

## **The Importance of Mentoring Novice and Pre-Service Teachers: Findings from a HBCU Student Teaching Program**

**By Lisa D. Hobson, Deborah Harris,  
Kimberley Buckner-Manley,  
& Patricia Smith**

Lisa D. Hobson and Patricia Smith are professors in the Department of Educational Leadership at Prairie View A&M University, Prairie View, Texas. Deborah Harris is an associate professor in the College of Education at Texas A&M University, Texarkana, Texas. Kimberly Buckner-Manley is a doctoral candidate in the Ph.D. Program in Educational Leadership at Prairie View A&M University.

Teacher preparation programs across the country have faced criticisms regarding the quality of their programs. Additionally, these programs now compete with non-traditional programs when their graduates seek positions in public schools. As a result of many conversations as well as audits of the degree program at institutions in the state of Texas, we were interested in examining dimensions of the student teaching program at one institution. One of the researchers in this study served as the Interim Director of the Office of Clinical and Field Based Studies at this institution. Additionally, two of us (as researchers) worked in the leadership preparation program at the institution.

As our conversations evolved, we became very interested in the need for mentoring as articulated by our graduates of the teacher education program as well

## The Importance of Mentoring Novice and Pre-Service Teachers

---

as our graduates in the masters programs who were teachers. Furthermore, we acknowledged that for the leadership preparation program and Ph. D. program, we should prepare future and current candidates to utilize best practices for working with their teachers. Just as other professionals need support to improve and reduce turnover, there are specific forms of support that help keep teachers in their schools after their first year of teaching. Educational leaders must be able to establish expectations or norms of teaching and learning for administrators and teachers alike while building organizational systems to support them while maintaining a climate that encourages practitioners to continue learning (Harris, 2002). We could ensure program quality at a number of levels that would impact K-12 student learning.

To adequately address learning and program outcomes, we utilized an action research methodology for evaluation of the student teacher program for continuous improvement. Ferrance (2000) defined action research as “a process in which participants examine their own educational practice systematically and carefully, using the techniques of research” (p. 1). Additionally, Ferrance (2000) wrote, “Rather than dealing with the theoretical, action research allows practitioners to address those concerns that are closest to them, ones over which they can exhibit some influence and make change” (Introduction).

The dimension of the program we were most interested in evaluating was mentoring. We were aware of the benefits of mentoring as well as the variety of mentoring programs across the country. Much of the literature on mentoring is on the in-service dimension, i.e., practicing teachers. We were interested in studying the impacts of mentoring with pre-service teachers, i.e., student teachers. Two assumptions undergirded our work: (a) mentoring of pre-service teachers does not automatically occur with the assignment of a student teacher with a cooperating teacher and the university supervisor and (b) supervision and evaluation of student teachers by cooperating teachers in schools does not equate with mentoring. To clarify further, we believe mentoring can occur with student teachers in schools, however, just because a student teacher is assigned a cooperating teacher does not mean the pre-service teacher will be mentored. The ideal program would ensure the student teachers are mentored. Thus, we wanted to determine stakeholders’ views of mentoring student teachers.

Beyond an expectation of conducting qualitative research, we thought it necessary to identify our assumptions in the context of our work because of the implications on how we could impact teacher and leader preparation at our institution. This goal was affirmed in our choice to employ an action research approach. Riel (2010) wrote,

Action research goes beyond self-study because actions, outcomes, goals and assumptions are located in complex social systems. The action researcher begins with a theory of action focused on the intentional introduction of change into a social system with assumptions about the outcomes. This theory testing requires a careful attention to data, and skill in interpretation and analysis. Activity theory, social network theory, system theories, and tools of evaluation such as surveys, interviews

and focus groups can help the action researcher acquire a deep understanding of change in social contexts within organizations. (p. 7)

---

### **Related Research**

Teacher training programs have received attention as researchers and practitioners attempt to understand how to best ensure graduates are equipped to teach all learners and districts are able to reduce turnover rates (Ludwig, Kirshstein, & Sidana, 2010). Although teacher education programs produce significant percentages of prospective teachers, not all of the graduates actually pursue employment in the field. There is a paucity of data on the numbers of teacher education programs whose graduates choose not enter the field of teaching. Other issues surrounding prospective novice teachers includes their preparation while in teacher preparation programs and during the first few years of teaching. Ingersoll and Smith (2003) reported turnover is higher in teaching than in other professions and that turnover is higher among beginning teachers than among other teachers. The National Commission on Teaching and America's Future (2007) estimated the cost of teacher turnover in public schools at more than \$7 billion per year.

Once obtaining a position in the field, the need for mentoring and induction is critical. Schools with mentoring and induction programs have lower attrition rates for beginning teachers (Guarino, Santibañez, & Daley, 2006). Meaningful induction programs have a long-term impact on teacher quality and retention (Kelley, 2004).

Smith and Ingersoll, (2004) found that teachers who had access to mentors from the same subject area and who participate in induction activities, such as planning and collaboration with other teachers, were less likely to leave the field during their first year. They were also less likely to transfer to other schools when properly inducted.

---

### **The Mentoring Relationship**

Mentoring pre-service teachers in their initial school-based experience has been advocated as a reform in pre-service teacher education since the late 1980s. Bigelow (2002) and Haney (1997) describe mentoring as a process to help novices develop teaching behaviors and strategies, involving a nurturing relationship between a less experienced person and a more experienced person where the mentor provides guidance by serving as a role model and advisor.

Carver (2009) espoused that in most comprehensive induction programs, a formally assigned mentor teacher (or mentoring team) is responsible for many responsibilities and roles, from providing the novice teacher with a basic orientation of school procedures, norms, and expectations to help the novice teacher integrate and/or design a standards-based curriculum that is responsive to the students' learning needs. The American Association of Colleges for Teacher Education (2010) suggested that mentors should be trained and highly skilled in supporting the learning of adult teacher candidates. In order to accomplish these tasks, mentors need authentic opportunities to work with their beginning teachers around the real issues

## The Importance of Mentoring Novice and Pre-Service Teachers

---

of classroom teaching and learning with consistent and on-going opportunities to observe, coach, and co-plan with each other (Carver, 2009).

---

### Support for Mentoring Pre-Service Teachers

The American Association of Colleges for Teacher Education (2010) found that having strong school-based clinical teachers is essential to the success of the clinical experience and these teachers should be selected for their deep expertise, extensive experience, and planned match with candidates from the similar subject area and grade level. To address the issue of ensuring effective teacher preparation, some university programs have examined and included a focus on mentoring. In the University of Colorado-Boulder's Partners in Education program, expert teachers work with pre-service teachers and teach methods courses and also mentor novice teachers (Kelley, 2004).

Additionally, Vietnamese English as a Foreign Language (EFL) pre-service teachers enrolled in a six-week practicum identified their needs for mentor's personal attributes as well as their needs for supportive mentoring practices (Hudson & Nguyen, 2008). The highest personal needs of these pre-service teachers were: *enthusiastic* (57%), *helpful* (27%), and *friendly* (25%; n=91). The highest practices for supporting mentoring were: "sharing experiences" (32%), "modeling EFL teaching" (22%), and "clear advice and expectations" (21%) (Hudson & Nguyen, 2008, p. 5). In the area of developing pedagogical knowledge, these teachers identified *teaching strategies* (37%), *classroom management* (34%), and *motivating students* (17%) as the greatest needs (Hudson & Nguyen, 2008, p.7). Concerning areas of mentor feedback, the pre-service teachers desired feedback on *teaching performance* (56%), *lesson planning and preparation* (24%), and *pronunciation and grammar* (23%) as the greatest needs. Concerning the technique for delivery of the feedback from mentors, the pre-service teachers desired feedback that was *detailed and useful* (44%), *sincere, frank, and objective* (23%), and *constructive, but tactful and encouraging* (22%) (Hudson & Nguyen, 2008, p. 7).

---

### An Innovative Pre-Service Teacher Mentoring Program

One pre-service teacher mentoring program has been designed to prepare future teachers to work in urban settings with high diversity and large percentages of economically disadvantaged students through a service-learning field experience. In a partnership with the University of Missouri-St. Louis and St. Louis Public Schools, pre-service teachers complete their field placements through a service-learning model where they gain strategies to become change agents who advocate for children and families and positively impact the school system. The program focuses on the knowledge base and skill set needed for work in urban school classrooms (Catapano, 2006).

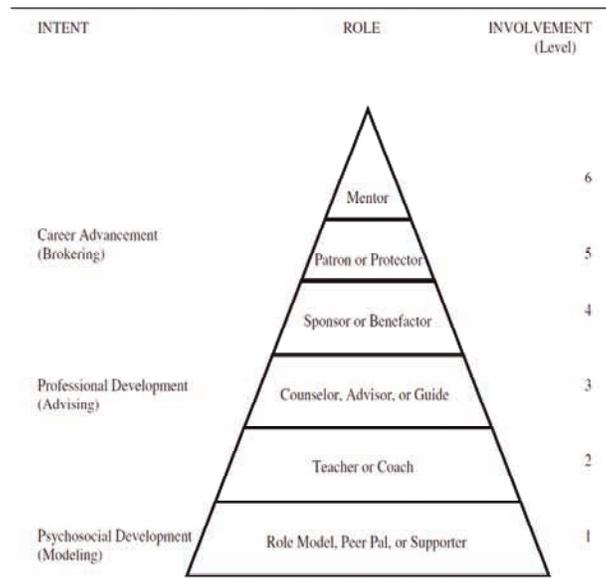
The mentoring piece includes problem solving techniques and communication strategies along with how to "authentically" involve parents in their children's education. Catapano addressed the benefits of the program "Mentoring pre-service

teachers to apply this model that integrates service-learning, advocacy strategies and their field experiences will help them develop the strategies they will need to make changes as classroom teachers. Armed with these tools, new teachers can make their classrooms welcoming places to learn for children and families” (2006, p.95).

**Conceptual Framework**

The framework we examined for this study was Mertz’s *Hierarchy of Mentoring Intent and Involvement Levels Framework* (2004). Mertz’s framework is derived from the literature on mentoring as well as Kram’s (1983) distinctions of the functions of mentoring which uses the variables of intent and involvement as variables for distinguishing and categorizing mentoring relationships and roles. In comparison to other mentoring frameworks, Mertz’s work is quite comprehensive in the inclusion of the various aspects needed for effective mentoring. In lieu of grouping the various aspects of mentoring into one role, Mertz differentiates the types of mentoring with the level of involvement required of the mentee. There are a total of six levels on the framework which progress from the lowest level of mentoring which is *Role Model, Peer Pal, or Supporter* (Level 1) to the highest level, *Mentor* (Level 6), which is the most comprehensive and involved level ( see Figure 1). Mertz’s framework was used to design the study as well as provide terminology for labeling the components of mentoring discussed by the participants.

**Figure 1**  
Mertz’ Hierarchy of Mentoring Intent and Involvement Levels Framework  
(Mertz, 2004)



## The Importance of Mentoring Novice and Pre-Service Teachers

---

### Methods

The purpose of this mixed methods study was to examine perceptions of the mentoring experiences of pre-service and novice teachers during initial field placements at a historically Black university (HBU) located in a rural area near a large metropolitan city in Texas. The guiding questions are as follows.

1. Is there a need for mentoring programs with student teachers?
2. Do mentoring programs for pre-service teacher facilitate attainment of k-12 teaching positions?
3. What constructs and components do different educational stakeholders perceive should comprise the mentoring programs for pre-service teachers?

We distributed the *Survey on Mentoring Pre-service and Novice Educators* (an instrument designed by the lead researcher based on the literature) to collect quantitative and qualitative data during university student teaching seminars and site visits to public schools. A total of 135 participants were included in the overall study: cooperating teachers, principals, vice and assistant principals, curriculum leaders, directors or instruction, and pre-service teachers of a student teaching program at a public HBU in Texas. For the purposes of this article, we only include findings from the 44 student teachers who participated in the study (see Table 1).

In 2009, Hobson designed the instrument in consideration of findings from previous research on novice teachers. This instrument was an adaptation of previous version of the instrument used for a grant funded study on first year teachers. The *Survey on Mentoring Pre-service and Novice Educators* consisted of three components: (a) demographic information, (b) rating scales for the quantitative dimensions, and (c) qualitative questions.

The demographic portion required participants to provide information on current employment or student status, race, gender, range of age, years of experience, certification type, subject matter and grade level (for teacher participants) universities attended, and type of degree. The quantitative portion consisted of Likert-type scale items related to Mertz's (2004) *Hierarchy of Mentoring Intent*

---

**Table 1**  
Student Teacher's Race/Ethnicity and Gender

<i>Student Teacher's Race/Ethnicity</i>	<i>Female</i>	<i>Male</i>
African American	32	2
Caucasian American	3	0
Hispanic	2	1
Other (participant identified)	2	2
Total	39	5

*and Involvement* (reported as measures of central tendency). We sought to examine how student teachers at the HBU value the categories and levels of mentoring on Mertz’s *Hierarchy of Mentoring Intent and Involvement Levels Framework* (2004). Participants rated Mertz’s framework on 5-point Likert-type scale for the importance (very important, important, neutral, somewhat important, and unimportant) of each of the six levels of mentoring for pre-service teachers and also for novice teachers (see Figure 2).

The qualitative section of the instrument included open-ended questions assessing components, expectations, and obstacles of mentoring programs for student teachers and novice teachers. Participants could also provide additional comments or general feedback related to the instrument and topics of the survey.

## **Discussion and Findings**

### **Quantitative Findings**

The quantitative Likert-type scale responses were calculated by frequency of response by percentage on the scale with six levels: (a) five (high) through one (low) and (b) no opinion. Importance was examined in terms of the level of need for the mentee or pre-service teacher. If the student teachers, perceived the level or role as important for pre-service or novice teachers to receive, they were to select a rating of 4 (important) or 5 (very important). If the role had limited importance, the participants selected 1 (unimportant) or 2 (somewhat important). If they didn’t have a strong opinion about the level or role for pre-service or novice teachers, the

**Figure 2**  
Importance Rating of Mertz Levels of Mentoring —  
Survey on Mentoring Pre-Service and Novice Educators

<i>Hierarchy of Mentoring Intent and Involvement Levels (Mertz, 2004)</i>	<i>Unimportant</i>	<i>Somewhat Important</i>	<i>Neutral</i>	<i>Important</i>	<i>Very Important</i>
	1	2	3	4	5
Level 1. Role Model, Peer Pal, or Supporter	1	2	3	4	5
Level 2. Teacher or Coach	1	2	3	4	5
Level 3. Counselor, Advisor, or Guide	1	2	3	4	5
Level 4. Sponsor or Benefactor	1	2	3	4	5
Level 5. Patron or Protector	1	2	3	4	5
Level 6. Mentor	1	2	3	4	5

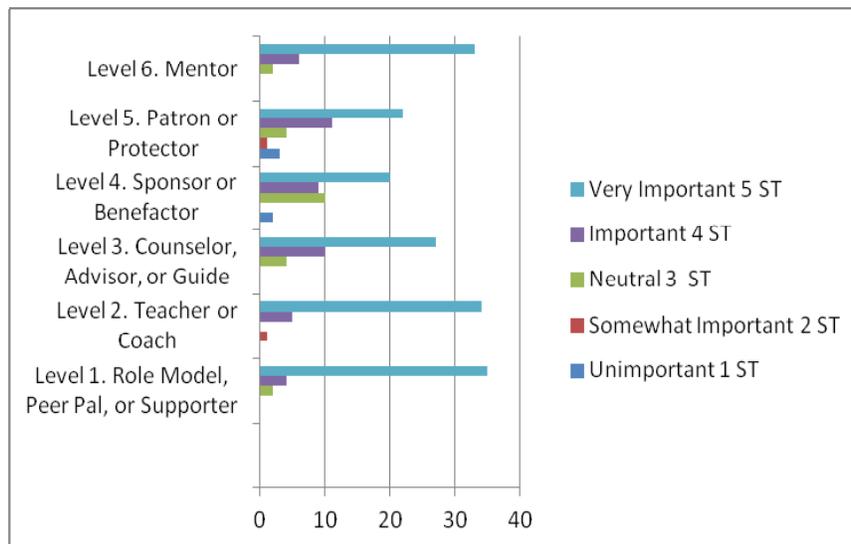
### The Importance of Mentoring Novice and Pre-Service Teachers

student teachers were to select neutral. Figure 3 contains the ratings the student teachers gave for levels of importance of mentoring for pre-service teachers.

The student teachers indicated how important they perceived the type of mentoring involvement and intent levels for pre-service. The six levels pertained to the relationship between an expert and a novice learner in work relationships. The student teachers rated all six mentoring levels as very important for pre-service teachers. The three roles with the highest percentages of support out of all six roles were: Level 1-Role Model, Peer Pal, or Supporter; Level 2-Teacher or Coach; and Level 6-Mentor. The Role model, peer pal, or supporter role had the highest percentage of student teachers to rate this category as very important (i.e., 35 teachers or 80%). Seventy-seven percent (n=34) of the student teachers rated the Teacher or Coach level as very important. Thirty-three, or 75%, of the student teachers rated the Mentor role (Level 6) as very important.

Also, student teachers rated the levels of importance of mentoring of novice teachers. This data is presented in Figure 4. The order of importance differed slightly when the student teachers rated the mentoring levels for the novice teacher group. The student teachers rated all six mentoring levels as very important for novice teachers. The three roles with the highest percentages of support out of all six roles were: Level 1-Role Model, Peer Pal, or Supporter; Level 2-Teacher or Coach; and Level 6-Mentor. The Role model, peer pal, or supporter role had the highest percentage of student teachers to rate this category as very important for novice teachers, i.e., 34 student teachers or 77%. Thirty-three or 75% of the student teachers rated the Mentor role (Level 6) as very important for novice teachers. Thirty-two (72%) of

**Figure 3**  
Student Teachers Rating of the Importance of Mentoring Pre-Service Teachers



the student teachers rated the Teacher or Coach level as very important for novice teachers.

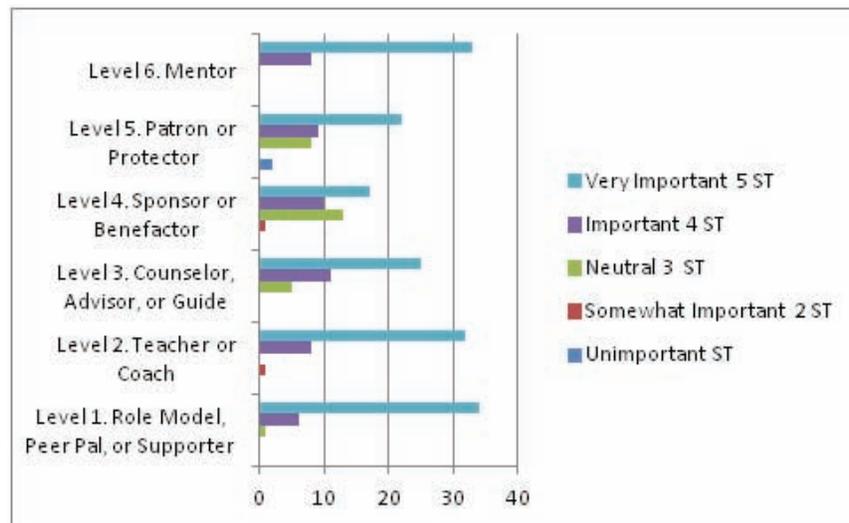
**Qualitative Findings**

For the qualitative dimension of the survey, we coded the survey responses to identify themes. We surveyed participants to learn their views on preparation, mentoring, and preparation in the pre-service training program, collecting 32 pages of narrative data from the 12 open-ended response questions on the survey. The themes were categorized consistent with qualitative research analysis methods. We have included those themes related to the responses by pre-service teachers only as we also collected data from practicing educators and administrators in the larger study.

*Obstacles to the Success of Pre-service and Novice Teachers.* One theme that emerged from the data was obstacles to the success of pre-service and novice teachers. Although the perceptions of obstacles varied considerably with the student teachers, the top four responses under this theme as obstacles were: (a) poor mentors, cooperating teachers, and role models (18% or 8 student teachers indicated this response type), (b) lack of mentoring (18% or 8 student teachers), (c) ineffective time management and organization skills (11% or 5 student teachers), and (d) lack of classroom experiences and practice in the real world (11% or 5 student teachers). Table 2 contains all of the responses that were identified as obstacles from the highest percentages to the lowest.

One African-American female student teacher (Participant #135) who was

**Figure 4**  
Student Teachers Rating of the Importance of Mentoring Novice Teachers



## The Importance of Mentoring Novice and Pre-Service Teachers

**Table 2**  
Obstacles to the Success of Pre-Service and Novice Teachers

Theme/Category	Student Teacher Participant #	Percentage of Student Teachers Providing Response
Poor Mentors and Cooperating Teachers/Bad Role Models	101, 105, 128, 131, 138, 140, 141, 142	8/44 = 18%
Lack of Mentoring & Support	104, 109, 111, 116, 117, 130, 135, & 139	8/44 = 18%
Time Management and Usage/Organization	118, 119, 125, 127, & 136	5/44 = 11%
Lack of Experience in Classroom and Real World Practice	102, 105, 110, 130, 134	5/44 = 11%
Lack of Confidence, Motivation, and Willingness to Perform	100, 107, 112	3/44 = 7%
Lack of Communication and Support w/ University	108, 116, 117	3/44 = 7%
Student Teacher Not Following Through	112, 123, 133	3/44 = 7%
Lack of Communication (Person not Identified)	106, 130, 136	3/44 = 7%
Handling Paperwork, Procedures, & Red Tape	127, 129	2/44 = 5%
Being Overwhelmed/ Jumping Right In	107	1/44 = 2%
Unknowledgeable about Curriculum and Subject Matter	126	1/44 = 2%
Difficulty of the First Year	132	1/44 = 2%
Difficult Students/Discipline Problems	128	1/44 = 2%
Poor Preparation from the University	139	1/44 = 2%
Fear	102	1/44 = 2%
Limited Resources	111	1/44 = 2%
Inability to Reach All Students	113	1/44 = 2%
Difficulty Picking a School Placement	119	1/44 = 2%
Students Views of Respect Based on Age	120	1/44 = 2%
Lack of Licensure Review Sessions	122	1/44 = 2%
Unclear Response from Participant	137	1/44 = 2%

**Lisa D. Hobson, Deborah Harris, Kimberley Buckner-Manley, & Patricia Smith**

---

obtaining EC-4 (early childhood through grade four) certification stated an obstacle was “not having someone that is fully there to mentor or support the pre-service teacher.” Another African American female student teacher (#139; also EC-4) commented, “Obstacles that may affect student/novice teachers [are] no support and advising. New teachers should have a constant support system.” A Caucasian American female student teacher (# 141; Grades 4-8 certification) wrote that an obstacle was, “Cooperating teachers not letting their classes go, so the student teacher can teach.”

*Designing Mentoring Programs for Student Teachers.* One of the areas we assessed on the survey included what components should be included in the design of mentoring programs for student teachers. Some student teachers mentioned the concept of having a pre-student teaching experience where they could have a session to prepare them for student teaching. One African-American female student teacher (#106) wrote if she could design a program for mentoring of pre-service she “would include are the role of a student teacher, classroom management and discipline skills, professional I development skills, etc.” Another African-American female student teacher (#117) wrote, “Student teachers should have the opportunity to do pre-student teaching, so you can get acquainted with the cooperating teacher and start building on that relationship. It’s more experience for you coming in and a better chance for you to be offered a job because everyone knows you and have seen you in action.” Another African-American female student teacher (#127) commented, “Student teachers should have to do pre-student teaching before actual student teaching. The pre student teaching will give student teachers a better understanding of what is expected of them.”

Other teachers spoke of the components to include in the design of a mentoring program for student teachers. One African-American female student teacher (#111) stated, “Components: grades, classroom management, professionalism, educational laws. The time frame does not matter as long as pre-service teachers attend each class/session over the subject matter.” One male student teacher who identified his race as “other” (#129) stated the mentoring program for student teachers should consist of the following components: “certification prep, ethics training, parental involvement strategies, and dress code.”

*Additional Thoughts on Mentoring.* Under the area of general comments about mentoring, student teacher participants also provided important points for consideration. These points centered on the importance of mentoring. A Caucasian-American female student teacher (#112) wrote “mentoring is a very fulfilling position. It makes you feel very good about yourself. Don’t mentor unless you are willing to be ‘that’ role model expected of you.” An African-American female student teacher (#117) wrote, “I think it’s great to have a mentor teacher because you know someone has your back and best interest at heart. They can also help with educational boundaries and professional development.” An African-American female student teacher (#139) wrote, “I believe that mentoring is a great position

## The Importance of Mentoring Novice and Pre-Service Teachers

---

to have because mentors serve as [a] support system to teachers letting teachers know that they can count on their mentor to be there for [them] in any way they can. Mentors are very useful because they can share their experiences with teachers so that teachers can relate.”

---

### Significance of the Study

We conducted the research to ensure quality learning and field experiences of student teachers and wanted to support the accreditation and research initiatives of the institution and field of teacher education. The study was significant primarily for three reasons:

- The findings provided information on how to adequately address Interstate New Teacher Assessment and Support Consortium (INTASC) standards, Interstate School Leader Licensure Consortium (ISLLC) standards, and Texas Examinations of Educator Standards (TExES) competencies and domains through having better prepared student teachers. The student teachers mentioned specific competencies they wanted to acquire during the student teaching experience which can be linked to the national standards.
- The findings assist university administrators and faculty in ensuring the curriculum student teachers receive at this university addresses the skill and interpersonal constructs needed for successful induction in the teaching field.
- The research provides solutions to address concerns suggested in national and state level reports that criticize the quality of teacher and administrator preparation programs in the United States. We assert that if teacher preparation programs enhance their mentoring components during student teaching, the pre-service teachers will be better prepared when obtaining positions in the field. The findings can be used to make improvements within mentoring programs in colleges of education.

At the institution of the study, the findings will also be shared with the faculty and students who are administration degree candidates to receive the skill constructs needed to develop mentoring programs for pre-service and novice teachers.

---

### Implications and Conclusions

Recommendations for further research include replicating this study with additional pre-service and novice teachers for a more comprehensive investigation of characteristics of successful mentoring programs. Additional studies could also examine the differences in the roles and responsibilities of the cooperating teacher or administrator at the elementary, middle, and high school level. This research would include the effects of the support rendered at each level and determine commonalities at each level. We also think additional research is needed to validate Mertz’s *Hierarchy of Mentoring Intent and Involvement Levels Framework* to examine how

mentoring manifests with different populations of educators. Mentoring programs vary from university to university depending on size and location. A study is needed examining all of the existing programs at the university level that employ mentoring of pre-service teachers in lieu of simply placing the student teachers with a cooperating teacher and whether the programs define mentoring components as separate from supervision. We also recommend a study that examines whether differences exist in how mentoring programs should be actualized in HBCU, Predominately White Institutions (PWIs), Hispanic-serving institutions (HSIs), Tribal colleges and universities (TCUs), and Asian American and Pacific Islander Serving Institutions (AAPIs). Within and across different types of institutions, researchers should examine if differences exist in mentoring program needs across race/ethnicity and gender.

Again, we desired to improve the quality of student learning experiences which is consistent with the action research approach employed in the study (Creswell, 2011; Riel, 2010). This study on mentoring of pre-service teachers focused on the perceptions of the mentoring experiences of HBCU student teachers. This study affirmed that the student teaching program must include a succinct focus and actualization of mentoring with student teachers. We found that these programs must be tailored to the actual needs of the student teachers. We also found a need for a pre-student teaching phase where pre-service teachers could be acquire an understanding of the expectations, components, goals, and challenges of the student teaching experience. Although our findings stem from a HBU program, these findings could also apply to other PWIs, HSIs, TCUs, and AAPIs.

To address the guiding questions that undergirded the study we found there is a need for mentoring programs with student teachers. We will need to conduct follow-up research with those student teachers in the study who had a mentoring experience during their student teaching placements to determine if these mentoring programs for pre-service teachers offered at the school placements actually facilitate attainment of k-12 teaching positions. We did acknowledge the need to ensure mentoring is embedded in the work of the university supervisors. Student teachers believed the primary constructs and components that should comprise the mentoring programs for pre-service teachers include: a focus on certification examination preparation, strategies on working with k-12 students of different backgrounds, and assessment of learners. Attention should be given to the preparation and selection of mentors as well. We want to expand on and revisit the best practices that should be included in all of our degree and certification programs that lead to future success of pre-service teachers. These best practices must be examined by educators and policy makers in order to increase the survival rate of teachers in the workforce and ensure teacher candidates actually obtain certification and pursue and obtain employment in the field.

---

## **References**

American Association of Colleges for Teacher Education. (2010). *The clinical preparation of teachers: A policy brief*. Washington, DC: American Association of Colleges for

## The Importance of Mentoring Novice and Pre-Service Teachers

---

- Teacher Education.
- Carver, C. (2009) Using policy to improve teacher induction: Critical elements and missing pieces. *Educational Policy*, 23(2), 295-328.
- Creswell, J. (2011). *Educational research: Planning, conducting, evaluating quantitative and qualitative research*. Boston: Pearson Education.
- Ferrance, E. (2000). *Action research*. Providence, RI: Northeast and Islands Regional Education Laboratory.
- Guarino, C. M., Santibañez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, 76(2), 173-208.
- Harris, D. (2002). Teacher leaders' roles and responsibilities in high achieving schools. Doctoral dissertation. University of Texas, Austin.
- Hudson, P., & Nguyen, T. M. H. (2008). What do preservice EFL teachers expect from their mentors? Paper presented at the Annual Conference of the Australian Association of Research in Education. Brisbane, Australia.
- Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30-33.
- Kelley, L. M. (2004). Why induction matters. *Journal of Teacher Education*, 55(5), 438-448.
- Kram, K. (1983). Phases of the mentoring relationship. *Academy of Management Journal*, 26, 608-625.
- Ludwig, M., Kirshstein, R., & Sidana, A. (2010). An emerging picture of teacher preparation pipeline. Paper presented at the Annual Conference of the American Association of Colleges for Teacher Education, Washington, DC.
- Mertz, N. T. (2004). What's a Mentor, Anyway? *Educational Administration Quarterly*, 40(4), 541-560. doi: 10.1177/0013161X04267110.
- National Commission on Teaching and America's Future. (2007). *The high cost of teacher turnover*. Policy brief. Washington, DC: National Commission on Teaching and America's Future.
- Riel, M. (2010). *Understanding action research*. Los Angeles: Center for Collaborative Action Research, Pepperdine University. Accessed online on July 16, 2012 from <http://cadres.pepperdine.edu/ccar/define.html>.