

Documenting Evidence of Quality Teacher Preparation on Novice Teachers' Perceptions and Performance

**Cheryl Kershaw, Ed.D., Susan Benner, Ed.D.,
Lisa Scherff, Ph.D., Amy Brommel, Ph.D.,
Leslie Suters, M.S., Gina Barclay-McLaughlin, Ph.D.**

**The University of Tennessee
College of Education, Health, and Human Sciences**

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Abstract

This research covers three elements related to the induction of novice teachers into the profession. The first element involves the measurement of pre-service teachers' growth in cultural competence and sense of efficacy as a result of their participation in an urban preparation program. The second pertains to novice teachers' perceptions of "preparedness," strengths, needs, and quality of nurturing received as part of their school's efforts to scaffold their induction into the profession. The third, a pilot study, compares perceptions of novice teachers and administrators related to the formal evaluation process. Overall, the study provides insights into the impact of research-based strategies for improving teacher preparation and induction for urban and other high-need learning contexts. Findings have implications for teacher educators as well as school officials who are working to assure that the diverse needs of all students are being met by qualified teachers who are committed to their students, schools, and communities and are supported by capable mentoring teachers.

Introduction

This paper combines three studies designed to document the impact of innovative teacher preparation initiatives on novice teachers' performance and perceptions of preparedness. The overall purpose of our collaborative research is to assess the impact of a university and school system partnership's efforts, funded by a Title II Teacher Quality Enhancement Grant, to improve the preparation and induction of novice teachers. Two of the three studies represented in this paper reflect three years of research focused on improving the preparation and induction of novice teachers in urban settings. They build upon the theories of the development of a professional (Berliner, 1998), teacher induction (Haberman, 1987; Howey, 2000), culturally relevant pedagogy (Ladson-Billings, 1995, 2001), self-efficacy (Zimmerman, 1995; Bandura, 1997), and adult learning (Lambert, 2003).

The first study focuses on pre-service teachers who completed their preparation in one elementary and two secondary Professional Development Schools (PDSs). It studies the impact of changes in traditional teacher preparation programs designed to strengthen novice teachers' knowledge, skills, and dispositions for addressing the needs of all students and their commitment to social justice. Specifically, it addresses the impact of research-based curricular innovations that have been proposed for improving teaching and learning in urban schools (e.g., culturally relevant pedagogy, expanded emphasis on social justice and equity, linkage with human services, action research, reflective practice, differentiating instruction, and embedded use of technology) on novice teachers' perceptions and performance during their pre-service experience. Data for this study were disaggregated by program area (elementary and secondary). The second study focuses on developing an understanding of novice teachers' sense of "preparedness" and documenting high priority areas of need during the initial years of teaching, perceptions related to the quality of mentoring provided, and the impact of an organized mentoring and induction program on their retention in the profession. Differences among elementary, middle school, and high school novice teachers' perceptions were identified. The third study, in its pilot stage, compares perceptions of novice teachers and their administrators relative to the novice's performance on the state's evaluation model. Data for this pilot were disaggregated among the following subgroups of novice teachers: 1) teachers prepared in fifth year programs vs. four year or alternative certificate programs; and 2) teachers prepared in the urban preparation programs vs. other pre-service teachers in a fifth year program.

The overall objectives for these collaborative studies were:

- 1) to provide formative data to assist university and school personnel in utilizing novice teachers' assessments of the efficacy of their pre-service program to improve future teacher preparation curriculum, instruction, and assessment.
- 2) to identify the needs of novice teachers as they enter the teaching profession and their sense of support as a result of participating in a formal induction experience; and
- 3) to compare perceptions of novice teachers and their principals related to the novice's performance on a state evaluation assessment by key preparation characteristics.

Theoretical Framework

The need for the teacher preparation and induction interventions and these studies was based on the research on teacher quality and retention, particularly in urban settings. The innovations were designed and implemented to address the impact of high teacher turnover rates in urban classrooms that negatively impact both teaching and learning (Haberman, 1987; Delpit, 1995; Weiner, 1999; Howey, 2000). Research has shown that teachers are the single largest factor impacting student learning (Cochran-Smith, 2003b; Sanders & Horn, 1998). However, from one-third to one-half of our novice teachers, particularly those in urban settings, do not remain in their schools or classrooms long enough to make the transformation from "novice" to Berliner's (1998) "mature" or "expert" levels (Howey, 2000; Gay, 2000). In many cases, there are so few teachers with more than three years of experience in an urban school that there are no effective role models available to scaffold the induction of those just entering the profession in their schools (Darling-Hammond, 2000; Howey, 2000).

High attrition rates and the absence of "highly qualified" teachers in many urban communities has brought to the forefront the debate about how to best prepare novice teachers (Cochran-Smith, 2003a). All stakeholders in American education want quality teachers because they recognize the linkage between quality teaching and the quality of education (Cushman, 1999; Darling-Hammond, 1996, 2000; Darling-Hammond & Youngs, 2002; Cochran-Smith, 2003b). The quality of teacher preparation, therefore, must be perceived as a contributing factor to both teacher retention and student achievement. Research has shown that teachers without pre-service experiences that develop belief systems, skills, and commitment to working effectively with children and families from diverse backgrounds are often ill-prepared for initial teaching assignments in high need schools and classrooms (Irvine, 1992; Delpit, 1995; Ladson-Billings, 1995; Zeichner, et. al, 1998, Weiner, 1999; Howey, 2000). Without developing the dispositions and expertise to address the needs of the diverse urban student population, many become overwhelmed and more focused on their own survival issues than on student achievement. The ultimate victims in the cycle are the children who need the best teachers the profession has to offer to equalize their opportunities for success in life. According to studies conducted with "value added" test score data, it takes approximately three to five years for novice teachers, even those among the most effective, to make significant gains in student achievement (W. L. Sanders, personal communication, February 2, 2004). What urban students often experience, however, is a revolving door of novice teachers who leave their classrooms and the profession before they have developed the level of expertise needed to promote their learning at levels comparable to their suburban counterparts (Darling-Hammond, 2003).

Leaders in the field of urban education challenge teacher educators to raise novice teachers' self-awareness regarding their beliefs and assumptions about cultures other than their own and issues of racism, classism, sexism, and discrimination (Cochran-Smith, 1999; Ladson-Billings, 2001; The National Coalition for Equity in Education, 2003). Furthermore, Cochran-Smith (1999) identifies six principles that should be incorporated into programs teaching for

social justice: 1) enabling significant work for all students within learning communities, 2) building on what students bring to school with them – knowledge and interests, cultural and linguistic resources, 3) teaching skills and bridging gaps; 4) working with (not against) individuals, families, and communities; 5) diversifying modes of assessment; and 6) making activism, power, and inequity explicit parts of the curriculum (pp. 118-119). These studies were designed to identify perceptions of “preparedness” for novice teachers who were prepared in two urban pre-service preparation programs that incorporated these principles and Howey’s (2000) recommendations for teacher education programs. They also include an initial attempt to compare the quality of performance among novices who have and have not received preparation focused in these areas.

Study Design

In order to gain an understanding of novice teachers’ perceptions, as well as their level of performance, we attempted to triangulate both qualitative and quantitative data derived through multiple measures. Qualitative data for each study were gathered through interviews (individual and focus group) and surveys. Quantitative data were gathered from the state’s framework for teacher evaluation scores and teacher employment and retention data. An analysis of student test score data was not included due to the fact that three years of teacher effect data required to compute “value added” scores for Tennessee teachers is not available for novice teachers. Teacher evaluation data for teachers outside the partnership school system are not available due to: 1) inability to track the location of specific graduates; and 2) difficulties in securing annual permission required to access teachers’ evaluation data. Collaborative efforts are currently underway to overcome the barriers that previously existed in accessing these data.

Each of the three studies are presented independently and findings and conclusions are drawn for each and across all three. The three studies are identified as “Analysis of the Impact of Innovations in Teacher Preparation,” “Novice Teachers’ Perceptions of Needs and Effectiveness of Mentoring and Induction Practices,” and “Perceptions of Novice Teachers and their Administrators their Performance on the State Framework For Evaluation.”

Study 1: Analysis of the Impact of Innovations in Teacher Preparation

Description of the Innovative Practices

Both the elementary and secondary PDS programs build upon the design principles proposed by Zeichner et. al (1998), the Contextual Teaching and Learning Framework developed by Hersh and Sears (1999) as part of the federally funded school-to-work initiative, Cochran-Smith’s (1999) six principles for teaching for social justice, and Howey’s (2000) recommendations for improving teacher preparation to address the needs of diverse student populations. While designed and implemented in varying manners that are aligned with their unique school level and PDS contexts, the elementary and secondary programs both focus on five major areas: self-awareness, cultural understanding, relationship building, skill development, and integrated activities. Table 1 includes an illustration of major activities for each of these strands at program level. Activities that are required of all university fifth-year candidates are italicized.

Table 1. Innovative Pre-Service Coursework Components

	Self-awareness	Cultural Understanding	Relationship Building	Skill Development	Integrated Activities
Urban Multicultural Studies (Elementary PDS)	<ul style="list-style-type: none"> ▪ cultural autobiographies ▪ gathering and presenting artifacts that represent cultural and family heritage ▪ readings and dialogue that promotes cross-cultural exploration and interaction ▪ <i>reflections</i> 	<ul style="list-style-type: none"> ▪ field-based experiences ▪ learning from community leaders ▪ field trips designed to increase their awareness of cultures other than their own ▪ readings, discussions, and case studies, and reflections on culturally- related educational issues 	<ul style="list-style-type: none"> ▪ cohort model ▪ <i>developing positive and supportive relationships with students, colleagues, families, and community members</i> ▪ interdependent learning groups 	<ul style="list-style-type: none"> ▪ materials analysis to identify cultural representation in commercially available materials; ▪ using a variety of approaches to pre-assess students' dispositions, abilities, and talents ▪ development of culturally relevant and differentiated lesson plans and strategies for promoting family literacy 	<ul style="list-style-type: none"> ▪ “community mapping” -- learning context within and beyond the classroom ▪ problem-based learning ▪ electronic portfolios ▪ <i>action research.</i>
Urban Preparation in Secondary Schools (Two PDS sites)	<ul style="list-style-type: none"> ▪ cultural autobiographies ▪ readings and dialogue that promotes cross-cultural exploration and interaction ▪ discussions with community leaders about issues related to self-awareness ▪ <i>reflections</i> 	<ul style="list-style-type: none"> ▪ field-based experiences ▪ learning from community leaders ▪ experiences to provide insight into cultures and backgrounds different from their own ▪ awareness building field trips to sites impacting the lives of many secondary students (e.g., juvenile court, prison) ▪ readings, discussion case studies, and reflections on culturally- related educational issues 	<ul style="list-style-type: none"> ▪ cohort model ▪ readings, research, role playing, and discussion ▪ <i>developing positive and supportive relationships with students, colleagues, families, and community members</i> ▪ interacting with community leaders who challenge assumptions ▪ learning how to work with and interview parents – taught by community leaders ▪ inter-dependent learning 	<ul style="list-style-type: none"> ▪ disaggregating student performance data to better understand the needs and strengths of students in their classrooms; ▪ development of culturally relevant and differentiated lesson plans ▪ work sample methodology to translate awareness of student needs/ abilities to planning, instruction, and assessment ▪ incorporating technology as a tool for learning ▪ learning to collaborate on school-wide projects (e.g., departmental 	<ul style="list-style-type: none"> ▪ “community mapping” -- learning context within and beyond the classroom ▪ problem-based learning ▪ service learning (as a model and as a means to promote team building and to introduce planning and assessment). ▪ electronic portfolios ▪ <i>action research</i>

			groups	goals)	
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Self-awareness activities, despite differences in approach across programs, have fostered discussions that identify similarities and differences while intending to build trust and comfort in discussing issues that society tends to avoid. In developing cultural understanding and competence, students are placed in situations that differ from their own experiences. They learn first hand how to interact with families from cultural, racial, or socio-economic backgrounds different from their own. In most cases, community leaders are involved in leading these seminars and working with faculty members in discussing relevant readings. Relationship-building, cited by numerous studies as critical to any teacher’s success and to student learning, is emphasized throughout the program. Skill development ranges designing, implementing, and assessing instruction to collaborating with colleagues, families, and community members. Students learn to disaggregate test score data and to gather qualitative data regarding students’ needs, interests, and experiences; design culturally relevant and differentiated lesson plans to address the needs of all subgroups of students; study the impact of their lessons on the performance of students in the various subgroups; and analyze curricular materials for their cultural appropriateness. While the design for achieving these outcomes varies across the school levels, the focus is consistent, expectations are clearly communicated, and rubrics for student performance are provided. Finally, the integrated component incorporates the concepts of “community mapping,” work samples, electronic portfolios, and action research into learning about the learning context within and beyond the classroom.

Methodology and Data Sources

In order to assess the URBAN IMPACT interns’ growth in the innovative “urban” components of their pre-service programs, they have completed a series of pre- and post-assessments to determine their perceptions related to diversity, efficacy, and the use of technology. Although the instruments have changed over the duration of the grant, the focus has consistently been on determining their development in understanding, appreciating, and serving as an advocate for social justice and equity. The following instruments have been utilized:

1. *The Woolfolk Hoy Teacher Efficacy Scale* (Tschannen-Moran & Woolfolk-Hoy, 2001). This scale was used during the first two years of the grant (2000-2001; 2001-2002) to determine candidates’ understanding of issues related to diversity and efficacy and to assess their growth during the program. It was conducted with one elementary and one secondary PDS program prior to the involvement of the second high school PDS. Candidates responded on a six-point Likert scale (1= “strongly disagree” and 6= “strongly agree”) to a series of 42 questions. Sample questions from the survey include:
 - a. The amount a student can learn is primarily related to student background.
 - b. If students’ aren’t disciplined at home, they aren’t likely to accept any discipline.
 - c. When I really try, I can get through to most difficult students.
 - d. A teacher is very limited in what he/she can achieve because a student’s home environment is a large influence on his/her achievement.
 - e. If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.

The mean responses for each item were analyzed and used to guide program development. The instrument was administered again at the end of each school year. Growth was determined by assessing the differences between pre- and post-assessment means.

2. *The Survey of Context*, an adaptation of *The Hungry Mind Questionnaire* (Schneider, 1997) designed by grant personnel, provided qualitative baseline data regarding teacher candidates’

prior experiences with individuals from cultures other than their own. Candidates rated both the frequency with which they had been involved in inter-cultural experiences as well as their level of understanding related to concepts such as “social justice,” “social capital,” “human capital,” and “communal interdependence.” They were asked to rate the frequency with which they had experienced each item on a four point Likert scale ranging from “many,” to “some,” to “few,” to “none.” Responses were tallied, used to guide program refinements and implementation, and assessed to determine students’ growth in understanding, appreciation, and advocacy for cultural diversity.

- 3 *Beliefs about Diversity Scale* (Pohan and Aguilar, 2001). Beginning in 2002, this scale was implemented to provide faculty with information about interns’ personal and professional beliefs related to diversity. It was used as a pre- and post- assessment. Pre-assessment data were used to guide program implementation. Post-assessment data were used to assess changes in interns’ perceptions as a result of their urban teacher preparation experience. Candidates responded on a five-point Likert scale (1= “strongly disagree” and 5= “strongly agree”) to a series of 40 questions. Sample questions from the survey include:

Table 2: Beliefs about Diversity Scale Items

<p><i>Personal Beliefs</i></p> <ul style="list-style-type: none"> • The reason people live in poverty is that they lack motivation to get themselves out of poverty. • In general, white people place a higher value on education than do people of color. • It is a good idea for people to develop meaningful friendships with others having a different sexual orientation. • It is more important for immigrants to learn English than to maintain their first language. <p><i>Professional Beliefs</i></p> <ul style="list-style-type: none"> • People of color are adequately represented in most textbooks today. • Students with physical limitations should be placed in the regular classroom whenever possible. • Teachers often expect less from students from lower socioeconomic classes by school personnel. • In order to be effective with all students, teachers should have experience working with students from diverse racial and ethnic backgrounds. • Multicultural education is less important than reading, writing, arithmetic, and computer literacy.
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4. *The Teacher Confidence Scale* (Developed by grant personnel). Initiated in 2002, this scale requires pre-service teachers, at the culmination of their internship experience, to respond identify levels of confidence on 17 items that bridge all aspects of planning, instruction, assessment, accommodating diversity, classroom management, communication, using technology, and teaching effectively in urban schools. Responses, on a scale ranging from “more confident now,” “about the same,” and “less confident now,” are tabulated for all interns in the urban program by year.
5. *Exit Interviews*. For three years, program evaluators have conducted focus group interviews with both the elementary and secondary cohorts to gather their perceptions of the effectiveness of their “urban” preparation program. Content analysis procedures have been used to identify themes and patterns in the data.

6. *Follow-up Data.* First, attempts have been made to identify the number of each cohort who: 1) have pursued teaching careers, 2) who elected to teach in urban school settings, and 3) who remain in the profession. Second, for those interns continuing to work in the partnership school system, efforts are underway to track evaluation and student test score achievement data along with perceptual data regarding their internship experiences. Graduates of this fifth year program who continue to teach in the same state are given credit for their first year of teaching upon their graduation. Their performance during their internship year is assessed against the same standards as that of any other teacher in the system. Therefore, the evaluation ratings they receive during their internship are comparable to those they receive once in a full time teaching assignment. For graduates of the first two cohorts of participants who hired by the partnership school system, evaluation data were analyzed to determine how the novices' ratings during their second and third years compared to those they received at the end of their internship year. Third, assessing impact on student achievement has been a greater challenge. It takes three years to determine "value added" data for new teachers, which will be available for the first cohort of interns in the urban programs as of the 2003-04 school testing cycle. Due to confidentiality regulations regarding these data, the school system will only be to report teacher effect data for the total group of novice teachers from each cohort. The partnership is in the process of gathering these important "impact" data.
7. *University Follow-up Studies.* Interns in each of the urban preparation programs complete an on-line survey for the university Office of Evaluation and Research. Frequency distributions are provided for the total population of graduates from UT's preparation program and for individual program areas. Graduates respond to a 38 question survey with a five point Likert response scale (1=strongly disagree, 2 = "disagree," 3= "not sure," 4 = "agree," and 5= strongly agree").

Findings

1. *Woolfolk-Hoy Scale* (Tschannen-Moran & Woolfolk-Hoy, 2001). The analysis indicated that students in the first year of the implementation of the grant initiatives were, by the end of the year, slightly more positive about their abilities to address issues related to student learning and motivation. However, the vast majority generally maintained their initial beliefs about the impact of students' lives outside of school that limit their own potential impact. While performance increased during the second year of the grant, data from both years indicated a need to expand the program's emphasis on self-awareness to promote cultural understanding.
2. *The Survey of Context.* Across both elementary and secondary cohorts and two years of data, the great majority of the responses were consistent with existing research on pre-service teacher candidates. More than 80% of the candidates were white, female, and from a working to middle-class background. While the majority indicated that they did interact on a regular basis with people from different cultures and socio-economic levels, more than half reported that they had not shared a meal in the home of a friend from a different culture, attended a social event centered on a different culture, or participated in a social or sporting event with friends of two or more cultures other than their own. Approximately one-half had eaten in a restaurant in the African-American community or visited a recreation area. Fewer than 20% in either cohort had ever attended an African-American church. In another, approximately 20% reported this experience. More than half reported a lack of understanding when it came to terms such as "social justice," "social capital," "human capital," "resiliency," and "communal interdependence." Furthermore, they also indicated that they knew very little about local politics and communities.

3. *Personal and Professional Beliefs about Diversity*

Table 3: Personal and Professional Beliefs about Diversity Post-assessments

Personal and Professional Beliefs About Diversity Scale	2002– 2003		Instrument Post-Test Sample Means
	Elementary Post-assessment	Secondary Post-Assessment	
Personal Beliefs	70	58.70	62.9
Professional Beliefs	105.5	98.96	103.89

Gains were greater among elementary candidates whose scores exceeded the instrument’s sample means. Data from this instrument were used to revise subsequent internship experiences, particularly at the secondary level.

4. *Teacher Confidence Scale*

Data from 2002 indicate that both cohorts were significantly more confident on all items EXCEPT one -- evaluating software for teaching and learning (6/19). Moderate levels of concern were indicated related to constructing student-centered activities (5/18) and developing assessment rubrics (7/18), and explaining standardized test scores to students and family members. The 2003 data . . .

5. *Exit Interviews.* Through their interviews, the interns have indicated a strong commitment to trying innovative teaching methods, structures, and approaches. They view the experiences focused on cultural relevance and relationship building as among the most valuable. While they feel that their internship experiences have all had a positive impact, they primarily focus on organizational components for improvement. In some cases, they were frustrated with the ambiguity of having to complete inductive activities (e.g., community studies, work samples) when they knew that other interns in the university’s program were not being asked to do so. In both focus groups, the theme of instructors’ commitment to preparing them to work with *all* children was evident.
6. *Follow-up Data.* Grant personnel have not been able to track former interns’ employment statistics unless they have been hired by the partnership school system. Nor have they been able to track performance data beyond the partnership school system. Within the partnership school system, more than 90 percent of the former interns have received ratings of equal to or higher than they did during their internship experience. In a large percentage of cases, the ratings increased in at least two areas.
7. *University Follow-up Studies.* With one exception, nearly all secondary interns indicated that all aspects of the program addressed their needs. The exception related to how well the pre-internship courses prepared them for their internship experience. Elementary interns frequently expressed concerns related to not having opportunities to observe their peers or to teach at a variety of grade levels.

Study 2: Novice Teachers' Perceptions of Needs and Effectiveness of Mentoring and Induction Practices

Description of the Innovative Practices

Novice teachers in “high need” urban schools within partnership have been the focus of efforts to improve teacher induction and mentoring since the inception of the Title II grant. Beginning during the first year of the grant funding, 1999-2000, a research-based teacher induction program was developed and implemented in six schools. Each year, the partnership has added between five to six additional schools for a total of approximately 30, or 40% of the system’s schools. At the same time, the state department of education asked that the model be shared across the state. The result is that more than 200 schools have developed induction plans based upon the partnership model. As of 2003-2004, lead mentors have been trained in every metropolitan school system and in clusters of rural school systems to be able to coordinate the induction program development within their school systems. For the purpose of this study, only schools within the grant partnership are included. This is due to variations in implementation by systems across the state for which grant personnel have had no control.

The “model” involves five key components: 1) professional development for teams of administrators and teachers; 2) structure that aligns teacher induction with school improvement planning efforts and leadership teams to assure that it is viewed as an essential aspect of improving student achievement, 3) focused efforts to understand better the needs of novice teachers and mentors, 4) formative program assessments to determine what is working and what needs to be refined, and 5) on-line support for mentor teams. See Appendix A for specific activities for each component

Methodology and Data Sources

This study focuses on the perceptions of novice teachers in 21 urban schools as they entered their first years of teaching. Novice teachers were defined for this study as teachers with fewer than five years experience or teachers new to the urban school setting. The schools were selected for the study because their induction program had been in place for at least three years. Novice teachers in partnership schools (2000-2001, 2001-2002, and 2002-2003) each completed *The Beginning Teacher Pre-Assessment* that documents their perceived strengths and needs. At the end of each year, the teachers also complete *The Novice Teacher Perceptions of the Mentoring Experience* that includes items related to teacher quality as well as the quality of mentoring. See Appendix A for the survey.

1. The Beginning Teacher Pre-assessment data.

Pre-assessments were completed by all novice teachers in the 21 schools. The population for the 2000-2001 school year was 101, for the 2001-2002 school year was 191, and for 2002-2003 was 200. In documenting perceptions of their readiness to teach, all were asked, in open-ended questions, to identify areas in which: 1) they felt most confident as they entered the teaching profession, and 2) they felt the need for assistance during their first year. Their answers were analyzed using content analysis procedures and disaggregated by school level. Themes identified from their responses are in Table 4 below. The table illustrates the areas of greatest and least confidence, each in prioritized order. For “areas of greatest confidence,” a “1” signifies the area where the beginning teachers indicated that they felt most confident. For “areas of least confidence,” a rating of “1” signifies the area where the respondents expressed the least confidence. Although there were responses in all areas for all subgroups, only the top five were reported.

Table 4. Novice teachers' perceived areas of confidence

Areas of confidence (Prioritized)	Elem.	M.S.	H.S.
Effective instructional methodology	1	2	2
Establishing relationships with colleagues and staff	2	5	5
Ability to manage the classroom	3	4	
Knowledge of content and curriculum	4	1	1
Experience gained from an urban teacher preparation program	5	3	
Confidence in their career choice/desire to teach			4
Support from department members and/or mentors			3
Areas of least confidence (Prioritized)			
Working with administrators	1	1	1
Communicating with parents	2	2	
Knowledge and skills in using technology	3		2

When asked what coaching or information they most needed to succeed during their first year of teaching, the following were listed in prioritized order: 1) classroom management, 2) accommodating the diverse needs of students, 3) planning; developing a repertoire of instructional strategies, and 4) dealing with paperwork and school procedures.

2. *The Novice Teacher Perceptions of Mentoring Support*

A survey, *Novice Teacher Perceptions of the Mentoring Experience*, was developed by URBAN IMPACT personnel in 2001 to determine novice teachers' perceptions of the mentoring support they had received during their school year. Developed in alignment with the research-based framework for developing an induction programs, the survey focused on the level of support novices received from mentors in: 1) understanding professional expectations for teachers in the school, 2) establishing and maintaining effective professional relationships, 3) developing as an effective educator, and 4) nurturing professional growth and development. See Appendix B for a copy of the instrument. The survey was administered to all novice teachers in the 21 schools in the study (n=191 in 2002; n=200 in 2003). Respondents were asked to rate each of 38 items, comprising the four categories, on a 4 point Likert scale (1= "strongly disagree" 2= "disagree," 3 = "agree," and 4 = "strongly agree"). They were also asked to share their perceptions of their overall induction experience by answering four open-ended questions. Frequencies of response and means were derived for each of the survey items by school and total population. Content analysis procedures were used to analyze the responses to the open-ended questions. Patterns were identified and used to assess overall program impact. In addition, the "anonymous" survey responses were shared with school-based Mentor Core Teams to guide their program refinements.

3. *Teacher Retention Data*

During the initial year of the grant, efforts were made to identify reasons for teachers' leaving participating schools. Working with data available from human resources personnel, we realized that without exit interviews, there were no data available regarding reasons for teacher attrition. The only data available were the percentages who had left a given school. In collaboration with Mentor Core Teams, grant personnel constructed the following chart and asked building principals to help determine the causes for attrition. In many of the urban schools, principals were new to the school and did not know the history either. Therefore, they turned to department chairs or grade level chairs for the information which was readily accessible. (The teachers knew why their colleagues had left the school.) The following table

illustrates the categories that were developed to track teacher turnover rates in the 21 schools with Induction Programs.

Table 5. Teacher Turnover Data: Sample School A

Reason	1998-99	1999-2000	2000-2001	2001-2002	2002-2003
(# Who Left/Total Faculty/%)	6/17 (35%)	7/17 (41%)	6/17 (35%)	2/18 (11%)	1/17(6%)
Retirement	1	1	0	0	
Marriage or Move	0	0	0	0	
Transfer to another school (same level)	4	2	2	0	1 - suburban
Transfer to another school (different school level)	0	0	0	0	
Pregnancy	0	2	2	1	
Illness	0	0	0	0	
Resignation	1	2	1	1	
Administrative move	0	0	0	0	
Promotion			1 (Curriculum generalist)		
Non-renewal of contract	0	0	0	0	

Findings

1. *The Beginning Teacher Pre-assessment data.* Perceptions varied significantly across school levels. Elementary novices ranked content knowledge and ability to manage the classroom almost as often as they cited confidence in their career choice and experience gained from an urban teacher preparation program as areas of greatest confidence. Middle school interns felt most confident in being able to manage a classroom and establishing positive relationships with colleagues and staff. Secondary interns felt most confident about establishing collegial relationships followed by ability to plan and to gain support of department members and/or other mentors. All three groups cited “working with administrators” as their where they felt least confident. This was followed by communicating with parents and ability to use technology for two of the three subgroups.
2. *Novice Teacher Perceptions of Mentoring Support.* In the schools with established Induction Programs, the mean response on the four-point scale for all 38 items was 3.32 (2002) and 3.43 (2003). Responses ranged from a lows of 2.90 (2002) and 3.15 (2003) to highs of 3.61 (2002) and 3.71 (2003). The following table illustrates the areas that were ranked among the most helpful and least helpful for the total population over a two year period:

Table 6. Perceived areas of support

Highest mean scores related to support	2002 Mean	2003 Mean
Making time for me when I need assistance	3.61	3.71
Listening to my concerns and helping me identify solutions	3.59	3.62
Accepting me as a professional	3.58	3.66
Being flexible and open-minded in assisting me	3.56	3.66
Providing the specific support and assistance I need	3.51	3.63
Maintaining effective relationships with students	3.51	3.56
Informal conferences with mentors	3.49	3.58
Serving as a professional role model	3.45	3.61

Lowest mean scores related to support	2002 Mean	2003 Mean
Linking me with community resources that are available to address the diverse needs of my students	2.90	3.17
Helping me balance my own life responsibilities with the demands of teaching	3.01	3.21
Helping me establish and maintain effective professional relationships with community members	3.03	3.15
Helping me understand the professional expectations related to standards (national, state, system, and INTASC)	3.10	3.21
Having regularly scheduled conferences with mentors to plan, discuss issues, and celebrate accomplishments	3.11	3.17
Helping me with the completion of the state evaluation process	3.16	3.36 *

The novices' responses indicate that the socialization and support factors (e.g., making time, listening, accepting, being open-minded, conferencing, modeling) were considered of most significance to the novice teachers. The areas that would require more mentor knowledge and experience (e.g., linking with community resources; working with community partners; addressing state, content, or national standards; completing the requirements of the state's evaluation process) were perceived as slightly less satisfied. Only one factor on the survey indicated a less than satisfactory rating and it related to "linking me with community resources that are available to address the diverse needs of my students."

3. *Teacher turnover statistics.* While teacher turnover rates have not changed substantially within and across the participating schools, the number leaving one school for another school at the same level has decreased across the sites. This is particularly true in schools with experienced or new administrators perceived by the faculty to be effective leaders. A large percentage of novice teachers continue to leave for the following reasons: marriage, pregnancy, move to another city, promotion to another position, and administrative move/non-renewal of contract.

Study 3: Teacher Behaviors Related to High Student Engagement

Description of the Innovative Practices

All teachers in the state are evaluated three times per year using the state's framework for evaluation which measures competence in six domains: planning, teaching strategies, assessment and evaluation, learning environment, professional growth, and communication. Based upon administrators' assessments, novice teachers are granted or denied "professional" licenses. With recent changes to the status of "highly qualified teachers" our aim was, through a pilot study, to compare novice teachers' sense of accomplishment in the domains represented by the evaluation process with what their administrators had perceived as a result of conducting three required observations.

Methodology and Data Sources

Participants in this pilot study are novice teachers in four university/school system partnership schools. For this study a novice teacher is defined as having five or fewer years of teaching experience. The participants are divided into four distinct groups: 1) novice teachers from the partnering university's fifth year preparation program for "career changers" (n=2); 2) novice teachers from the partnering university's fifth year preparation program (n=5); 3) novice teachers

with undergraduate degrees (n=4); 4) novice teachers with undergraduate degrees who completed a masters level education program (n=2); and 5) novice teachers from alternative preparation programs (n=2). Data analysis involved comparisons of perceptions within and across groups. We must note that although our aim was to disaggregate the survey data to include graduates from our university's urban preparation program, no surveys from that group have been returned. Therefore, this group is not included in the analysis.

The data source for each group includes teachers' self-ratings and administrators' evaluation of the same teachers using a sixteen question, Likert scale instrument developed and offered for public use on www.serve.org. During 2003-2004, a brief survey, *Teacher Behaviors Related to High Student Engagement* (See Appendix C), was completed separately by both the primary evaluator and the teacher at the evaluation conference at some point during the first semester. The survey items assess teachers' competence in three areas: instruction, assessment, and classroom climate. Teachers rank both the desirability and implementation of these practices in their own classroom; likewise, administrators rank what they consider desirable and what they actually observe the teachers implementing.

Findings

Preliminary data analysis utilizing the first set of teacher and administrator evaluations shows that only one variable, level of teaching (elementary or secondary) had any effect on implementation of the sixteen teaching behaviors (dependent variables). Neither method of preparation nor years of experience appeared to have any impact on the dependent variables. Though not significant, elementary teachers and their evaluators noted more overall implementation of facets of instruction (survey items 1-4) and classroom climate (survey items 12-16) while secondary teachers and their evaluators noted higher means in assessment (survey items 5-11). Through one-way ANOVAs, only four of the sixteen variables proved to be significant—use of discussion to show relevance of work, $F(1,28)=4.145$, $p<.05$, articulation to students regarding the alignment of course goals with assessment, $F(1,28)=4.543$, $p<.04$, purposeful use of grades, $F(1,28)=6.776$, $p<.01$, and strategies to stress student individuality, $F(1,28)$, $p<.03$.

Conclusions

A major limitation of this study is its sample size, with only fifteen teachers and administrators returning surveys. Another limitation is attributed to no graduates of the urban program in the sample. Although this was a pilot study, the return rate of instruments from the participating schools was lower than expected. Therefore, both findings and conclusions are drawn from a less than desirable sample size. With this limitation in mind, the differences between elementary and secondary teachers in the areas of instruction, assessment, and classroom climate have been impacted by several factors: the survey questions, the goals and aims for each level, a combination of the two, or the nature of self-reports which are suspect. For instance, elementary teachers showed higher means for “uses strategies designed to get to know students as individuals.” This result might be due to the fact that elementary teachers have the same students all day whereas secondary teachers usually have between 70-125 students per day. Likewise, the fact that secondary teachers provided students with more “opportunities to improve work or grades” more than their elementary counterparts may be due to the nature of the courses taught, their difficulty, and requirements.

The researchers feel it is important to note that a larger sample size may elicit different results. Trends that are not present with the limited sample size may emerge with the addition of

more teachers. Nonetheless, the absence of any significant findings across all variables leads only to more questions and topics for further research

Lessons Learned

1. *Many novice teachers, whose preparation has been in intensive urban program, indicate that they have a sense of competence and confidence to succeed in urban classrooms of their own.* Many directly acknowledge the link between their feelings of confidence and their pre-service experiences in urban schools. While they also realize that they have much to learn, they indicate a level of confidence in their ability to address the needs of diverse student populations and an increased knowledge of resources available to address the needs of the whole child when compared to graduates from other certification programs.
2. *A large percentage of graduates of the urban preparation program indicate an increased sense of “cultural competence” in working with families or parenting adults from cultures other than their own.* The focus on asset building, self-awareness, and commitment to social justice have made an impact on an increasing number of program graduates. However, not all students, especially at the secondary level, believe that they can impact student achievement. Therefore, there is a need to expand efforts in this area.
3. *Developing the dispositions and commitment to social justice and equity requires more than simply including it in the curriculum.* Over the past four years, it has become evident that novice teachers’ perceptions of students from backgrounds other than their own do not change significantly unless pre-service experiences are carefully framed, involve first hand experiences, and are followed by reflection and debriefing that challenges any misconceptions and tendencies toward reinforcement of stereotypes. Teaching for social justice cannot be simply “covered” in coursework for it to make a difference. It must be threaded throughout the program and emphasized in relation to all aspects of teaching from learning about context and working with parents and community members to planning and assessment.
4. *Pre-service teachers have indicated that instructional innovations such as community mapping, service learning, reflective practice, experiences addressing issues of social justice and equity, working with families in human service agencies, and action research have given them effective tools for adapting their instruction to the diverse needs of their students.* For example, the secondary interns have found that learning to disaggregate student performance data in studying the impact of their instruction on student learning, through both work sample methodology and action research, has helped them realize that they must differentiate instruction if they are to address the needs of *all* their students. They recognize that they have the skills to determine the impact of their instruction on student learning. However, it requires a repeated reference to issues of social justice for novices to understand the reason why these actions are important.
5. *Gathering the data to document the impact of teacher preparation on student achievement continues to be a challenge.* Confidentiality issues, related to both performance reviews and student test data, limit the ability of researchers to study the impact of specific program initiatives. After three years of partnership work, it is just becoming possible to gather the information for groups, not individual teachers.
6. *Preliminary results indicate that a large percentage of the novice teachers from the urban preparation program elected to work in urban schools and have had a smaller turnover rate when compared to other novices.* For example, eight former interns from the urban preparation program currently teach in the elementary PDS. According to their principal,

their commitment to the school and to the children and families of the community has helped the school achieve student achievement gains that have taken it off “the list” of the state’s lowest performing schools. In this school, turnover rates have also decreased significantly.

7. *Identifying why teachers are leaving schools is as important as tracking attrition figures.* While teachers in our induction study continued to leave the “high need” schools at similar rates, many were actually leaving for leadership roles within the system, marriage, or pregnancy rather than transferring to schools at the same level. This indicated that the school culture was no longer the primary factor in teacher attrition. The tendency to continue to hire young teachers contributes to these patterns. Therefore, simply looking at turnover figures does not provide the total picture.
8. *Leadership at all school levels is critical to the quality of teacher induction programs.* Although the structure of the model developed through URBAN IMPACT has been to involve administrators and teachers in tailoring systemic induction plans to the unique school context, the variation in effectiveness of these programs has been dependent on how integrated they have been in the total school culture. When teams recognized the impact of teacher turnover on student achievement; developed, implemented, assessed the impact of their programs, and continued to make refinements, they were able to make an impact on teacher turnover. In the schools with minimal leadership and emphasis, attrition rates were not impacted. As a result, the current focus is on including induction on the TN SDE rubric for assessing school improvement plans and on making local school system superintendents aware of the need to retain talented teachers. It is our belief that when school system leaders made teacher induction a priority, school principals were more likely to do the same.
9. *More support is needed for teacher induction to become systemic.* School system leadership needs to directly involved in supporting building-level induction programs. There needs to be a stronger link between what is planned, initiated, and assessed at the building level and what is recognized, celebrated, and supported at the system level. For example, the director of the partnership’s Teacher Center is currently developing strategies to expand the focus on induction at the system level by providing resources for ongoing professional development for mentors.

Conclusion

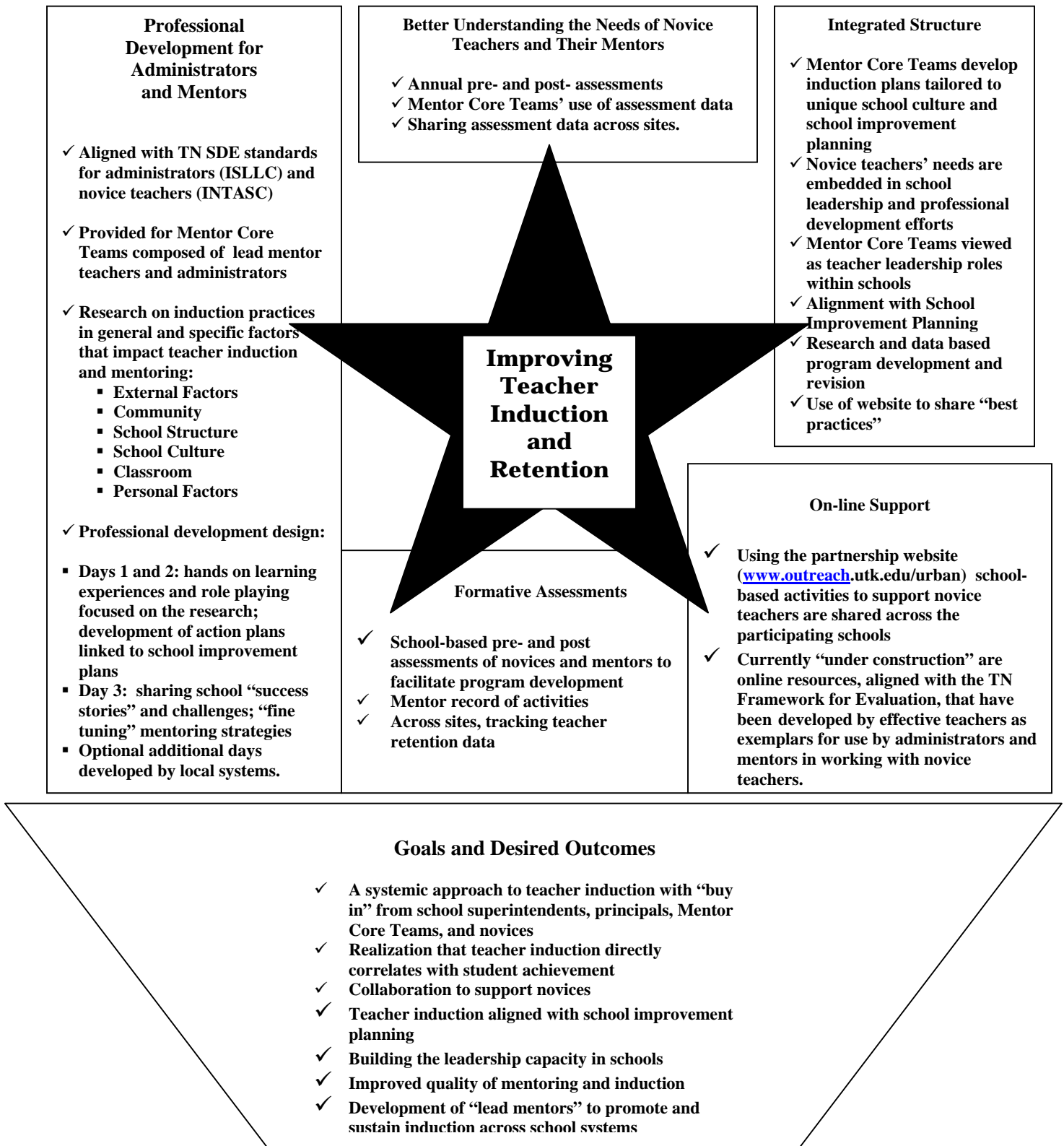
The three studies represented by this paper have attempted to address the challenge of documenting the impact of teacher preparation and induction programs on the performance and retention of novice teachers. Documenting “inputs,” the rationales and components included in teacher preparation programs is relatively easy. Doing the same for “outputs,” or performance and achievement indicators, is far more challenging. Establishing the process for gathering data needed to assess the “outputs” requires redefining partnerships between teacher preparation and partnering school systems – and beyond. This study attempted to gather necessary data and as able to overcome a number of barriers. Far more collaboration between universities and school systems is needed to more closely align the efforts of both institutions in improving student achievement.

References

- Association for Curriculum Development and Supervision. (2003). Research-based characteristics of high quality teacher preparation. Research Brief, 1(4). Accessed February 19, 2003. www.ascd.org/publications/researchbrief/volume1/v1n4.html
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28, 117-148.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Berliner, D. (1998). Implications of expertise in pedagogy in teacher education and evaluation. Paper presented at the Educational Testing Service Invitational Conference.
- Cochran-Smith, M. (2003a). Teaching quality matters. *Journal of Teacher Education*, 54(2), 95-98.
- Cochran-Smith, M. (February 2003b). The unforgiving complexity of teaching: Avoiding simplicity in the age of accountability. *Journal of Teacher Education*, 54(1), 3-5.
- Cushman, K. (Spring 1999). Teacher preparation and renewal: Creating conditions for better practice. *Challenge Journal*, 3(2), 1-8.
- Darling-Hammond. (May, 2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership* 60(8), 6-13.
- Darling-Hammond. (2000). *Solving the dilemmas of teacher supply, demand, and quality*. New York City: National Commission on Teaching and America's Future.
- Darling-Hammond, (1996). *What matters most: Teaching for America's future*. New York City: National Commission on Teaching and America's Future.
- Darling-Hammond, L. & Youngs, P. (2002). Defining "highly qualified teachers": What does "scientifically-based research" actually tell us? *Educational Researcher* 31(9), 13-25.
- Delpit, L. (1995). *Other people's children: Cultural conflict in the classroom*. New York: The New Press.
- Feiman-Nemser, S. (2001). Helping novices learn to teach: Lessons from an exemplary support teacher. *Journal of teacher education*, 52(1), 17-30.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers College Press.
- Haberman, 1987). Recruiting and selecting teachers for urban schools. New York: ERIC Clearinghouse on Urban Education, Institute for Urban and Minority Education, Columbia University. (ERIC Document Reproduction Service No. ED 292 942).
- Howey, K. (March 2000). A review of challenges and innovations in the preparation of teachers for urban contexts: Implications for state policy. A paper presented to the Title II Teacher Quality Institute, Biloxi, MS.
- Irvine, J. J. (1992). "Making teacher education culturally responsive." In M.E. Dilworth (Ed.), *Diversity in teacher education: New expectations*. San Francisco: Jossey-Bass.
- Ladson-Billings, G. (1995). *The dreamkeepers: Successful teachers of African American children*. San Francisco: Jossey-Bass.
- Ladson-Billings, G. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms*. San Francisco: Jossey-Bass.
- Lambert, L. (2003). *Leadership capacity: For lasting school improvement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McNamara, D. (1995). The influence of student teachers' tutors and mentors upon their classroom practice: An exploratory study. *Teaching and Teacher Education*, 11, 51-61.
- Pohan, C. & Aguilar, T. (Spring, 2001). Measuring educators' beliefs about diversity in personal and professional contexts. *American Educational Research Journal*, 38(1), 159-182.

- Recruiting New Teachers (RNT). (1999). *Learning the ropes: Urban teacher induction programs and practices in the United States*. Belmont, MA: author.
- Sanders, W., & Horn, S. (1998). Research findings from the Tennessee Value-Added Assessment System (TVAAS) database: Implications for educational evaluation and research. *Journal of Personnel Evaluation in Education*, 12(3), 247-256.
- Sears, S. & Hersh, S. (1998). *Contextual Teaching and Learning: Preparing teachers to enhance student success in and beyond the school*. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. Center on Education and Training for Employment. (Available at <http://www.contextual.org>)
- Schneider, B. (1997). *Race: An anthology in the first person*. New York: Crown Publishing Group.
- Tschannen-Moran, M., & Woolfolk-Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805.
- Weiner, L. (1999). *Urban Teaching: The essentials*. New York: Teachers College Press.
- Weiner, L. (2000). Research in the 90s: Implications for urban teacher preparation. *Review of Educational Research*, 70 (3), 369-406.
- Zeichner, K., Grant, C. Gay, G.; Gillette, M. Valli, L. & Villegas, M. (Spring, 1998). A research informed vision of good practice in multicultural teacher education: Design principles. *Theory into Practice*, 37 (No. 2), pp.
- Zimmerman, B. (1995) Self-efficacy and educational development. In A. Bandura, (ed.) *Self-efficacy and changing societies*, pp. . New York: Cambridge University Press.

Appendix A: The Model for Teacher Mentoring and Induction



Appendix B. Novice Teacher Perceptions of the Mentoring Experience

School _____
How many years (including this year) have you taught? _____ In this school? _____

This survey will help us determine the effectiveness of our Mentoring Program in addressing your needs as a beginning teacher. Please rate the following components of our program in terms of their impact on your growth as a professional this year.

Section I Directions: Circle the number that most accurately reflects your perception for each statement. If you did not experience an item, circle “NA.”

Scale:

4 = strongly agree; 3 = agree; 2 = disagree; 1 = strongly disagree; and “NA” = did not experience

Perceptions of the Mentoring Experience					
	Scale				
1. Mentors at my school helped me understand the professional expectations for teachers related to:					
a. Fulfilling classroom responsibilities	1	2	3	4	NA
b. Assuming grade level or departmental responsibilities	1	2	3	4	NA
c. Assuming appropriate school level responsibilities (e.g., extra-curricular, committees)	1	2	3	4	NA
d. Knowing and following school and school system policies and procedures (e.g., paperwork, Special Education requirements, emergency procedures)	1	2	3	4	NA
e. Addressing standards (national, state, system, INTASC)	1	2	3	4	NA
f. Completing the TN Teacher Evaluation Process (e.g., professional expectations, evaluation criteria, paperwork, timelines)	1	2	3	4	NA
2. Mentors helped me learn how to establish and maintain effective professional relationships:					
a. With students	1	2	3	4	NA
b. With parents and caregivers	1	2	3	4	NA
c. With colleagues	1	2	3	4	NA
d. With administrators and other school/school system leaders	1	2	3	4	NA
e. With community members	1	2	3	4	NA
3. The following mentoring activities helped me develop as an educator:					
a. Regularly scheduled conferences during the school day with mentor(s) to plan, discuss issues, or celebrate accomplishments	1	2	3	4	NA
b. Informal conferences with mentor(s)	1	2	3	4	NA
c. Coaching by my mentor (e.g., observations, promoting reflection, providing feedback, encouraging new strategies)	1	2	3	4	NA
d. Observing mentor(s) and other faculty members	1	2	3	4	NA
e. Informal meetings with other faculty	1	2	3	4	NA
f. Informal “get togethers”	1	2	3	4	NA
g. Learning opportunities at the school (e.g., sharing of effective strategies, workshops, special sessions on topics of interest to novice teachers, study groups)	1	2	3	4	NA
h. Encouragement to attend system-wide learning opportunities (e.g. in-service sessions, new teacher orientations, new teacher workshops)	1	2	3	4	NA

4. Mentors impacted my professional development by:	SD	D	A	SA	
a. Serving as professional role models	1	2	3	4	NA
b. Accepting me as a professional colleague	1	2	3	4	NA
c. Making time for me when I needed assistance	1	2	3	4	NA
d. Providing the specific support and assistance I needed	1	2	3	4	NA
e. Listening to my concerns and helping me identify solutions	1	2	3	4	NA
f. Being flexible and open-minded in assisting me	1	2	3	4	NA
g. Helping me get to know other faculty and staff	1	2	3	4	NA
h. Linking me with faculty who could assist me in addressing my concerns	1	2	3	4	NA
i. Helping me acquire the resources I needed	1	2	3	4	NA
j. Helping me develop a repertoire of effective instructional strategies	1	2	3	4	NA
k. Helping me design a supportive learning environment and effective classroom management system	1	2	3	4	NA
l. Helping me learn strategies to address the diverse needs of my students	1	2	3	4	NA
m. Helping me develop interpersonal and relationship building skills	1	2	3	4	NA
n. Helping me understand the organization and culture of the school	1	2	3	4	NA
o. Helping me understand the school community and its issues, strengths, and resources that impact our students	1	2	3	4	NA
p. Linking me with community resources that are available to address the diverse needs of my students	1	2	3	4	NA
q. Helping me learn to balance my own life responsibilities with the demands of teaching	1	2	3	4	NA
r. Helping me become a more reflective teacher	1	2	3	4	NA
s. Making me aware of my development as an educator and assisting me in setting goals for my continued professional growth.	1	2	3	4	NA

Section II Directions: Describe or give examples of your perceptions for each sentence stem or question. Be as specific as possible. Feel free to write on the back of this survey if you need additional space.

1. I most appreciated the Mentoring Program for:
2. The Mentoring Program addressed my specific needs as a new teacher by:
3. How has your participation in the Mentoring Program affected your attitudes and behaviors as a teacher?
4. How has your participation in the Mentoring Program (i.e., knowledge and skills you derived) affected the teachers, parents, community, and students in your school?
5. My suggestions for improving the Mentoring Program would be:

Appendix C. Teachers' Behaviors Related to High Student Engagement

1 – Undesirable, of no value

1 – No implementation

Item	Desirability					Implementation					Comments
	Low		High			Low		High			
Instruction											
1. Instruction is varied; a steady diet of routine and predictable lessons is avoided.	1	2	3	4	5	1	2	3	4	5	
2. Hands-on, problem-centered activities are used frequently to actively involve students.	1	2	3	4	5	1	2	3	4	5	
3. Pacing is adjusted to match students' needs: instructional time is extended when students report difficulty understanding an important concept.	1	2	3	4	5	1	2	3	4	5	
4. The relevance and importance of topics studied and work assigned are discussed frequently with students.	1	2	3	4	5	1	2	3	4	5	
Assessment											
5. Course goals are clearly presented to students and students' progress toward goals is assessed.	1	2	3	4	5	1	2	3	4	5	
6. Criteria for assignments are made clear to students through the use of rubrics for key skills and other means (exemplar papers).	1	2	3	4	5	1	2	3	4	5	
7. Multiple assessment methods are used including peer and student self-assessment.	1	2	3	4	5	1	2	3	4	5	
8. Specific, individualized feedback is provided to help students improve.	1	2	3	4	5	1	2	3	4	5	
9. Grades are used sparingly and purposefully so that students perceive the teacher as a "coach" rather than only a judge.	1	2	3	4	5	1	2	3	4	5	
10. Students are provided opportunities to improve their work/grades.	1	2	3	4	5	1	2	3	4	5	
11. The process of developing final grades allows all a chance at success (grades are not allocated based on a bell curve, but on clearly explained expectations).	1	2	3	4	5	1	2	3	4	5	
Classroom Climate											
12. Teacher communicates high expectations to all students.	1	2	3	4	5	1	2	3	4	5	
13. Teacher fosters student choice and autonomy in learning, rule making, and resolution of conflicts.	1	2	3	4	5	1	2	3	4	5	
14. Opportunities for teamwork and cooperation are provided.	1	2	3	4	5	1	2	3	4	5	
15. Teacher uses strategies designed to get to know students as individuals.	1	2	3	4	5	1	2	3	4	5	
16. Classroom management and discipline approaches minimize blind obedience and compliance and maximize the creation of a caring community.	1	2	3	4	5	1	2	3	4	5	