in relation to the socio-economic level of the school and the grade level taught. The research questions will guide the discussion of the findings of this study. Subsequent recommendations and implications for future study will follow.

To determine whether urban novice teachers experienced a growth over time in the observation scores of classroom teaching behaviors, a Wilks Lambda Test reported a statistically significant difference of  $p = .00$  with  $p < .05$  and a large effect size of .27 through repeated measures of ANOVA (Pallant, 201/2004). Because the effect size supported the statistically significant difference, it appeared that participating in a

university-based teacher induction program was beneficial to urban novice teachers in promoting an increase or growth in observational scores of classroom teaching behaviors.

An important result of participating in a teacher induction program noted in the literature was that the novice teachers' performance and instructional effectiveness was enhanced (Bartell, 2005; Darling-Hammond, 2001; 2005; Evertson & Smithey, 2001; Fideler & Haselkorn, 1999; Giebelhaus & Bowman, 2002; Grant, 2003; Joeger & Bremer, 2001; Moon-Merchant & Carter, 2004; Odell & Ferraro, 1992; Olebe, 2001; Villar, 2004; Weiman & Colbert, 2003; Wonacott, 2002). Studies revealed that novice teachers involved in teacher induction programs became more competent more quickly than novice teachers who were not involved in such programs (Darling-Hammond, 2001; 2005; Wojnowski et al., 2003; Villar, 2004).

Of the ten most frequently listed components, the university-based induction program utilized nine. Only orientation to the novice teacher's school campus and district failed to be addressed within the program components. However, participants were encouraged to seek a colleague teaching at the same campus and grade level or discipline who was able to answer questions related to the school's culture.

Therefore, the integrated triad model of a teacher induction program provided packages of support to one-semester participants and the two-semester participants of the university-based teacher induction program, which appeared to affect the growth in the observation scores of classroom teaching behaviors.

### Research Question 1

Is there a statistically significant difference between classroom teaching behaviors of urban novice teachers who participated in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program?

This longitudinal trend study examined the observation scores of classroom teaching behaviors of one-semester or two-semester participants served by a university-based teacher induction program. As both groups continued their participation in the university-based teacher induction program, the means of the observation scores of classroom teaching behaviors increased, while the standard deviations decreased. Upon further analysis, a Wilks Lambda Test reported  $p = .10$  with  $p < .05$  and an effect size of .03. Therefore, no statistically significant difference was found between the observation scores of classroom teaching behaviors of one-semester and two-semester participants.

Both one-semester and two-semester participants were provided the same intervention based on the goals of the integrated triad of the university-based teacher induction program. Due to this treatment, it appeared that conducting formative observations using an observation instrument based on pre-determined standards, affording individualized conferences focusing on data collected during the observations and encouraging novice teachers to engage in reflective activities appeared to assist participants of both groups to improve their observation scores.

The formative observations founded on pre-determined standards identified goals, documented the progress and provided feedback to the novice teacher to assist



them in developing teaching competence (Feiman-Nemser, 2000; Feiman-Nemser et al., 1999). Utilizing formative observations in combination with professional development enabled participants to implement research-based management and instructional strategies (Feiman-Nemser et al., 1999; Giebelhaus & Bendixen-Noe, 2000; Gold, 1996; Shoen, 1987; Valli, 1997).

Through the one-on-one conferences, or educative mentoring, Feiman-Nemser (2001) found that the mentor and beginning teacher collaboratively established clear teaching goals based on the data collected. This provided a plan to augment the novice teacher's instructional practices. Olebe et al. (1999) determined that through the individualized discussions, entry-level teachers became more aware of their instructional strengths and areas that needed improvement. The observed classroom teaching behaviors were measured against the pre-determined standards of the observation instrument. While teachers learned to self-critique their practices and then reflect on them using reflection-on-action (Shoen, 1987), they were better able to critique their classroom teaching behaviors and use deliberative reflection to improve their future instruction (Valli, 1997).

#### Research Question 2

Is there a statistically significant difference between the observation scores of classroom teaching behaviors of urban novice teachers who participated in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program related to the socio-economic level of the school or the grade level taught?

The most inexperienced teachers have been assigned to teach in urban schools (Darling-Hammond, 2005; Darling-Hammond & Sykes, 2003; Fidler & Haselkorn, 1999). Urban schools have high attrition rates (Darling-Hammond & Sykes, 2003; Ingersoll, 2001; NCTAF, 2003). This condition is magnified when novice teachers begin their career with inadequate preparation and resources to instruct students representing diverse cultures (Carter, 2003a; Claycomb, 2000; Darling-Hammond & Sykes, 2003; Zeichner, 2003). In this study, differences in the means of the observation scores of classroom teaching behaviors of one-semester and two-semester participants teaching in high or low poverty schools were examined.

#### Socio-economic Level of the School

The means of the observation scores of classroom teachers participating in a one-semester program were compared with the means of the observation scores of the classroom teaching behaviors of those participating in a two-semester program in relation to the socio-economic level of the school. While the means of the observation scores of classroom teaching behaviors increased, the standard deviations decreased. Thereby suggesting that as urban novice teachers continued to participate in the university-based teacher induction program, the observation scores were more closely distributed. However, a Wilks Lambda Test determined  $p = .92$  with  $p < .05$  and an effect size of .00. Therefore, no statistically significant difference in the means of the observation scores of classroom teaching behaviors was found. Therefore, the socio-economic level of the school in which participants taught did not affect the observation scores of classroom teaching behaviors.

## Grade Level

The means of the observation scores of classroom teachers participating in a one-semester program were compared with the means of the observation scores of the classroom teaching behaviors of those participating in a two-semester program related to the grade level taught. While the means of the observation scores of classroom teaching behaviors increased, the standard deviations decreased. Thereby suggesting that as urban novice teachers continued to participate in the university-based teacher induction program, the observation scores were more closely distributed. However, a Wilks Lambda Test calculated  $p = .29$  with  $p < .05$  and an effect size of  $.02$ ; therefore, no statistically significant difference in the means of the observation scores of classroom teaching behaviors was found. Therefore, the grade level in which participants taught did not affect the observation scores of classroom teaching behaviors.

Based on the increase in the observation scores of classroom teaching behaviors and the decrease in standard deviations over the period of time that the participants were involved in the university-based teacher induction program, it appears that growth occurred. Furthermore, it seems that there were fewer differences within the subgroups. Therefore, a statistical significance appears to be masked.

Research has reported that urban schools have a higher turnover rate than other more affluent schools (Ingersoll, 2001). Ingersoll (2001) reported that high poverty schools have an annual attrition rate of 20 percent. Additionally, uncertified secondary teachers instruct almost 50 percent of core classes (Fuller, 2003). In urban schools, teachers, who lacked a minor in the subject area in which they teach or were uncertified

taught core courses, such as English, science, math and social studies (Alexander & Fuller, 2003; Claycomb, 2000; Ingersoll, 1999, 2001; Joerger & Bremer, 2001; NCTAF, 2003; Recruiting new Teachers, Inc., 2000a; USDOE, 1997).

However, other studies have stated that urban novice teachers served by teacher induction programs have a retention rate of 93 percent (Fideler & Haselkorn, 1999; Moon-Merchant & Carter, 2004). The rate of attrition in urban schools affects the stability of the faculty, which, in turn, affects student achievement. Supporting urban novice teachers through teacher induction programs during their initial year of teaching contributes to student achievement (Bartell, 2005; Darling-Hammond, 2000, 2001; 2005; Evertson & Smithey, 2001; Fideler & Haselkorn, 1999; Giebelhaus & Bowman, 2002; Grant, 2003; Joerger & Bremer, 2001; Odell & Ferraro, 1992; Olebe, 2001; Villar, 2004; Weiman & Colbert, 2003; Wonacott, 2002).

### Research Question 3

Which program component, as perceived by urban novice teachers, participating in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program, was identified as most effective after teaching five years?

Of the 145 urban novice teachers that participated in a one-semester or two-semester university-based teacher induction program, 82 (or 57 percent) responded to the TIPPS. Of those, 77 participants (or 94 percent) have remained in educational profession within the first five years of beginning their teaching career, while 5 participants (or 6 percent) stated that they were raising young children. Of those

retained in the education profession after five years of teaching, 3 participants (or 4 percent) are employed as school district consultants, 2 participants (or 2 percent) serve as librarians and 1 participant (or 1 percent) is an administrator. Therefore, it appears that participating in a university-based teacher induction program increased the retention rate of beginning teachers within the first five years of their teaching career.

Through analyzing data from the NCES Schools and Staffing Survey (SASS) and the Teacher Follow-up Study (TFS), Ingersoll (2001) reported a national retention rate of 54 percent. Further, Ingersoll and Smith (2004) found after controlling for the variables of teachers' gender, age and race, school level, types of schools, community size and poverty level, that the retention rate was dependent upon the number and types of support received by the novice teacher (Ingersoll & Smith, 2004). Their study established that utilizing a greater number of supportive components reduced the rate of teacher turnover from 40 percent for teachers having no support to less than 20 percent for teachers who had up to eight components of support (Ingersoll & Smith, 2004). The study determined that induction programs offering packages of support were the "strongest factors in retaining teachers" (Ingersoll & Smith, 2004, p. 35).

Researchers have established that the key components of an induction program consisted of using experienced teachers as mentors, providing professional development based on the needs of beginning teachers, planning opportunities for collaboration and support, conducting formative observations, supplying feedback, furnishing orientation to the school and district, encouraging reflection, observing other teachers, procuring administrative support and establishing program goals (Brewster & Railsback, 2001;

Evertson & Smithey, 2001; Fallon, 2004; Feiman-Nemser, et al., 1999; Fideler & Haselkorn, 1999; Fleishmann, et al., 2000; Grant, 2003; Horn, et al., 2002; Joerger & Bremer, 2001; Maulding, 2002; McKibben, 2001; Moir & Gless, 2001; Nugent & Faucette, 2004; Recruiting New Teachers, Inc., 2000b; Seo, Bishop & Langley, 2004; Wong, et al., 1999).

Urban novice teachers participating in the university-program discussed in this study took part in nine of the ten most frequently included components within a teacher induction program. Only orientation to the school district and campus was excluded. However, participants were encouraged to seek information specific to their school and district culture.

#### Formative Observation

Past participants of the university-based teacher induction program were asked to rate the effectiveness of each program component on a Likert scale from one to five based on their perceptions. A rating of one denoted that the component was the least effective, while five indicated that the component was most effective.

The program component of the university-based teacher induction program perceived as most effective was the formative observation component by both the one-semester and two-semester previous participants. The mean of the perceptions of formative observations was 4.19 of the one-semester participants and 4.33 of the two-semester participants with standard deviations of calculated at 0.56 and 0.51 respectively.

Joerger and Brewer (2001) found that formative observations were considered the fifth most important component in a teacher induction program. Formative observation, or educative mentoring (Feiman-Nemser, 2000), was defined as regularly scheduled, reflective activities that guided and supported the novice teacher in evaluating their instructional practices (AFFEE, 2004). Additionally, formative observations served to highlight areas of strength as well as those that need further development.

The perceptions of formative observation could also be considered a result of the mentor observing and collecting data and then sharing that information through conferencing with the novice teacher. During the conference, both the mentor and the novice teacher collaboratively planned ways to improve instruction. Throughout this process, a strong, trusting, interpersonal relationship was built (Gless & Moir, n.d.; Perez et al., 1997; Wing & Jinks, 2001). The sharing of constructive criticism through addressing the individual's psychological and instructional needs in a one-to one relationship has been noted by researchers to be regarded as being very helpful and satisfying (Fideler & Haselkorn, 1999; Odell & Ferraro, 1992).

#### Peer Support

Past participants of a university-based teacher induction program perceived peer support as the second most important component. One-semester participants rated their perceptions of peer support at 4.02 and two-semester participants rated it at 4.16. The standard deviations of ratings were 0.74 and 0.73 respectively. Upon examining the ratings, the scores were very similar and closely distributed.

On-going support of novice teachers has been noted as one of the four most important components within a teacher induction program (Joerger & Bremer, 2001). Psychological support incorporated into the induction program as a form of therapeutic guidance assisted the novice's personal and professional self-esteem, increased their ability to handle stress and transmitted the culture of teaching (Gold, 1996; Huling-Austin, 1989; Odell, 1990; Stansbury & Zimmerman, 2000). Support can be exhibited through one-on-one sessions or through communication with a community of learners. Other forms of peer support include collegial support, mentor support or support from an external network of novice teachers (Gold, 1996; Joerger & Bremer, 2001; Wong et al., 1999).

The principal function of support was to share ideas, teaching techniques and affirmation in a non-judgmental environment (Bartell, 2005; Stanulis et al., 2002). Through sharing teaching experiences, novice teachers solved common problems, gained a deeper understanding of themselves as teachers and allocated time to reflect upon classroom teaching behaviors (Bartell, 2005; Joerger & Bremer, 2001; Nugent & Faucett, 2004; Stanulis et al., 2002).

#### Professional Development

Professional development was perceived as third most effective by past participants in the university-based induction program. One-semester participants rated the mean of the perceptions of professional development at 3.88, while the two-semester participants rated the component at 3.95. The standard deviation was 0.49 for both groups.



In a study of teacher induction programs in urban districts, Fideler and Haselkorn (1999) determined that professional development training topics were highly correlated with the issues perceived to hinder the success of the novice teachers. While most districts provided professional development seminars, only 21 percent of the programs offered training on topics specific to the novice teachers' needs (Horn et al., 2002). In the professional development seminars, groups of novice teachers worked together in a community of learners to consider strategies, discuss implementation within the classrooms and then modify them to meet the specific needs of their classroom (Joyce & Showers, 2002; Lave & Wenger, 1991/2003).

Novice teachers perceived professional development seminars as beneficial, challenging and interesting when the information being presented added to their general knowledge and assisted in solving problems frequently encountered (Bartell, 2005; Fideler & Haselkorn, 1999; Joerger & Bremer, 2001; Wong et al., 1999). If these conditions failed to be met, then novice teachers perceived little or no value in attending the sessions (Wong et al.).

For urban novice teachers to regard professional development being beneficial, adding to their knowledge base and solving problems frequently encountered in urban schools, then it is suggested that multicultural education and culturally responsive pedagogy be incorporated within the professional development topics to address the learning styles and interests of students representing diverse populations. This might assist novice teachers in solving issues that confront them as well as increase student achievement.

When professional development topics are specific to the needs of the novice teacher and focused on particular instructional practices, the strategies presented were more readily incorporated within their classroom teaching behaviors (Desimone et al., 2002). As novice teachers perceive professional development seminars as beneficial, challenging and addressing their needs, they are more apt to utilize the strategies in their classroom (Bartell, 2005; Fideler & Haselkorn, 1999; Joerger & Bremer, 2001; Wong et al, 1999).

Since the perceptions of each component were above average and the standard deviations clustered, it appeared that all three components were perceived as being integral to a teacher induction program. As educational leaders consider implementing teacher induction programs, it is suggested that they consider incorporated the program components represented by the integrated triad of the university-based teacher induction program.

#### Research Question 4

Is there a statistically significant difference in the effectiveness of program components, as perceived by urban novice teachers five years after participating in either a one-semester university-based teacher induction program or a two-semester university-based teacher induction program, related to the socio-economic level of the school or the grade level taught?

As noted in the results of the previous question, the perceptions of past participants were skewed negatively for the formative observation and the peer support components. However, the perceptions of professional development by past participants

in their fifth year of teaching were plotted on a normal curve. The Kruskal Wallis Test compared the interactions of the means of one-semester and two-semester participants (independent variables - between groups), the means of the socio-economic level of the school (independent variables - within groups) in which participants taught and the past participants' perceptions of the program components (dependent variables) of the university-based teacher induction program.

A Wilks Lambda Test calculated the perceptions of the program component of formative observation at  $p = .61$ ; peer support at  $p = .81$  and professional development at  $p = .40$  with  $p < .05$ . Consequently, statistically significant differences failed to be found regarding the perceptions of formative observation, peer support and professional development components of the university-based teacher induction program.

Based on the findings of this study, the observation scores of classroom teaching behaviors demonstrated growth over time by participants of a university-based teacher induction program. However, the observation scores were not affected by program length, socio-economic level of the school or the grade level taught. Further, past participants perceived the formative observation component of the program as the most effective followed by peer support and professional development respectively. The socio-economic level of the school or the grade level taught by the participant did not affect these perceptions.

### Recommendations

Based on the literature review and the results of this study, the following recommendations are made. Through this longitudinal trend study, 94 percent of

participants responding to the TIPPS continued to be employed in the educational profession. Of those, 87 percent were continuing to teach. Further, the results of this study implied that urban novice teachers participating in a university-based teacher induction program experienced an increase or growth in observation scores of classroom teaching behaviors. Therefore, it is suggested that novice teachers participate in a formal, comprehensive teacher induction program for a minimum of one semester.

A critical period of time in a teacher's career has been determined to be the induction period (Ramsey, 2000). As novice teachers participated in a teacher induction program, the program components contributed to the quality of the teachers' performance throughout their teaching careers (Ramsey, 2000). Teacher induction programs have been shown to enhance the existing skills of novice teachers, while decreasing the attrition rate (Darling-Hammond, 1998; Recruiting New Teachers, Inc., 2000a).

The length of time suggested for support, or induction, has changed from the time of the inception of teacher induction to meeting the needs of urban novice teachers working in contemporary schools. The recommended time for receiving support has varied from 6 months to one year (Fideler & Haselkorn, 1999; Huling-Austin, 1990; Lawson, 1992; McCormack & Thomas, 2003; Veenman, 1984; Veenman & Denessen, 2001). Other researchers have recommended that induction support continue through the first two (Feiman-Nemser et al., 1999; Odell & Huling, 2000) or three years of teaching (Bartell, 2005; Fideler & Haselkorn, 1999). However, the actual length of time recommended to support novice teachers has been highly inconsistent due to differences

in novice teacher's individual experiences and the issues confronted (Wong et al., 1999). While various researchers have suggested providing mentoring activities for up to five years, this study recommends that urban novice teachers receive a minimum of one-semester of formal, comprehensive support through a teacher induction program.

National, state and local education agencies appear to be interested in increasing the quality of teaching; thereby increasing student achievement. As shown by the increased observation scores of classroom teaching behaviors and the decreasing standard deviations, existing teaching behaviors of urban novice teachers participating in a university-based teacher induction program were enhanced. However, fiscal resources necessary to provide support for novice teachers during their first year of teaching have been limited. Therefore, to increase the quality of teaching and, as a result, student achievement, it is suggested that teacher induction programs be adequately funded by national, state and local educational agencies.

Due to the demands on experienced teachers, it is suggested that school-based teacher induction programs work collaboratively with institutes of higher education (IHE). Such collaborations may assist in linking theory with practice as well as serving the educational needs of the community. Further, Such collaborations might provide instruction in implementing research-based learning strategies for both the mentor and mentee.

A university-based teacher induction program could address the psychological and instructional support of the beginning teacher, while district-based programs might provide information particular to district and campus' culture. At this time, 31 percent of

school districts that offer some type of teacher induction activities collaborate with IHEs (Fideler & Haselkorn, 1999). Without adequate funding and collaboration, inconsistent support has often been provided by overburdened, untrained and, sometimes, unwilling mentors (USDOE, 2002). Further, beginning teachers are unable to identify areas needing assistance (Gordon, 1991; Huling-Austin, 1989; Newberry, 1977; Sweeny, 2001). Therefore, numerous beginning teachers continue to lack the guidance of a mentor to support and assist them in becoming effective teachers (Fideler & Haselkorn, 1999; Odell, 1990). Sharing psychological and instructional support through a collaboration between LEAs and IHEs appears to increase the probability that the novice and inservice teachers' skills will be enhanced through linking theory and research-based practice (Bartell, 2005; Brock & Grady, 1997; McCormack & Thomas, 2001; Odell, 1990). Such collaborative programs might be adapted to meet the needs of the individual teachers and address existing challenging contextual issues (Moskovitz & Stephens, 1997).

While past participants perceived formative observation as the most effective of the three program components of the university-based teacher induction program, it was considered the fifth most important component in an induction program (Joeger & Bremer, 2001). In a study of urban districts, Fideler and Haselkorn (1999) reported that 67 percent of the respondents indicated that formative observation was essential in supporting novice teachers. However, of those districts responding, only 16 percent reported including formative observations as part of their teacher induction program

(Fideler & Haselkorn, 1999). Therefore, it is recommended that a formative observation component be included within teacher induction programs.

Further, it is recommended that external mentors be assigned the task of conducting formative observations after developing a trusting relationship with novice teachers. Assigning external mentors would ensure that time would be devoted to supporting, observing and conferencing with urban novice teachers. Moreover, using external mentors would not interfere with the teaching responsibilities of other school colleagues. It is further suggested that external mentors maintain confidentiality regarding future employment.

During the same period of time that data from the university-based teacher induction program was being collected, characteristics of culturally relevant pedagogy (Gay, 2000) were emerging in the literature. Strategies, such as cooperative learning, learner-centered, or active engagement, strategies, higher level thinking skills, developing relationships with students and communicating with parents, were included within the components of the university-based teacher induction program. The use of these strategies was encouraged during peer support sessions; instruction was given on the utilization of these strategies during professional development seminars and transfer of these strategies was encouraged as well as observed during formative observations.

Since similar pedagogical skills and activities appeared to be employed in both culturally relevant pedagogy (Gay, 2000) and within the program components of the university-based teacher induction program, it is suggested that these applied activities be incorporated within the components of a teacher induction program. While this study

suggested that the socio-economic level of the school did not affect the observation scores of classroom teaching behaviors of urban novice, it should be noted that strategies now known as culturally responsive pedagogy (Gay, 2000) that address the learning styles of students of diverse populations were included within the program components.

#### Implications for Further Research

The following implications are based on the findings and conclusions of this study:

1. Replicate the study in different geographical region.
2. Because the observation scores of classroom teaching behaviors increased and the standard deviations decreased over the period in which the participants were involved in the university-based teacher induction program, it appeared that a statistical significance between and within the subgroups were masked due to fewer differences being calculated. Therefore, further study is recommended to determine the differences between and within the participating subgroups.
3. Observe one-semester participants during their second semester of teaching using the TIPFOI. Compare their observation scores with those of two-semester participants who continued to participate in the university-based teacher induction program.
4. Compare the observation scores of classroom teaching behaviors of past participants during their fifth year of teaching with the observation scores



of classroom teaching behaviors of their first year of teaching, as they participated in a university-based teacher induction program.

5. Conduct a qualitative study in which the classroom teaching behaviors of an urban novice teacher, who participated in the university-based teacher induction program, are documented during the second year of teaching.
6. Compare observation scores of classroom teaching behaviors conducted throughout the year of novice teachers participating in a university-based teacher induction program of an experimental group with those of a control group.
7. Determine whether a statistically significant difference exists between the classroom teaching behaviors of participants of a university-based teacher induction program that incorporates culturally responsive pedagogy within the program components and the observation scores of participants who participate in a program that fails to include culturally responsive pedagogy.
8. Compare the results of the TIPPS given at the end of the first year of teaching with the results of the TIPPS during the fifth year of teaching.

### Summary

A critical time in a teacher's career has been determined to be the induction period (Ramsey, 2000). As novice teachers participate in teacher induction programs, the program components contribute to the quality of the teachers' performance throughout their teaching careers (Ramsey, 2000). Teacher induction programs have

been shown to enhance the existing skills of novice teachers, while also decreasing the attrition rate (Darling-Hammond, 1998; Recruiting New Teachers, Inc., 2000a). As quality of teaching is increased, so are student achievement scores (Darling-Hammond & Sykes, 2003). This chapter summarized the results of the study, made recommendations for teacher induction programs and discussed implications for further research.

## REFERENCES

- Abell, S. K., Dillon, D. R., Hopkins, C. J., McInerney, W. D., & O'Brien, D. G. (1995). "Somebody to count on": Mentor/intern relationships in a beginning teacher internship program. *Teaching and Teacher Education, 11*, 173-188.
- Advisory Committee on Teacher Induction. (1989). *Beginning teacher induction plan for Texas schools*. Austin, TX: Author.
- Alliance for Excellent Education. (2004). *Tapping the potential: Retaining and developing high-quality new teachers*. Retrieved November 30, 2004, from <http://www.all4ed.org/publications/TappingThePotential/index.html>
- American Federation of Teachers. (2000). *Building a profession: Strengthening teacher preparation and induction*. Washington, DC: Author.
- American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.
- Amstutz, D. D. (1999). Adult learning: Moving toward more inclusive theories and practices. *New Directions for Adult and Continuing Education, 82*, 19-32.
- Angelle, P. S. (2002). *T. O. S. S. it to the new teacher: The principal's role in the induction process*. Paper presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.
- Arekere, D. (2004). *Advancing advances*. Paper presented at the Race and Ethnic Studies Institute, Cabo San Lucas, Mexico.
- Armstrong, T. (1994). *Multiple intelligences in the classroom*. Alexandria, VA:

Association for Supervision and Curriculum Development.

- Ballantyne, R., & Hansford, B. (1995). Mentoring beginning teachers: A qualitative analysis of process and outcomes. *Educational Review, 47*, 297-308.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Banks, J. A. (2001a). Multicultural Education: Characteristics and goals. In J. A. Banks & C. M. Banks (Eds.), *Multicultural education: Issues and perspectives* (4th ed., pp. 3-30). New York: John Wiley & Sons, Inc.
- Banks, J. A. (2001b). Approaches to multicultural curriculum reform. In J. A. Banks & C. M. Banks (Eds.), *Multicultural education: Issues & perspectives* (4th ed., pp. 225-246). New York: John Wiley and Sons, Inc.
- Banks, J. A. (2001c). Multicultural education: Its effects on students' racial and gender role attitudes. In J. A. Banks & C. M. Banks (Eds.), *Handbook of research on multicultural education* (pp. 617-627). San Francisco, CA: Jossey-Bass.
- Barab, S., Barnett, M., & Squire, K. (2002). Developing an empirical account of a community of practice: Characterizing the essential tensions. *The Journal of the Learning Sciences, 11*, 489-542.
- Barnes, S. (1987). *The development of the Texas Teacher Appraisal System*. Paper presented at the annual meeting of the American Research and Education Association, Washington, DC.
- Bartell, C. A. (2001, Winter). Bridging the disconnect between policy and practice in teacher education. *Teacher Education Quarterly, 28*, 189-198.

- Bartell, C. A. (2005). *Cultivating high-quality teaching through induction and mentoring*. Thousand Oaks, CA: Corwin Press.
- Berliner, D. C. (1988). Implications of studies of expertise in pedagogy for teacher education and evaluation. In *New directions for teacher assessment*. Princeton, NJ: Educational Testing Service.
- Berry, B. (2003). *Considering the costs of teacher induction*. Retrieved November 30, 2004, from [www.teachingquality.org/resources/powerpoints/2003222\\_Holmes\\_Ptnrshp\\_induction\\_costs.pdf](http://www.teachingquality.org/resources/powerpoints/2003222_Holmes_Ptnrshp_induction_costs.pdf)
- Berry, B., & Hirsch, E. (2003). *What we know and can do to retain quality teachers*. Paper presented at the Teacher Quality, Recruitment & Retention Symposium, Clearwater, FL.
- Birrell, J. R. (1995). "Learning how the games is played": An ethnically encapsulated beginning teacher's struggle to prepare Black youth for a White world. *Teaching and Teacher Education, 11*, 137-147.
- Books, S. (Ed.). (1998). *Introduction: An invitation to listen and learn*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Boreen, J., Johnson, M., Niday, D., & Potts, J. (2000). *Mentoring beginning teachers: Guiding, reflecting, coaching*. York, ME: Stenhouse Publishers.
- Boreen, J., & Niday, D. (2000). Breaking through the isolation: Mentoring beginning teachers. *Journal of Adolescent & Adult Literacy, 44*, 152-163.
- Borrego, I., & Hirai, D. C. (2004). *Does self-reflection/observation impact teacher*

*effectiveness*. Paper presented at the annual meeting of the Society for Information Technology & Teacher Education International Annual Conference, Atlanta, GA.

Brenner, A. D. (2000). *The cost of teacher turnover*. Retrieved March 8, 2003, from <http://www.sbec.state.tx.us/SBECOnline/txbess/turnoverrpt.pdf>

Brewster, C., & Railsback, J. (2001). *Supporting beginning teachers: How administrators, teachers and policymakers can help new teachers succeed*. Portland, OR: Northwest Regional Educational Laboratory.

*Brief Facts...2003-2004*. (2004). Retrieved July 24, 2004, from <http://www.corpus-christi.k12.tx.us/index.cfm?page=1549>

Brock, B., & Grady, M. (1997). *From first-year to first-rate: Principals guiding beginning teachers*. Thousand Oaks, CA: Corwin Press, Inc.

Brooks, M. (1999). Mentors matter. In M. Scherer (Ed.), *A better beginning* (pp. 53-59). Alexandria, VA: Association for Supervision and Curriculum Development.

Brown, J., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18, 32-42.

Bullough, R. (1992). Beginning teacher curriculum decision making, personal teaching metaphors and teacher education. *Teaching and Teacher Education*, 8, 239-252.

Calhoun, R. (1994). *How to use action research in the self-renewing school*. Alexandria, VA: Association of Supervision and Curriculum Development.

Carnegie Forum on Education and the Economy, Task Force on Teaching as a

- Profession. (1986). *A nation prepared: Teachers for the 21st century*. New York: Author.
- Carter, M. (2000). *Beginning teachers and workplace learning: An exploration of the process of becoming a teacher*. Paper presented at the annual meeting of the International Congress for School Effectiveness and Improvement, Hong Kong.
- Carter, M., & Strong, R. (2001). Mentoring and beginning teachers' workplace learning. *Asia-Pacific Journal of Teacher Education, 29*, 249-262.
- Carter, N. P. (Ed.). (2003a). *Convergence or divergence: Alignment of standards, assessment and issues of diversity*. Washington, DC: American Association of Colleges for Teacher Education.
- Carter, N. P. (2003b). Diversity and standards: Defining the issues. In N. P. Carter (Ed.), *Convergence or divergence: Alignment of standards, assessment and issues of diversity* (pp. 9-20). Washington, DC: American Association of Colleges for Teacher Education.
- Carter, N. P., Gayles-Felton, A., Hilliard, R., & Vold, L. (1999). Dealing with issues of racism in the classroom: Preservice and beginning teachers. In N. Quisenberry & J. McIntyre (Eds.), *Educators healing racism* (pp. 87-101). Reston, VA: Association of Teacher Educators.
- Carter, N. P. & Larke, P. J. (1995). Preparing the urban teacher: Reconceptualizing the experience. In M. O'Hair, & S. Odell (Eds.) *Teacher education yearbook II*. (pp. 77-95). Thousand Oaks, CA: Corwin Press, Inc.

- Carter, N. P., & Larke, P. J. (2003). Examining INTASC Standards through the lens of multicultural education: Meeting the needs of underserved students. In N. P. Carter (Ed.), *Convergence and divergence: Alignment of standards, assessment and issues of diversity* (pp. 55-70). Washington, DC: American Association of Colleges for Teacher Educators.
- Certo, J. L., & Fox, J. E. (2002). Retaining quality teachers. *High School Journal*, 86, 57-76.
- Claycomb, C. (2000, Winter). High-quality urban school teachers: What they need to enter and to remain in hard-to-staff schools. *The State Education Standard*, 4, 17-20.
- Cochran-Smith, M. (2001). Higher standards for prospective teachers: What's missing from the discourse? *Journal of Teacher Education*, 52, 179-181.
- Collins, T. (1999). *Attracting and retaining teachers in rural areas*. Retrieved January 1, 2002, from <http://www.ael.org/eric/publicat.htm#digests>
- Conway, C., Hansen, E., Schulz, A., Stimson, J., & Wozniak-Reese, J. (2004). Becoming a teacher: Stories of the first few years. *Music Educators Journal*, 91, 45-51.
- Corpus Christi Regional Economic Development Corporation. (2004). *Quality of life*. Retrieved July 24, 2004, 2004, from <http://www.ccredcc.com/quallife.asp>
- Croasmun, J., Hampton, D., & Herrmann, S. (1999). *Teacher attrition: Is time running out?* Retrieved December 14, 2001, from <http://horizon.unc.edu/projects/issues/papers/Hampton.asp>



- Curran, B. (2000). *Teacher supply and demand: Is there a shortage?* Retrieved November 14, 2003, from [http://www.nga.org/center/divisions/1,1188,C\\_ISSUE\\_BRIEF^D\\_532,00.html](http://www.nga.org/center/divisions/1,1188,C_ISSUE_BRIEF^D_532,00.html)
- Danielson, C., & McGreal, T. (2000). *Teacher evaluation: To enhance professional practice*. Alexandria, VA: Association of Supervisors and Curriculum Directors.
- Darling-Hammond, L. (1997, November). *Doing what matters most: Investing in quality teaching*. Retrieved October 28, 2000, from [www.tc.columbia.edu/~teachcomm](http://www.tc.columbia.edu/~teachcomm)
- Darling-Hammond, L. (1998). *Using standards to support student success*. Retrieved November 19, 2001, from <http://cpdc.k12.ca.us/briefs/015/03.html>
- Darling-Hammond, L. (1999). Educating teachers: The academy's greatest failure or its most important future? *Academe*, 85, 26-35.
- Darling-Hammond, L. (2000a). *Solving the dilemmas of teacher supply, demand, and standards: How we can ensure a competent, caring, and qualified teacher for every child*. New York: National Commission on Teaching & America's Future.
- Darling-Hammond, L. (Ed.). (2000b). *Studies of excellence in teacher education*. New York: National Commission on Teaching & America's Future.
- Darling-Hammond, L. (2001). Inequality and access to knowledge. In J. A. Banks & C. M. Banks (Eds.), *Handbook of research on multicultural education* (pp. 465-483). San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L. (2004). Educating the new educator: Teacher education and the future of democracy. *The New Educator: A Journal of Educator Recruitment*,

*Development and Support, Preview*, 1-18.

Darling-Hammond, L. (2005). Foreward. In C. A. Bartrell (Ed.), *Cultivating high-quality teaching through induction and mentoring* (pp. xi-xiii). Thousand Oaks, CA: Corwin Press.

Darling-Hammond, L., & Sykes, G. (2003). *Wanted: A national manpower policy for education*. Denver, CO: Education Commission of the States.

David, T. (2000). Teacher mentoring--Benefits all around. *Kappa Delta Pi Record*, 36, 134-136.

Desimone, L., Porter, A. C., Garet, M., Yoon, K., & Birman, B. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Education Evaluation and Policy Analysis*, 24, 81-112.

Dexter, G. (2000). *Mentors and protégés: The impact of a mentoring relationship on beginning teachers and mentor teachers*. Unpublished doctoral dissertation, Johnson & Wales University, Providence, RI.

Dolton, P. & Newson, D. (2003). The relationship between teacher turnover and school performance. *London Review*, 1, 131-140.

Driscoll, M. P. (2002). *How people learn (and what technology might have to do with it)*. Syracuse, NY: ERIC Clearinghouse on Information & Technology.

Edwards, A. & Protheroe, L. (2003). Learning to see in classrooms: What are student teachers learning about teaching and learning while learning to teach in schools?, *British Educational Research Journal*, 29, 227-242.

- Eller, W. S., Doerfler, C. B., & Meier, K. J. (2000). *Teacher turnover in Texas: Problems and prospects* (No. 10). College Station, TX: The Texas Educational Excellence Project.
- Evertson, C. M., & Smithey, M. W. (2001). Mentoring effects on protégés classroom practice: An experimental field study. *Journal of Educational Research, 93*, 294-304.
- Exstrom, M. (2003, October/November). Keeping high quality teachers. *State Legislatures, 26-29*.
- Falk, B. (2004). From the editor. *The New Educator: A Journal of Educator Recruitment, Development and Support, Preview, iii-v*.
- Fallon, D. (2004). *Tapping the potential: Retaining and developing high-quality new teachers*. New York: Carnegie Corporation.
- Farrell, T. (1998). *Reflective teaching: The principles and practices*. Retrieved June 10, 2003, from <http://exchanges.state.gov/forum/vols/vol36/no4/p10.htm>
- Feiman-Nemser, S. (1996, July). *Teacher mentoring: A critical review*. Washington, DC: American Association of Colleges for Teacher Education.
- Feiman-Nemser, S. (1998). Teachers as teacher educators [1]. *European Journal of Teacher Education, 21*, 63-74.
- Feiman-Nemser, S. (2000, Fall). Teachers as teacher educators. *The New Teacher Center Reflections, 4*, 3-7.
- Feiman-Nemser, S. (2001). *Educative mentoring: A focus on teacher development*. Paper

- presented at the annual Symposium on Teacher Induction, San Jose, CA.
- Feiman-Nemser, S., Carver, C., Schwille, S., & Yusko, B. (1999). Beyond support: Taking new teachers as learners. In M. Scherer (Ed.), *A better beginning* (pp. 13-17). Alexandria, VA: Association for Supervision and Curriculum Development.
- Feistritzer, C. E., & Chester, D. (2000). *Alternative teacher certification: A state-by-state analysis*. Washington, DC: National Center for Educational Information.
- Fenwick, T. (2004). Teacher learning and profession growth plans: Implementation of a provincial policy. *Journal of Curriculum and Supervision, 19*, 259-282.
- Fideler, E. F., & Haselkorn, D. (1999). *Learning the ropes: Urban teacher induction programs and practices in the United States*. Belmont, MA: Recruiting New Teachers, Inc.
- Fitch, P. A. (1999). *Update of beginning teacher support and assessment program evaluation activities*. Retrieved October 15, 2004, from [http://www.ctc.ca.gov/aboutctc/agendas/december\\_1999/rep/rep2/html](http://www.ctc.ca.gov/aboutctc/agendas/december_1999/rep/rep2/html)
- Fleischmann, A. K., Ganzer, T., Marchione, M. J., & Massie, E. W. (2000). *Mentoring: A support system for beginning teachers*. Paper presented at the annual meeting of the Association for Supervision and Curriculum Development, New Orleans, LA.
- Foster, M. (2004). An innovative professional development program for urban teachers. *Phi Delta Kappan, 85*, 401-406.
- Freemyer, J. (1999). *The impact of mentor training on the perceived effectiveness of*

- mentor support*. Unpublished doctoral dissertation, The University of North Carolina at Charlotte, Charlotte, NC.
- Fuller, E. (1998). *Does teacher certification matter? A comparison of TAAS performance in 1997 between schools with low and high percentages of certified teachers*. Austin, TX: University of Texas at Austin.
- Fuller, E. (2002). *Elements of the demand for Texas public school teachers*. Retrieved January 5, 2004, 2003, from <http://www.sbec.state.tx.us/SBECOnline/default.asp>
- Fuller, E. (2003, August). *State Board for Educator Certification meeting highlights*. Retrieved December 13, 2003, from <http://www.sbec.state.tx.us/SBECOnline/default.asp>
- Fuller, E., & Alexander, C. (2004). *Retaining beginning teachers through the Texas beginning educator support system (TxBESS)*. Paper presented at the annual meeting of the American Educational Research Association. San Diego, CA.
- Futrell, M. (1999). Recruiting minority teachers. *Educational Leadership*, 56, 30-33.
- Gall, M., Borg, W., & Gall, J. (1996). *Educational research: An introduction* (6<sup>th</sup> ed.). White Plains, NY: Longman.
- Galvez-Hjornevik, C. (1985). *Teacher mentors*. Austin, TX: Research and Development Center for Teacher Education, The University of Texas at Austin. (ERIC Document Reproduction Service No. ED263105)
- Ganzer, T. (2000, March). *Evaluating a university mentoring program for K-12 teachers: The University of Wisconsin-Whitewater beginning teacher assistance*

- program*. Paper presented at the annual meeting of the International Mentoring Association Conference, New Orleans, LA.
- Ganzer, T. (2001a, March). *Building the capacity of school districts to design, implement and evaluate new teacher mentor programs*. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, Dallas, TX.
- Ganzer, T. (2001b, March). *Beginning teaching in Jamaica: Challenges and assistance*. Paper presented at the annual meeting of the International Mentoring Association, Washington, DC.
- Ganzer, T., Marchione, M. J., & Fleischmann, A. K. (1999). Baltimore takes mentoring to the next level. In M. Scherer (Ed.), *A better beginning: Supporting and mentoring new teachers* (pp. 69-84). Alexandria, VA: Association of Supervision and Curriculum Development.
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research & practice*. New York: Teachers College Press.
- Gay, G., & Howard, T. (2000, Summer). Multicultural teacher education for the 21st century. *The Teacher Educator*, 36, 1-16.
- Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. (2001). Working in special education: Factors that enhance special educators' intent to stay. *Exceptional*

*Children, 67, 549-567.*

Giebelhaus, C. R., & Bendixen-Noe, M. (2000). *"I'll be there for you." Mentoring and beginning teacher success.* Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, Chicago, IL.

Giebelhaus, C. R., & Bowman, C. L. (2002). Teaching mentors: Is it worth the effort? *Journal of Educational Research, 95, 246-255.*

Gilles, C., Cramer, M. M., & Hwang, S. K. (2001). Beginning teachers perceptions of concerns: A longitudinal look at teacher development. *Action in Teacher Education, 23, 89-98.*

Gless, J., & Moir, E. (n.d.). *Supporting beginning teachers with heart and mind: A decade of lessons learned form the Santa Cruz New Teacher Project.* Retrieved November 28, 2004, from <http://www.newteachercenter.org/article7.php>

Glover, R. W., & Mutchler, S. E. (2000). *Lessons form the field: Case studies of three districts.* Austin, TX: Southwest Educational Development Laboratory.

Gold, Y. (1996). Beginning teacher support: Attrition, mentoring and induction. In J. Sikula (Ed.), *Project of Association of Teacher Education* (2nd ed., pp. 548-594). New York: Macmillan.

Good, T. L., & Brophy, J. E. (2000). *Looking in classrooms* (8th ed.). New York: Longman.

Gordon, S. (1991). *How to help beginning teachers succeed.* Alexandria, VA: Association of Supervisors and Curriculum Directors.

- Grant, C. (1989). Urban teachers: Their new colleagues and curriculum. In J. Krevotics and Edward Nussel (Eds.), *Transforming urban education*, (pp. 315-326). Boston: Allyn and Bacon.
- Grant, C., & Tate, W. (2001). Multicultural education through the lens of the multicultural education research literature. In J. A. Banks & C. M. Banks (Eds.), *Handbook of research on multicultural education* (pp. 145-168). San Francisco, CA: Jossey-Bass.
- Grant, L. (2003). *Meta-analysis of induction and mentoring programs' contribution to new teacher retention during the first five years of employment*. Unpublished doctoral dissertation, Northern Illinois University, DeKalb, IL.
- Haberman, M. (1995). *Star teachers of children in poverty*. West Lafayette, IN: Kappa Delta Pi.
- Haberman, M. (2000). Increasing the number of high-quality African American teachers in urban schools. *Journal of Instructional Psychology*, 26, 208-212.
- Haberman, M. (2002). *Who benefits from failing urban school districts? An essay on equity and justice for diverse children in urban poverty*. Retrieved August 23, 2004, from <http://www.educationnews.org>
- Haberman, M. (2004). *Where the public schools can find \$2.6 billion more--every year*. Retrieved November 30, 2004, 2004, from <http://www.educationnews.org/billions-wasted-on-teacher-attrib.htm>
- Halford, J. (1999). Easing the way for new teachers. In M. Scherer (Ed.), *A better*



- beginning* (pp. 13-17). Alexandria, VA: Association for Supervision and Curriculum Development.
- Halpern, D. (2000). *Using the principles of cognitive science and learning theories to enhance learning and teaching*. Retrieved April 30, 2004, from [http://www.pkal.org/template2.cfm?c\\_id=993](http://www.pkal.org/template2.cfm?c_id=993)
- Hansman, C. A. (2001). Context-based adult learning. In S. B. Merriam (Ed.), *The new update on adult learning theory* (pp. 43-51). San Francisco, CA: Jossey-Bass.
- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2004, Winter). The revolving door. *Education Next*, 77-82.
- Hargreaves, A., & Fullan, M. (1999). Mentoring in the new millennium. *Theory into Practice*, 39, 59-65.
- Hausfather, S. J. (1996). Vygotsky and schooling: Creating a social context for learning. *Action in Teacher Education*, 18, 1-10.
- Heidkamp, A. (1999). The elements of a supportive induction program. In M. Scherer (Ed.), *A better beginning: Supporting and mentoring new teachers* (pp. 40-46). Alexandria, VA: Association of Supervision and Curriculum Development.
- Hendrick, L. S., & Childress, L. J. (2002). *The RIMS Beginning teacher support and Assessment partnership: A study of eight years of collaboration*. Paper presented at the annual meeting of the American Educational Research Association Conference, New Orleans, LA.
- Henke, R., Chen, X., & Geis, S. (2000). *Progress through the Teacher Pipeline: 1992-93*

*College Graduates and Elementary/Secondary School Teaching as of 1997.*

Retrieved February 10, 2005, from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000152>

Hertzog, H. S. (2002). "When, how and who do I ask for help?" Novices' perceptions of problems and assistance. *Teacher Education Quarterly*, 29, 25-41.

Holloway, J. H. (2001, May). The benefits of mentoring. *Educational Leadership*, 58, 85-86.

Holloway, J. H. (2002, March). Mentoring for diversity. *Educational Leadership*, 59, 88-89.

Holmes Group. (1986). *Tomorrow's teachers*. East Lansing, MI: Author.

Horn, P. J., Sterling, H. A., & Subhan, S. (2002). *Accountability through "Best practice" induction models*. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, New York.

Howard, T. (2003). Who receives the short end of the shortage? Implications of the U.S. teacher shortage on urban schools. *Journal of Curriculum and Supervision*, 18, 142-160.

Howey, K. (1999). Preparing teachers for inner city schools. *Theory into Practice*, 38, 31-36.

Huffman, G., & Leak, S. (1986). Beginning teachers' perceptions of mentors. *Journal of Teacher Education*, 37, 22-25.

- Huling-Austin, L. (1986). Factors to consider in alternative certification programs: What can be learned from teacher induction research? *Action in Teacher Education*, 8, 51-58.
- Huling-Austin, L. (1989). A synthesis of research on teacher induction programs and practices. In J. Reinhartz (Ed.) *Teacher induction* (pp. 13-33). Washington DC: National Education Association.
- Huling-Austin, L. (1990). Teacher induction programs and internships. In W. R. Houston (Ed.), *Handbook of research on teacher education* (pp. 535-568). New York, NY: Macmillan Publishing Company.
- Huling-Austin, L. (1992). Research on learning to teach: Implications for teacher induction and mentoring programs. *Journal of Teacher Education*, 43, 173-180.
- Hunt, D. E. (1974). *Matching models in education*. Toronto, Canada: Institute for Studies in Education.
- Hurley, A. (1989). *Beginning teacher induction plan for Texas schools*. Austin, TX: Commissioners' Advisory Committee on Teacher Education.
- Hutto, N., & Haynes, L. (1989). *The mentoring program*. Austin, TX: Texas Education Agency.
- Imig, D. (2002). *Making teacher education responsive to the needs of the 21st century student learning*. Retrieved October 16, 2003, from <http://www.education.armstrong.edu/making.html>
- Ingersoll, R. (1999). Do schools vary in their levels of out-of-field teaching? *Educational*

*Researcher*, 28, 26-37.

Ingersoll, R. (2001, Fall). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38, 499-534.

Ingersoll, R. (2002, June). *The teacher shortage: A case of wrong diagnosis and wrong prescription*. Retrieved September 30, 2002, from [http://www.nctaf.org/whatsnew/docs/charts\\_revised\\_8.15A.02.pdf](http://www.nctaf.org/whatsnew/docs/charts_revised_8.15A.02.pdf)

Ingersoll, R. M., & Kralik, J. M. (2004). *The impact of mentoring on teacher retention: What the research says*. Retrieved October 8, 2004, from <http://www.ecs.org/clearinghouse/50/36/5036.html>

Ingersoll, R., & Smith, T. M. (2004). Does teacher induction and mentoring matter? *NASSP Bulletin*, 88, 28-40.

*Interstate New Teacher Assessment and Support Consortium*. (2005). Retrieved January 20, 2005, from [http://www.ccsso.org/projects/Interstate\\_New\\_Teacher\\_Assessment\\_and\\_Support\\_Consortium](http://www.ccsso.org/projects/Interstate_New_Teacher_Assessment_and_Support_Consortium)

Irvine, J. J. (1992). Making teacher education culturally responsive. In M. Dilworth (Ed.), *Diversity in teacher education: New expectations* (pp. 79-92). San Francisco, CA: Jossey-Bass.

Irvine, J. J. (2003). *Educating teachers for diversity: Seeing with a cultural eye*. New York: Teachers College Press.

Irvine, J. J., & Armento, B. (2001). *Culturally responsive teaching: Lesson planning for elementary and middle grades*. Boston: McGraw Hill.

- Isaac, S. & Michael, W. (1997). *Handbook in research and evaluation: For education and the behavioral sciences* (3<sup>rd</sup> ed.). San Diego, CA: Educational and Industrial Testing Services.
- Joerger, R. M., & Bremer, C. D. (2001). *Teacher induction programs: A strategy for improving the professional experience of beginning career and technical education teachers*. Columbus, OH: National Dissemination Center for Career and Technical Education.
- Joyce, B., & Showers, B. (1980). *Student achievement through staff development*. New York: Longman.
- Joyce, B. & Showers, J. (2002). *Student achievement through staff development* (3<sup>rd</sup> ed.). Alexandria, VA: Association of Supervision and Curriculum Development.
- Justice, M., Greiner, C., & Anderson, S. (2003). Determining the influences of traditional Texas teachers vs. teachers in the emergency teaching certification program. *Education, 124*, 376-389.
- Kajs, L., Copenhaver, A., & Flatt, V. (2001). *Excellence in mentoring program model: A systemic approach to increase retention of novice teachers*. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education Quality Mentoring Symposium, San Jose, CA.
- Kardos, S. (2002). *New teachers' experiences of mentoring, classroom observations and teacher meetings: Toward an understanding of professional culture*. Paper presented at the annual meeting of the American Educational Research

Association, New Orleans, LA

- Kelchtermans, G., & Ballet, K. (2001). The micropolitics of teacher induction. A narrative-biographical study on teacher socialization. *Teaching and Teacher Education, 18*, 105-120.
- Kent, S. (2000). Problems of beginning teachers: Comparing graduates of bachelor's and master's level teacher preparation programs, *The Teacher Educator, 35*, 83-96.
- Kilberg, G. (2000, March). *A matter of trust: Mentoring partnerships*. Paper presented at the annual meeting of the International Mentoring Association, Washington, DC.
- Klug, B., & Salzman, S. (1990). *Formal induction vs. informal mentoring: Comparative effects and outcomes*. Paper presented at the annual meeting of the American Educational Research Association, Boston, MA.
- Larke, P. J. (1992, Winter). Effective multicultural teachers: Meeting the challenges of diverse classrooms. *Equity & Excellence, 25*, 133-138.
- Larke, P. J., & Carter, N. P. (1995). School violence: Preparing pre-service educators. *Dealing with Youth Violence: What Schools and Communities Need to Know, 5*, 45-52.
- Larke, P. J., Webb-Johnson, G., Rochon, R., & Anderson, M. G. (1999). Healing the wounds of instructional racism. In N. L. Quisenberry & D. J. McIntyre (Eds.), *Educators healing racism* (pp. 49-66). Reston, VA: Association of Teacher Educators Association for Childhood Education International.
- Larke, P. J., Wiseman, D., & Bradley, C. (1990). The minority mentorship project:

- Changing attitudes of preservice teachers for diverse classrooms. *Action in Teacher Education*, 12, 5-11.
- Lave, J. (1988). *Cognition in practice: Mind, mathematics and culture in everyday life*. Cambridge, UK: Cambridge University Press.
- Lave, J. (1996). Teaching, as learning, in practice. *Mind, Culture and Activity*, 3, 149-164.
- Lave, J., & Wenger, E. C. (1991/2003). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Lawson, H. A. (1992). Beyond the new conception of teacher induction. *Journal of Teacher Education*, 43, 163-172.
- Lortie, D. C. (1975). *Schoolteacher: A sociological study*. Chicago, IL: The University of Chicago Press.
- Loucks-Horsely, S., Hewson, P., Love, N., & Stiles, K. (1998). *Designing professional development for teachers of science and mathematics*. Thousand Oaks, CA: Corwin Press.
- Machles, D. (2003). *Situated learning: New approach to SH&E training focuses on learning*. Retrieved April 30, 2004, from <http://www.asse.org>
- Mager, G. M. (1992). The place of induction in becoming a teacher. In G. P. DeBolt (Ed.), *Teacher induction and mentoring: School-based collaborative programs* (pp. 15-27). Albany, NY: State University of New York Press.
- Maloch, B., Flint, A. S., Eldridge, D., Harmon, J., Loven, R., Fine, J. C., et al. (2003).

- Understandings, beliefs, and reported decision making of first-year teachers from different reading teacher preparation programs. *The Elementary School Journal*, 103, 431-445.
- Matus, D. E. (1999). An innovative strategy supports student teachers in urban secondary schools. *Urban Secondary Schools*, 73, 37-41.
- Maulding, C. (2002). *Mississippi teacher induction programs: An investigation of effective strategies*. An unpublished doctoral dissertation, Mississippi State University, Starkville, MS.
- Maynard, T., & Furlong, F. (1993). Learning to teach and models of mentoring. In D. McIntyre & M. Wilkin (Eds.), *Mentoring: Perspectives on school-based teacher education* (pp. 37-48). London: Kogan Page.
- McCann, T. M., Johannessen, L. R., & Ricca, B. (2004). Why do teachers leave, and what can we do to keep them? *Hot Topic*, 40, 1.
- McCormack, A., & Thomas, K. (2003). Is survival enough? Induction experiences of beginning teachers within a New South Wales context. *Asia-Pacific Journal of Teacher Education*, 31, 125-138.
- McCormack, R. S. (2001). Is it just natural? Beginning teachers' growth in reflective practice. *Issues in Teacher Education*, 10, 55-66.
- McCowen, R. G. (2004, April 21). The importance of highly qualified teachers in raising academic achievement. *Proceedings of the Committee on House Education and the Workforce Hearing on the Importance of Highly Qualified*



*Teachers, FDCH Congressional Testimony*, Washington, DC.

McKibben, M. D. (2001). One size does not fit all: Reflections on alternative routes to teacher preparation in California. *Teacher Education Quarterly*, 28, 133-149.

McLaughlin, M., & Talbert, J. (1993). *Contexts that matter for teaching and learning: Strategic opportunities for meeting the nation's educational goals*. New York: Teachers College Press.

Meek, A. (1998). America's teacher: Much to celebrate. *Educational Leadership*, 55, 12-16.

Menard, S. (2002). *Longitudinal research* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Meyer, T. (2002). Novice teacher learning communities: An alternative to one-on-one mentoring. *American Secondary Education*, 31, 27-42.

Minami, M., & Ovando, C. J. (2001). Language issues in multicultural contexts. In J. A. Banks & C. M. Banks (Eds.), *Handbook of research on multicultural education* (pp. 427-444). San Francisco, CA: Jossey-Bass.

Moir, E., & Gless, J. (2001, Winter). Quality induction: An investment in teachers. *Teacher Education Quarterly*, 1, 109-114.

Moon-Merchant, V., & Carter, N. P. (2004). A teacher induction model for urban settings: A follow-up study. *Journal of Public Management & Social Policy*, 10, 44-59.

Moskowitz, J., & Stephens, M. (1997). *From students of teaching to teachers of*

- students: Teacher induction around the Pacific Rim*. Washington, DC: Asia Pacific Economic Cooperation by the U.S. Department of Education.
- National Center for Education Statistics. (1999). *Mini-digest of educational statistics, 1998* (No. NCES Publication No. 1999-0391). Washington, DC: U.S. Department of Education Printing Office.
- National Commission on Teaching and America's Future. (2003). *No dream denied: A pledge to America's children*. Washington, DC: National Commission on Teaching and America's Future.
- National Education Association. (2002). Using data to improve teacher induction programs. *The NEA Foundation for the Improvement of Education, 4*, 2-8.
- Newberry, J. M. (1977). *The first year of experiences: Influences on beginning teachers*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Newton, M., Nash, D., & Ruffin, L. (1996). A whole language trilogy: The cover bridge connection. In M. Newton, D. Nash & Ruffin, L. (Eds.), *Teachers doing research: Practical possibilities* (pp. 72-87). Mahwah, NJ: Erlbaum.
- Nieto, S. (2000). *Affirming diversity: The sociopolitical context of multicultural education* (3rd ed.). New York: Longman.
- Nieto, S. (2001). School reform and student learning: A multicultural perspective. In J. A. Banks & C. A. Banks (Eds.), *Multicultural education: Issues & perspectives* (4th ed., pp. 381-401). New York: John Wiley & Sons, Inc.

- Nugent, P., & Faucette, N. (2004). Developing beginning teachers through an interactive induction and internship program. *Action in Teacher Education, 26*, 53-63.
- Oakes, J., Franke, M. L., Quartz, K. H., & Rogers, J. (2002). Research for high-quality urban teaching: Defining it, developing it, assessing it. *Journal of Teacher Education, 53*, 228-234.
- Odell, S. (1990). *What research says to the teacher: Mentor teacher programs*. Washington, DC: National Education Association.
- Odell, S. J., & Ferraro, D. (1992). Teacher mentoring and teacher retention. *Journal of Teacher Education, 43*, 200-204.
- Odell, S., & Huling, L. (2000). *Quality mentoring for novice teachers*. Indianapolis, IN: Kappa Delta Pi.
- Odell, S. J., Huling, L., & Sweeny, B. (2000). Conceptualizing quality mentoring- Background information. In S. J. Odell & L. Huling (Eds.), *Quality mentoring for novice teachers* (pp. 3-25). Indianapolis, IN: Kappa Delta Pi.
- Olebe, M. (1999). California Formative Assessment and Support System for Teachers: Investing in teachers' professional development. *Teaching and Change, 6*, 258-271.
- Olebe, M. (2001). A decade of policy support for California's new teacher: The beginning teacher support and assessment program. *Teacher Education Quarterly, 28*, 71-84.
- Olebe, M., Jackson, A., & Danielson, C. (1999). Investing in beginning teachers: The

- California model. *Educational Leadership*, 56, 41-44.
- O'Neill, L. M. (2004). *Support systems: Quality induction and mentoring programs can help recruit and retain excellent teachers-and save money*. Retrieved November 25, 2004, from <http://www.ciconline.org>
- Pallant, J. (2001/2004). *SPSS survival manual: A step by step guide to data analysis using SPSS*. New York: Open University Press.
- Pang, V. O. (1994). Why do we need this class? Multicultural education for teachers. *Phi Delta Kappan*, 76, 268-269.
- Pang, V. (2001). *Multicultural education: A caring-centered reflective approach*. Boston: McGraw Hill.
- Pascopella, A. (2004, February). *If at first...If you don't offer new teachers the right kind of professional development, you may not get a second chance*. Retrieved April 28, 2004, from [www.DistrictAdministration.com](http://www.DistrictAdministration.com)
- Patterson, N. C., Roehrig, G. H., & Luft, J. A. (2003). Running the treadmill: Explorations of beginning high school science teacher turnover in Arizona. *High School Journal*, 86, 14-23.
- Perez, K., Swain, C., & Hartsough, C. S. (1997). An analysis of practices used to support new teachers. *Teacher Education Quarterly*, 24, 41-52.
- Ponticelli, J., & Zepeda, S. (1997). First-year teachers at-risk: A study of induction at three high schools. *High School Journal*, 81, 8-22.
- Portner, H. (1998). *Mentoring new teachers*. Thousand Oaks, CA: Corwin Press, Inc.

- Portner, H. (2001). *Mentoring is not enough: Everything else schools and districts need to do*. Thousand Oaks, CA: Corwin Press, Inc.
- Pratt, D. (2002). Good teaching: One size fits all? *New Directions for Adult and Continuing Education, 93*, 5-15.
- Putnam, R. T., & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher, 29*, 4-15.
- Ramsey, G. (2000). *Quality matters--Revitalizing teaching: Critical times, critical choices*. Sydney, NSW, Australia: New South Wales Teacher Education & Training.
- Recruiting New Teachers, Inc. (2000a). *Future teacher: Promising practices*. Retrieved April 17, 2002, from <http://www.rnt.org>
- Recruiting New Teachers, Inc. (2000b). *A guide to developing teacher induction programs*. Retrieved April 18, 2002, from <http://www.rnt.org>
- Reiman, A., & Peace, S. (2002). Promoting teachers' moral reasoning and collaborative inquiry performance: A developmental role-taking and guided inquiry study. *Journal of Moral Education, 31*, 51-66.
- Reiman, A., & Theis-Sprinthall, L. (1998). *Mentoring and supervision for teacher development*. New York: Longman.
- Riggs, I. M., & Sandlin, R. A. (2002). *Professional development of mentors within a beginning teacher induction program: How does the garden (mentors) grow?*

Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

- Robinson, G. W. (1998). *New teacher induction: A study of selected new teacher induction models and common practices*. Paper presented at the annual meeting of the Mid-Western Educational Research Association, Chicago, IL.
- Roche, G. R. (1979). Much ado about mentors. *Harvard Business Review*, 53, 14-28.
- Rogers, D. & Babinski, L. (1999). Breaking through isolation with new teacher groups. *Educational Leadership*, 56, 38-40.
- Roth, W. M., & Tobin, K. (2002). Redesigning an "urban" teacher education program: An activity theory perspective. *Mind, Culture and Activity*, 9, 108-131.
- Runyan, K., White, V., Hazel, L., & Hedges, D. (1998). *A seamless system of professional development from preservice to tenured teaching*. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, New Orleans, LA.
- Sanders, W. L., & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future student academic achievement*. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.
- Scherer, M. (1999). A new teacher's world: Not your grandmother's classroom. In M. Scherer (Ed.), *A better beginning* (pp. vi-viii). Alexandria, VA: Association for Supervision and Curriculum Development.
- Schlecty, P. C. (1983). Induction: A framework for evaluating induction into teaching.

- Journal of Teacher Education*, 1, 37-41.
- Schlechy, P. C., & Vance, V. S. (1983). Recruitment, selection, and retention: The shape of the teaching force. *The Elementary School Journal*, 83, 469-487.
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass, Inc.
- Segall, A. (2004). Revisiting pedagogical content knowledge: The pedagogy of content/ the content of pedagogy. *Teaching and Teacher Education*, 20, 489-504.
- Seo, S., Bishop, A. G., & Langley, L. K. (2004). *Special educator supply and teacher quality: The critical role of teacher induction*. Paper presented at the annual meeting of the Council for Exceptional Children, New Orleans, LA.
- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57, 1-22.
- Slavin, R. (2001). Cooperative learning and intergroup relations. In J. A. Banks & C. M. Banks (Eds.), *Handbook of research on multicultural education* (pp. 628-634). San Francisco, CA: Jossey-Bass.
- Smith, M. K. (2003). *Communities of practice*. Retrieved April 28, 2004, from <http://www.infed.org/index.htm>
- Snow, D. B. (2000). *Teacher induction: A research based framework*. Unpublished doctoral dissertation, University of Alabama, Tuscaloosa, AL.
- Sprinthall, N. A., & Theis-Sprinthall, L. (2001). Educating for teacher growth: A cognitive developmental perspective. *Theory into Practice*, 19, 278-286.

- Stansbury, K., & Zimmerman, J. (2000). *Lifelines to the classroom: Designing support for beginning teachers*. San Francisco, CA: WestEd.
- Stanulis, R. N., Fallona, C. A., & Pearson, C. A. (2002). 'Am I doing what I am supposed to be doing?': Mentoring novice teachers through the uncertainties and challenges of their first year of teaching. *Mentoring & Tutoring, 10*, 71-81.
- Sweeny, B. (2001a). *Creating and sustaining a high impact mentoring program: Strategies that work in all settings*. Paper presented at the annual meeting of the International Mentoring Conference, Washington, DC.
- Sweeny, B. (2001b). *Induction models*. Retrieved October 14, 2004, from <http://teachermentors.com>
- Sweeny, B., & DeBolt, G. (2000). A survey of the 50 states - Mandated teacher-induction programs. In Sandra J. Odell and Leslie Huling (Eds.), *Quality mentoring for novice teachers*, (pp. 97-106). Indianapolis, IN: Kappa Delta Pi.
- Taris, T. W. (2000). *A primer in longitudinal data analysis*. Thousand Oaks, CA: Sage Publications.
- Taylor, G. (1994). *An assessment of the Minority Mentorship Project; Educating teachers for culturally responsive classrooms*. Unpublished doctoral dissertation, Texas A&M University, College Station, TX.
- Texas Center for Educational Research. (2000). *The cost of teacher turnover*. Austin, TX: Texas State Board for Educator Certification.
- Texas Education Agency. (1984). *Texas teacher appraisal system*. Retrieved



June 27, 2001, from [http://www.utexas.edu/admin/opa/discovery/disc2000v15n4/disc\\_initiatives.html](http://www.utexas.edu/admin/opa/discovery/disc2000v15n4/disc_initiatives.html)

Texas Education Agency (2002). Snapshot: School District Profiles. Retrieved July 20, 2004, from <http://www.tea.state.tx.us/perfreport/snapshot/>

Texas State Board for Educator Certification, Panel for Texas Novice Teacher Induction Support System. (1998). *Final report*. Austin, TX: Author

Thomas, J. (1998). Educating our future work force. *Women in Business*, 50, 26-28.

Tillman, L. C. (2003). Mentoring, reflection and reciprocal journaling. *Theory into Practice*, 42, 226-233.

Trahan, C. (2002). *Implications of the No Child Left Behind Act of 2001 for teacher education*. Washington, DC: National Center for Research on Teacher Learning. (ERIC Document Reproduction Service No. ED477723).

Urban Teacher Collaborative. (2000). *The urban teacher challenge: Teacher demand and supply in the great city schools*. Belmont, MA.

U. S. Census Bureau. (2003). *American Community Survey: 2003 Data Profile*. Retrieved October 7, 2004, from <http://www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/Tabular/010/01000US2.htm>

U. S. Department of Education. (1997). *Teaching---A national priority. The new teachers guide to the U. S. Department of Education*. Retrieved June 18, 2001, from <http://www.ed.gov/pubs/Teachersguide.html>

U. S. Department of Education. (2001). *No child left behind*. Retrieved January 29,

- 2004, from <http://ed.gov/nclb/landing.jhtml?src=pb>
- U. S. Department of Education (2002). *No child left behind*. Retrieved May 15, 2003  
From <http://web.ask.com/udir?bpg=http%3q%2f%2web.ask.com>
- U. S. Department of Education. (2003). *Teacher quality: Frequently asked questions*.  
Retrieved April 30, 2004, from <http://www.ed.gov/nclb/landing.jhtml?src=pb>
- Valencia, R. (1997). *The evolution of deficit thinking: Education through practice*.  
Washington, DC: The Falmer Press
- Valli, L. (1997). Listening to other voices: A description of teacher reflection in the  
*U.S. Peabody Journal of Education*, 72, 67-88.
- Veenman, S. (1984, Summer). Perceived problems of beginning teachers. *Review of  
Educational Research*, 54, 143-178.
- Veenman, S., & Denessen, E. (2001). The coaching of teachers: Results of five training  
studies. *Educational Research and Evaluation*, 7, 385-417.
- Villar, A. G. (2004). *Measuring the benefits and costs of mentor-based induction: A  
value-added assessment of new teacher effectiveness linked to student  
achievement*. Paper presented at the National Symposium on Teacher Induction,  
San Jose, CA.
- Villegas, A. M. (1991). Culturally responsive pedagogy for 1990s and beyond,  
*Trends and Issues*. Washington, DC: ERIC Clearinghouse on Teacher  
Education, Association of College for Teacher Education.
- Villegas, A. M., & Lucas, T. (2002). *Educating culturally responsive teachers*. Albany,

- NY: State University of New York Press.
- Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Watzke, J. L. (2003). Longitudinal study of stages of beginning teacher development in a field-based teacher education program. *The Teacher Educator, 38*, 209-229.
- Weasmer, J., & Woods, A. M. (2003). Mentoring: Professional development through reflection. *The Teacher Educator, 39*, 64-77.
- Webb-Johnson, G. (2002). Are schools ready for Joshua? Dimensions of African-American culture among students identified as having behavioral/emotional disorders. *Qualitative Studies in Education, 15*, 653-671.
- Weiner, L. (1999). *Urban teaching: The essentials*. New York: Teachers College Press.
- Weiss, E. M. & Weiss, S. G. (1999). *Beginning teacher induction*. Washington, DC: ERIC Clearinghouse on Teaching and Teacher Education. Retrieved April 18, 2002, from [http://www.ed.gov/databases/ERIC\\_Digests/ed436487.html](http://www.ed.gov/databases/ERIC_Digests/ed436487.html).
- Weitman, C. J., & Colbert, R. P. (2003). *Are elementary teacher education programs the real problem of unqualified teachers?* Paper presented at the annual meeting of the American Association of colleges for Teacher Education, New Orleans, LA.
- Wenger, E. C. (2000). Learning as social participation: Why we must change our assumptions about how we learn and share knowledge. *Knowledge Management Review, 6*, 30-33.
- Wenger, E. C., & Snyder, W. M. (2000a). *Learning in communities*. Retrieved

April 30, 2004, from <http://www.linezine.com>

Wenger, E. C., & Snyder, W. M. (2000b). Communities of practice: The organizational frontier. *Harvard Business Review*, 78, 139-145.

Wilkinson, G. A. (1994). Support for individualizing teacher induction. *Action in Teacher Education*, 16, 53-61.

Williams, J., & Williamson, K. M. (1996). University support for novice teachers: Success, struggles and limitations. *Education*, 116, 366-373.

Wineburg, S. (1997). *T. S. Eliot, collaboration, and the quandaries of assessment in a rapidly changing world*. Retrieved January 27, 2004, from <http://www.pdkintl.org/kappan/kwin9709.htm>

Wing, J. Y., & Jinks, T. (2001). What skills, beliefs and practices enable experienced teachers to promote reflective practice in novice teachers? *Issues in Teacher Education*, 10, 39-54.

Wise, A. E. (2002, June). *Meeting the highly qualified teachers challenge*. Retrieved December 15, 2004, from [http://www.ncate.org/institutions/0203\\_WiseStatement.asp?ch=37](http://www.ncate.org/institutions/0203_WiseStatement.asp?ch=37)

Wojnowski, B. S., Bellamy, M. L., & Cooke, S. (2003). A review of literature on mentoring and induction of beginning teachers with an emphasis on the retention and renewal of science teachers. *National Science Teachers Association*, 23-33 (ERIC Document Reproduction Service No. ED472323).

Wonacott, M. E. (2002). *Teacher induction programs for beginning CTE teachers*.

Retrieved October 14, 2004, from <http://www.nccte.org/publications/infosynthesis/in-brief/19/index.asp>

Wong, P., Sterling, H., & Rowland, P. (1999). *Effective induction practices for beginning teacher: A qualitative research evaluation study*. Retrieved February 2, 2004, from [http://www.abor.asu.edu/4\\_special\\_progrms/ITQ/Induction.PDF](http://www.abor.asu.edu/4_special_progrms/ITQ/Induction.PDF)

Zeichner, K. M. (2003). The adequacies and inadequacies of three current strategies to recruit, prepare and retain the best teachers for all students. *Teacher College Record, 105*, 490-519.

Zimpher, N. L., & Rieger, S. R. (1988). Mentoring teachers: What are the issues? *Theory into Practice, 27*, 176-182.

APPENDIX A

## APPENDIX A

## Teacher Induction Program Formative Observation Instrument

Name \_\_\_\_\_ Subject \_\_\_\_\_

Date: \_\_\_\_\_ Observation Number 1 V/2 3 4  
 (\* denotes indicators observed in the first formative evaluation; \*\* denotes indicators observed in the second formative evaluation; all indicators should be observed in the final observation.)

## I. INSTRUCTIONAL STRATEGIES

1. The teacher provides opportunities for students to participate actively and successfully by:

- \_\_\_ a. varying activities.
- \_\_\_ b.\*\* interacting with students in different formats when appropriate.
- \_\_\_ c.\* soliciting participation.
- \_\_\_ d.\*\* extending student responses.
- \_\_\_ e.\* providing appropriate wait time.
- \_\_\_ f. implementing the lesson at an appropriate level of difficulty.
- \_\_\_ g. using higher level questioning.

COMMENTS/SUGGESTIONS: (ExCET I.4, I.1, II.7, II.8, II.9; Proficiency I.1, II.4, II. 5, II.3, IV.2)

2. The teachers evaluates and provides feedback on student progress during instruction by:

- \_\_\_ a.\* communicating learning expectations.
- \_\_\_ b.\*\* monitoring students' performances as they engage in learning activities.
- \_\_\_ c.\*\* reinforcing correct responses/performances.
- \_\_\_ d.\*\* providing corrective feedback or clarifying.
- \_\_\_ e. reteaching using a different strategy, as appropriate.

COMMENTS/SUGGESTIONS: (ExCET II.10; Proficiency II.3)

## II. CLASSROOM MANAGEMENT AND ORGANIZATION

3. The teacher organizes materials and students through:
- a.\* securing students' attention.
  - b.\*\* using administrative procedure and routines which facilitate instruction.
  - c.\*\* giving clear administrative directions for classroom procedures or routines.
  - d.\* maintaining seating arrangement/grouping appropriate for the activity and the environment.
  - e.\* having materials, aids, and facilities ready for use.

COMMENTS/SUGGESTIONS:

(ExCET II.11; Proficiency II.3)

4. The teacher maximizes the amount of time available for instruction by:
- a.\* beginning promptly/avoiding wasted time at the end of the instructional period.
  - b. implementing appropriate sequence of activities.
  - c. maintaining appropriate pace.
  - d.\*\* maintaining focus.
  - e.\*\* keeping students engaged.

COMMENTS/SUGGESTIONS:

(ExCET II.11; Proficiency II.3)



5. The teacher manages student behavior by:
- a.\* specifying behavior expectations for the class before instruction.
  - b.\*\* using techniques to prevent off-task behavior.
  - c.\* using techniques to redirect/stop inappropriate/disruptive behavior.
  - d.\*\* applying rules consistently and fairly.
  - e.\*\* reinforcing desired behavior, when appropriate.
- COMMENTS/SUGGESTIONS: (ExCET II.11; Proficiency II.1)

### III. PRESENTATION OF SUBJECT MATTER\

6. The teacher teaches for cognitive, affective, and/or psychomotor learning by:
- a.\* beginning instruction/activity with an appropriate introduction.
  - b.\*\* presenting information in an appropriate sequence.
  - c.\*\* relating content to prior or future learning.
  - d.\*\* providing for definitions of concepts and description of skills and/or attitudes and interests.
  - e. providing elaboration of critical attributes of concepts, skills and/or attitudes and interests.
  - f.\*\* stressing the generalization, the principle, the rules as a relationship between or among concepts, skills, or attitudes/interests.
  - g.\*\* providing opportunities for application of knowledge learned.
  - h.\* closing instruction through assessing students' knowledge of the objective.

COMMENTS/SUGGESTIONS: (ExCET I.1,I.4,I.5, II.8, II.9; Proficiency I.1, I.2, II.4, II.5)

7. The teacher effectively communicates by:
- a.\* making no significant errors in content.
  - b.\* explaining content and/or learning tasks clearly.
  - c.\*\* using correct grammar.
  - d.\* using accurate language.
  - e.\*\* demonstrating skill in written communication.
  - f.\*\* using appropriate vocal delivery.

COMMENTS/SUGGESTIONS:

(ExCET I.4, II.7;  
Proficiency I.1, IV.2)

#### IV. LEARNING ENVIRONMENT

8. The teacher uses strategies to motivate students to learn through:
- a.\*\* relating content to student interests/experiences.
  - b. challenging students by using higher level thinking/problem solving skills.

COMMENTS/SUGGESTIONS:

(ExCET I.5; Proficiency I.2, II.3,  
II.5, III.1)

9. The teacher maintains a supportive environment by:
- a.\* avoiding sarcasm and negative criticism.
  - b.\*\* establishing a climate of courtesy and respect.
  - c.\*\* encouraging slow and reluctant students.
  - d.\* establishing and maintaining a positive rapport and relationship with students.

COMMENTS/SUGGESTIONS:

(ExCET Competency I.2, I.3, I.5;  
Proficiency I.2, II.2, III.1, IV.3)

10. The teachers demonstrates enthusiasm for teaching through:
- a.\*\* showing varied expressions.
  - b.\*\* demonstrating excitement about learning.

COMMENTS/SUGGESTIONS:

(ExCET I.5;Proficiency II.5)

This formative observation lists behaviors exhibited by the teacher and students in the class being observed on \_\_\_\_\_ while teaching \_\_\_\_\_.

date subject

I understand that this form will not be shared or used in my summative evaluation by the school district in which I teach.

\_\_\_\_\_ date \_\_\_\_\_ Teacher's signature \_\_\_\_\_ University Supervisor's Signature

Requirement checklist:

Checked items were observed in this observation.

\_\_\_\_\_ Journal \_\_\_\_\_ Documentation folder

\_\_\_\_\_ Daily schedule posted \_\_\_\_\_ Rules, rewards, consequences posted

\_\_\_\_\_ Student work displayed \_\_\_\_\_ Learner-centered activity

\_\_\_\_\_ Uses available technology + \_\_\_\_\_ Students participated in self-directed activities++

+Whatever equipment available to the teacher is considered technology; overhead projector, chalkboard, calculators, computers, etc.

++Students find their own strategies for constructing learning or problem solving; connecting or applying learning to real life and/or other disciplines.

Suggestions to increase effective teaching behaviors:

APPENDIX B

## APPENDIX B

April 15, 1991

Dear Beginning Teacher:

According to our records, you will soon complete your first year of teaching. To better serve the university students in the College of Education, we need your responses regarding the present program. We would appreciate your responses to the enclosed anonymous open-ended response form. Please list areas in which you needed extra help during your first year of teaching. All responses will be kept in strict confidence

After completing the response form, please return it in the enclosed self-addressed envelope. We appreciate your help in improving the program for future teacher educators.

Sincerely,

Vickie Moon Merchant  
Coordinator, Teacher Induction Program

APPENDIX C

## APPENDIX C

## Needs Assessment

April, 1991

Please list areas in which you needed extra help during your first teaching year. All responses will be kept in strictest confidence. Thank you.

Areas in which I needed extra help during the first teaching year:

1.

2.

3.

4.

5.

Please check the methods courses you completed:

\_\_\_\_\_EDM342      Teaching Arithmetic in the Elementary School

\_\_\_\_\_EDM 344      Language in the Elementary School

\_\_\_\_\_EDM 346      Teaching Social Studies in the Elementary School

\_\_\_\_\_EDM 348      Teaching Science in the Elementary School

Comments regarding methods courses:



APPENDIX D

## APPENDIX D

April 10, 1994

Dear Educator:

The Teacher Induction Program at Texas A&M University-Corpus Christi is conducting a pilot study. As an alumnus of the program, you are being asked to complete the enclosed questionnaire. The items on the questionnaire ask about your present teaching assignments, continuing education and your perceptions regarding the components of the program and continued use of the modeled strategies.

Some of the questions are open-ended. Please answer those as completely as possible. Others have a checklist asking you to check the activities that you are continuing to use in your teaching. Some of those with checklists also ask the degree of effectiveness that you perceive them to be. Please rate them on a scale of 1 to 5 with 1 - being ineffective, 2 – having little ineffectiveness, 3 – being effective; 4 – being very effective and 5- being highly effective.

The attached questionnaire will require about 10 minutes of your time to complete. Please take a moment to reflect about your participation in the program and the past five years of teaching before completing the questionnaire. All responses will be kept in strictest confidentiality. The information will be used as a program evaluation.

After completing the questionnaire, please use the self-addressed, stamped envelope to return it. within two weeks of the receipt of this letter.

Your participation is greatly appreciated.

Sincerely,

Vickie Moon Merchant  
Coordinator, Teacher Induction Program

APPENDIX E

## APPENDIX E

## Teacher Induction Year Program Pilot Study

Please answer the following questions and return in the enclosed envelope.

When asked to rate, please use: 1- being ineffective; 2- having little effectiveness;  
3 - effective; 4 – more effective; or 5 – highly effective.

Name \_\_\_\_\_ (optional) Years taught \_\_\_\_\_

1. What is your present occupation? \_\_\_\_\_

If teaching, which ISD? \_\_\_\_\_ Grade level during first year \_\_\_\_\_

Grade level at present \_\_\_\_\_ or subject \_\_\_\_\_

If you have changed grade levels, how has that change impacted your teaching?

If you are not teaching, why did you leave teaching?

- 
2. Check the following activities that you continue to use in your classroom. Rate the effectiveness of the activities from 1-5 with 1- being ineffective; 2- having little effectiveness; 3 effective; 4 – more effective; or 5 – highly effective.

<b>Activities</b>	<b>Check those still being used</b>	<b>Rate (1-5)</b>
a. Interactive bulletin boards/or activities		
b. Journal writing; personal Students		
c. Interactive vocabulary activities		
d. Reading strategies		
e. Process Writing		
f. Cooperative learning		
g. Manipulatives		
h. Whole-language activities		

3. Have you **seriously** thought about changing to another profession and didn't? \_\_\_\_\_ If so, what changed your mind and kept you in the teaching profession? Please answer on back.
4. Check the teacher behaviors on the following chart that you used when you began teaching and the ones you continue to use. If you are not using, please state why or give a comment.

Teacher Behavior	As an IYT	Using Now?	If not using, why? or Comments
a. uses organizational skills			
b. uses positive reinforcement consistently			
c. gives behavior expectations before beginning instruction			
d. uses lesson design consistently			
e. uses assertive discipline consistently or uses an alternative discipline system			
f. uses consistency with consequences			
g. uses rewards for appropriate behavior			

IYT – Induction Year Teacher

5. Compare your TTAS Evaluations now vs. when you began teaching:

	As an IYT		Now	
	Yes	No	Yes	No
•Accomplish most/all indicators				
Check the <b>average</b> of the following as per your last evaluation				
Satisfactory				
Meets Expectations				
Exceeds Expectations				
Clearly Outstanding				
•Number of EQs received (if given)				

6. Are you interested in an Alumni Organization? \_\_\_\_\_ If so, how often would you like to meet? Circle one:      Once a year,      Twice a year
7. Would you like to participate in a mentoring course if it were offered at TAMU-CC? Circle one:      Yes      No

8. Check other school leadership responsibilities in which you have participated:  
 \_\_\_\_\_ SBDM \_\_\_\_\_ Written Grants  
 \_\_\_\_\_ given inservices \_\_\_\_\_ attended conferences  
 \_\_\_\_\_ grade-level chairperson \_\_\_\_\_ curriculum development  
 \_\_\_\_\_ committees; name \_\_\_\_\_  
 \_\_\_\_\_ involved in professional organizations. \_\_\_\_\_ local \_\_\_\_\_ state  
 Other: \_\_\_\_\_
9. Please rate your job satisfaction from 1 to 5: 1- dissatisfied; 2 - somewhat  
 dissatisfied; 3-satisfactory; 4- Very satisfied; 5 - Completely satisfied.  
 First year: \_\_\_\_\_ Now: \_\_\_\_\_
10. At the end of your student teaching, did you have plans to finish your Masters  
 Degree? \_\_\_\_\_
11. At this time how many hours have you completed toward your  
 Masters Degree? \_\_\_\_\_
12. When do you plan to finish your Masters of Science Degree? \_\_\_\_\_
13. In what area of your teaching do you have the greatest challenge or in what area  
 would you like to have more assistance in the future?
- 
14. Please rate the overall effectiveness of the Induction Year Program from 1 to 5:  
 1-being ineffective; 2- somewhat ineffective; 3 – effective;  
 4 - Very effective; 5- Highly effective \_\_\_\_\_
15. How has the Induction Year Program added to your professional development? \_
16. Please add any suggestions for improving the program on the back of this sheet.

APPENDIX F

## APPENDIX F

Dear Educator:

As an alumni of the Teacher Induction Program, you are being asked to answer the enclosed questionnaire. The questionnaire asks specific questions about the degree of effectiveness of the components of the program, share and support, professional development and formative observations.

The attached questionnaire will require about 10 minutes of your time to complete. Please take a moment to reflect about your participation in the program and the past five years of teaching before completing the questionnaire. All responses will be kept in strictest confidentiality. The information will be used in a program evaluation. Then after completing the questionnaire, use the self-addressed stamped envelope to return it. Please return the questionnaire within two weeks of the receipt of this letter.

Your participation is greatly appreciated.

Sincerely,

Vickie Moon Merchant  
Coordinator, Teacher Induction Program



APPENDIX G

## APPENDIX G

## Teacher Induction Program Participant Survey

Name \_\_\_\_\_ (Optional)

1. Please circle the appropriate. Are you
  - a teacher?
  - a counselor?
  - an administrator?
  - not teaching.
  - other \_\_\_\_\_?
  
2. Circle the Independent School District in which you are teaching?
 

Corpus Christi ISD	Gregory-Portland ISD
Flour Bluff ISD	Aransas Pass ISD
Robstown ISD	Alice ISD

 If other, please specify \_\_\_\_\_
  
3. Are you continuing to take university classes? Yes  
No
  
4. Did some of the strategies discussed in the Teacher Induction Program change your mind about staying in the profession?  
Yes                      No                      Explain
  
5. Overall, How have your TTAS or PDAS Evaluations been rated? Check **one**.
 

Unsatisfactory	_____
Satisfactory	_____
Meets Expectations	_____
Exceed Expectations	_____
Clearly Outstanding	_____
Proficient	_____

6. **Rate by circling** the effectiveness of the following methods:  
 1- not effective; 2 - rarely effective; 3 - average effectiveness; 4 -somewhat effective; 5 - very effective; 6 not applicable; or N/U – if you are **not** using)

<b>Activities</b>	<b>Effectiveness</b>						
Learner-centered Activities	1	2	3	4	5	6	N/U
Reading/Note Taking Strategies	1	2	3	4	5	6	N/U
Cooperative Learning	1	2	3	4	5	6	N/U
Vocabulary strategies	1	2	3	4	5	6	N/U

7. **Circle** the amount of the following teacher behaviors you demonstrate in your classroom:  
 (1 not used, 2 occasional use, 3 sometimes used, 4 average use, 5 consistently used, 6 not applicable)

	<i>To what degree</i>					
Organizational skills	1	2	3	4	5	6
Lesson Design (Focus, Objective,..., Closure)	1	2	3	4	5	6
Discipline System	1	2	3	4	5	6
Behavior expectations	1	2	3	4	5	6
Consistent positive reinforcement	1	2	3	4	5	6
Consistent Consequences	1	2	3	4	5	6

8. **Circle** the school leadership/responsibilities in which you have participated within the first five years of your teaching career:

<b>Leadership</b>	<b>Professional Development</b>	<b>Curriculum</b>	<i>Extra-Curricular</i>
1. Grade level or department chairperson 2. Cooperating teacher 3. Adjunct faculty 4. Mentor teacher 5. SBDM or PDM	6. Given in-service presentations 7. Attended conferences 8. Involved in professional organization: --locally --nationally	9. Developed curriculum 10. Written grants 11. Received grants	12. Tutor 13. Sponsored club 14. Organized fieldtrips 15. Academic exhibits i.e. Science fair, History fair, Odyssey of the Mind, Special Olympics, etc.)

Please add any others not included

9. Please **circle** the appropriate number as to the extent the following challenge you in the classroom? (1 - not challenging; 2 - rarely challenging; 3 - average challenge; 4- somewhat challenging; 5 - most challenging; 6 - not applicable)

<b>CHALLENGE</b>	<b>RATE</b>					
<b>Student</b>						
Multiculturalism	1	2	3	4	5	6
Discipline	1	2	3	4	5	6
Inclusion	1	2	3	4	5	6
Lack of prerequisite skills	1	2	3	4	5	6
Student Apathy	1	2	3	4	5	6
At-risk	1	2	3	4	5	6
Parental involvement	1	2	3	4	5	6
<b>Teaching Responsibilities</b>						
End-of-Course Testing	1	2	3	4	5	6
Organization	1	2	3	4	5	6
Time Management	1	2	3	4	5	6
Collegial relationships	1	2	3	4	5	6
Paperwork	1	2	3	4	5	6
<b>Administrative Requirements</b>						
Change in Administrative Personnel	1	2	3	4	5	6
Change in standards at local/state level	1	2	3	4	5	6
Inadequate supplies	1	2	3	4	5	6

10. Rate your job satisfaction your **first year** by circling 1 to 5 (1-least satisfied; 2 - somewhat satisfied; 3 – satisfied; 4- very satisfied; 5 – extremely satisfied)

1                      2                      3                      4                      5

11. Rate your job satisfaction your **fifth year** from 1 to 5 (1-least satisfied; 2 - somewhat satisfied; 3 – satisfied; 4- very satisfied; 5 – extremely satisfied)

1                      2                      3                      4                      5

12. Rate the **overall effectiveness** of the Teacher Induction Program from 1 to 5 (1 - ineffective; 2 - least effective; 3 – effective; 4 – very effective; 5 - most effective)

1                      2                      3                      4                      5

13. Rate how the Teacher Induction Program has added to you personal or professional development by circling the appropriate number. (1 not useful; 2 – somewhat useful; 3 – useful; 4 – somewhat useful; 5 - most useful)

	<i>Usefulness</i>				
Support	1	2	3	4	5
Classroom Organization	1	2	3	4	5
Classroom Management	1	2	3	4	5
Strategies (Idea File; Book)	1	2	3	4	5
Application/Modeling of teaching strategies	1	2	3	4	5
Stress Relief	1	2	3	4	5
Confidence	1	2	3	4	5
Collegiality (friendships/networking)	1	2	3	4	5
Counselor for personal problems that effect work	1	2	3	4	5
Availability of mentors/instructors	1	2	3	4	5
Individual Observations	1	2	3	4	5
Professional Development Topics	1	2	3	4	5

14. Do you have a Masters Degree? Yes No

If yes, what year did you receive your Masters? \_\_\_\_\_

What discipline is your Master's Degree? **Circle one of the following.**

Counseling	Occupational Training and Development
Reading	
Early Childhood Education	Secondary Education
Educational Technology	Special Education
Elementary Education	Curriculum and Instruction
Educational Administration	

If your degree was in Curriculum and Instruction, please circle the area of specialization.

***(Elementary Certified)***

Bilingual/ESL  
 Early Childhood/ Kindergarten  
 Early Childhood/ Handicap  
 Educational Diagnostician  
 English  
 Generic Special Education  
 Gifted and Talented Education  
 History  
 Interdisciplinary  
 Kinesiology  
 Life/Earth Science  
 Mathematics  
 Reading

***(Secondary Certified)***

Biology  
 Business Administration  
 Chemistry  
 Composite Social Studies  
 Computer Information Systems  
 Earth Science  
 Educational Diagnostician  
 English  
 English as a Second Language  
 English/Language Arts  
 Generic special Education  
 Gifted and talented Education  
 Government  
 History  
 Interdisciplinary  
 Kinesiology  
 Life/Earth Science  
 Mathematics  
 Physical Science  
 Reading  
 Spanish  
 Speech Communication  
 Supervision  
 Theater Arts

If you would like to help update the TIP directory, please include your name, address, phone, school, and e-mail address. Please add any other comments concerning the program.



VITA  
 Vickie V. Moon Merchant  
 208 Augusta Dr.  
 Portland, TX 78374

EDUCATION:

Master of Science  
 Curriculum and Instruction - Science, Reading  
 Corpus Christi State University, December 1989

Bachelor of Science  
 Elementary Education - English  
 Texas A&I University-Corpus Christi, December, 1974

CERTIFICATES HELD:

Elementary Education (Grades 1-8); Texas  
 Instructional Leadership Training  
 Texas Teacher Appraisal System  
 Professional Development Appraisal System

EMPLOYMENT HISTORY:

1991-2001 Texas A&M University-Corpus Christi. Corpus Christi, TX  
 Lecturer; Coordinator, Teacher Induction Program; College of Education  
 1975-1988 Aransas County Independent School District, Rockport, Texas  
 Teacher - Third, Fourth, Fifth Grades

PUBLICATIONS:

Moon-Merchant, V. & Carter, N. (2004). A teacher induction model for urban settings: A follow-up study. *Journal of Public Management & Social Policy*, 10,1, 39-54.  
 Moon-Merchant, V. (2004, June). Helping teachers succeed within any border. Paper Presented at the 6<sup>th</sup> Annual Conference of the Race and Ethnic Studies Institute of Texas A& M University, Cabo San Lucas, Mexico.  
 Moon-Merchant, V., (2001). National crisis: Retaining teachers in the profession. *Diversity in Mentoring*. Kalamazoo, MI: International Mentoring Association.

PRESENTATIONS:

Moon-Merchant, V. & Carter, N. (2005, April). *Retaining teachers in an era of accountability: Teacher induction*. Annual Conference of the American Educational Research Association, Montreal, Canada  
 Moon-Merchant, V. (1999, October). *The teacher induction program at Texas A&M University-Corpus Christi*, DeWitt-Wallace Invited Forum on Induction Programs, American Association of Colleges for Teacher Education, Washington, DC.