

ArATE Electronic Journal
Volume 4, Number 2
September, 2013

Editor:

Nancy P. Gallavan, Ph.D.; University of Central Arkansas

Editorial Board Members and Manuscript Reviewers:

Karina Clemmons, Ed.D., University of Arkansas, Little Rock

Kevin C. Costley, Ph.D., Arkansas Tech University

Susan Grogan; Harding University

Patricia E. Murphy, Ed.D., Arkansas State University

Patricia H. Phelps, Ed.D.; University of Central Arkansas

V. Carole Smith, Ph.D.; Arkansas Tech University

Angela Webster-Smith, Ph.D.; University of Central Arkansas

Lynn Walsh, Ph.D.; Arkansas Tech University

Articles and Authors:

Continuing the Conversation: Sociocultural Factors that Contribute to the Overrepresentation of Black Males in Special Education

Kimberley Davis, Ph.D.; Arkansas State University

Audrey Bowser, Ph.D.; Arkansas State University

Generating Creative Capital in Mathematics for Elementary Teachers Candidates

James M. Fetterly, Ph.D.; University of Arkansas at Little Rock

Cooperating Teachers' Uncertainty of Their Roles as Mentors

Shelley Y. Handcock, Ed.D.; University of Central Arkansas

Rethinking the Recruitment of African American Teacher Education Candidates

Angela Webster-Smith, Ph.D.; University of Central Arkansas

Continuing the Conversation: Sociocultural Factors that Contribute to the Overrepresentation of Black Males in Special Education

Kimberley Davis, Ph.D.; Arkansas State University

Audrey Bowser, Ph.D.; Arkansas State University

Abstract

Despite efforts in the area of educational reform, the disproportionate placement of minorities in special education still remains just as problematic today as it did 30 years ago. In the past, the lack of relevant research has hindered efforts to balance the disproportionality of students of color placed in special education. The purpose of this paper is to examine ways that sociocultural factors affect the identification of African American male students classified for special education based on the pre-referral assessment.

Introduction

Debates of minority students being overrepresented in special education have characterized research in the field of special education for many years. Over time, many theories have been researched, as well as legislative debates have taken place; however the problem still remains. The disproportionate representation of minorities in special education is a nationwide issue whereas students of color constitute a majority of students in special education programs (Monroe, 2007). More specifically, there has been a keen interest in the overrepresentation of Black males in special education (Lopes, 2005). Black males are one and a half times more likely to be labeled as emotionally disturbed (ED) than other non-Black students and are placed in special needs programs more frequently than their peers, both male and female (Lopes, 2005).

The overrepresentation and inappropriate placement of Black males is cause for public concern at a time when the American student demographic itself is changing (Serpell, Hayling, Stevenson, & Kern, 2009). This concern comes at a time when the minority student population is growing at the most rapid pace, with one out of every three Americans being Black, Hispanic/Latino, Asian American, or American Indian (Lee, 2004). Furthermore, the widening gap between the teaching force and the growing culturally diverse P-12 student population in United States is a reality. However, just as the population of students of color has experienced great growth, the disproportionate representation of these students classified as ED in special education has also grown, intensifying the problems that persist (Kunjufu, 2005).

Multicultural Perspectives in Special Education Assessment

Multicultural theorists discuss at length the profound influence of sociocultural factors on the foundation of personal and cultural value systems (Banks, 2010; Nieto & Bode, 2008), which may contribute to inadequate attention to students' sociocultural differences in pre-referral assessment (Neal, McCray, Webb-Johnson, & Bridgest, 2003). Within the field of multicultural education and reform lie specific culturally sensitive practices related to working with culturally and linguistically different (CLD) students with disabilities. A great amount of research has been conducted in the area of multicultural special education, especially with regard to inappropriate and disproportionate referral and placement rates of CLD students in special education (Artiles & Ortiz, 2002; Harry & Anderson, 1995). Many of these studies document issues related to race, ethnicity, and socioeconomic status, as well as referral and disproportionate placement in special education, as related to the role of teachers and their

perceptions of students. Ortiz and Yates (2002) stated that disproportionate representation is reflective of a general lack of understanding in our school systems of the influence of sociocultural differences on student learning. In the case of the overrepresentation in special education, they imply that teachers who refer Black males do not have a good understanding of how to assess and intervene for students of color. A multicultural special education program, one that includes transformative learning experiences regarding issues of diversity and multiculturalism, may hold promise for socializing culturally competent teachers who can better understand how to improve the pre-referral process.

Granted, there is not just one cause for the overrepresentation of African American males in classrooms for students with emotional disturbance. However, two substantial reasons for concern about overrepresented and/or misdiagnosed populations is that this dilemma could be mere manifestations of larger sociocultural and environmental problems that plague Black families that serves to limit the academic worth and success of Black male learners (Serpell, Hayling, Stevenson, & Kern, 2009). Although there are several factors that contribute to the overrepresentation among African American males and special education, one of the key issues that has been continuously discussed is assessment procedures (Neal et. al, 2003).

Considering recent calls for accountability in student outcomes in special education, the need to examine practices and beliefs that support appropriate placement processes and positive academic achievement for Black male students with disabilities is crucial. Assessment signifies a major component in the disproportionate rate of African Americans that receive special education in the category of emotional disturbance. According to the National Association of School Psychologists (2004), services for students with emotional and behavioral disorders should be sensitive to the need for the involvement and perspectives of persons from diverse cultural backgrounds. The definition and identification process are two major factors that contribute to the overrepresentation of African American males receiving special education. Researchers have found that sociocultural factors are among the issues that most confound assessment for teachers and tend to contribute to inappropriate special education referrals. In a concerted effort to fully understand this cause, factors that lead to the assessment of these students must be identified. These factors include school variables, and environmental and cultural factors.

School Factors

Public schools are designed to meet the educational needs of all students; therefore educators must be prepared to teach all students regardless of race, ethnicity, ability, or gender (Anderson & Sadler, 2009). Many teachers may be unprepared to work with such a difficult population and may lack the necessary instructional or classroom management skills to be effective (Neal et. al, 2003). Educators teaching individuals with ED must be aware that they are taking on a challenging task (Serpell, Hayling, Stevenson, & Kern, 2009). Externalizing behaviors such as swearing, acting out, and being aggressive are examples of negative behaviors that educators endure when trying to educate students with ED (Kauffman, 2005). Thus, academic difficulties often take a back seat to the student's behavioral difficulties (National Association of School Psychologists, 2004). An effective teacher strives to actively engage students in coursework that is relevant to the students' backgrounds and interests, effectively organize a classroom environment, and manage student behavior using strategies that are evidence based (Lehr & McComas, 2004). In addition, it was also reported that direct instruction involving controlled presentation using modeling of new material, guided and independent

practice, improves levels of concentration and on task behavior among students with ED, allowing an approach that is more teacher directed and systematic (Kauffman, 2005).

There are few teachers who have been prepared to recognize and cope with the cultural, class, and gender differences of the students they teach (Neal, McCray, Webb-Johnson, & Bridgest, 2003). Further research conducted by Pavri (2001) states that there are an increasing number of traditionally educated teachers from dominant American culture who are teaching students who are often nontraditional learners. Students with ED are often filled with anger, rage, fear, sadness, and grief (Abrams, 2005). These negative behaviors manifested by students are often met with anger and punishment generated by teachers. Educators often react to the behavior rather than understanding the cultural, racial, and socioeconomic premise behind the problem (Pavri, 2001).

The dominant American culture who often educates our young African American males often try to simplify what they do not understand. Their interpretations and simplifications often lead to the perpetuation of myths and false assumptions about minority students' culture and behavior. This linkage often leads to misperception of African American male students as being inherently inferior when they are not successful in school (Gadsen, 2001). Additionally, stereotypes about the abilities and aggression of African American youth are maintained by this correlation, and to some extent, perpetuate the placement of disproportionate numbers as ED (Pavri, 2001).

Our schools are becoming more culturally diverse in society today. The problem with over representation of African American males will continue to exist as long as educational structures, systems, routines, and pedagogies are continually developed without a clear understanding of how the belief systems, biases, prejudices and socioeconomic inequities affect our students (Gasden, 2001). It is important that educators be prepared to educate all students holistically and take responsibility in correcting the epidemic that has been created for African American males classified as ED (Kunjufu, 2005).

Environmental Factors

There are many environmental factors that contribute to the over-identification of African American males in special education in the category of emotional and behavioral disorder. Kunjufu (2005) identifies one of the most prominent factors is the family. The family is one of the most influential institutions that shapes and molds children's minds and actions. However, when the family is lacking in any capacity and has not been trained or exposed to indicators that a child, especially a male, does not feel free and/or communicate what his problems are, in most cases the family seeks male associates on their own communicative level to communicate with him, especially negative ingredients that usually pull him into negative thinking, negative behavior, and negative lifestyles (Abrams, 2005). In addition, once a male is put into the EBD category of the special education program, he learns to react to the stimulants based upon past experiences that happen in a class and not his specific experiences and problems (Cullinan & Kauffman, 2005).

In most cases, family dysfunction can be apparent in the family structure, interactions, and culture, or way of living (Abrams, 2005). Many African American male students are brought up in single-female headed homes, which has been said to make them aggressive (Pattton, 1998). The absence of the father figure in these children's homes and lives plays an important role in the behaviors, roles, and perceptions they develop. So at home, these males may have acquired the titles of being the adult or man of the house, but when they enter the

classroom they have to “play” the role of the student, which may cause power struggles and result in them being kicked out of the class for disruption and later being referred for special education (Kunjufu, 2005). In some cases, children who grow up in these home environments may experience physical, sexual, mental, and emotional abuse; neglect; and little to no supervision from their parents or caregivers (Kauffman, 2005). However, just because these children are products of these conditions does not mean that they will develop EBD; but there is a greater chance they will (Serpell, Hayling, Stevenson, & Kern, 2005).

Children are products of their environments; if they grow up in home environments where they witness violence, substance abuse, emotional breakdowns, absurd behaviors, and any other negative conducts, they may easily become a part of the children’s repertoire of behaviors (Abrams, 2005). Furthermore, family discord and disintegration, low parental intelligence, parental criminality, and deteriorated living conditions seem to be much more influential than the parents’ occupational prestige in accounting for children’s behavior (Kauffman, 2005). However, parents’ low-socioeconomic status may also contribute to these disorders because most parents or people with this status live in poverty; therefore social status/class may have an indirect connection to Black students being displaced in special education (Anderson, Delgado, Kea, Raymond, Singh, 2003). Skiba, Michael, Nardo, & Peterson (2002) further state that students of color, from both low and high income homes, were unfairly targeted by school disciplinary sanctions. The most shocking and unfair disciplinary sanction would be to move them out of the general education class, label them, and place them into special education (Irving, 2006).

Cultural Factors

In some schools, many languages and cultures are represented that make the changes in our school population all the more apparent and the needs more important (Kendall, 1996). The constant increase in student diversity can contribute to significant displays of behavioral differences and conflicting cultural views. Moreover, dramatic increases in the ethnic diversity of most communities may contribute to the mistaken identification of behavioral differences” (Kauffman, 2005). The peer group is also a powerful contributor to the development of EBD in some children. “Peer pressure of some African American students toward academic failure and classroom disruption may involve not wanting to act or be accused of acting White” (Kauffman, 2005, p. 247).

Kunjufu (2005) further explains that it is challenging for African American males to navigate their ways through the maze of school culture while still maintaining a position of strength in Black male culture. The cultural aspects of issues such as perceived behavioral problems should be taken into consideration. In this regard, acquiring knowledge about cultural differences that may influence behavior is beneficial when educators are deciding whether a student has an emotional behavioral disorder (EBD) or not. It is also important to become cognizant that cultural differences in behavior may contribute to the disproportionate number of African American males currently in special education labeled with EBD (Serpell, Hayling, Stevenson, & Kern, 2009). The current preoccupation by many with the crisis of African American male students is further indication that these males are not receiving fair treatment in our schools (Serpell, Hayling, Stevenson, & Kern, 2009). Additional attention in this area can possibly reduce the probability African American males being disproportionately labeled with an emotional behavioral disorder.

Conclusion

Without a greater school understanding of students, families, and their diverse cultures, and a coordinated implementation of support at the school-wide, classroom, and individual student levels, both negative misconceptions and ineffective teaching will continue to contribute to disproportionate minority special education identification and adverse school outcomes. Because expectations set for people with disabilities may also differ across cultures, professionals must begin to recognize impact of these sociocultural factors. After all, human behaviors are shaped by a particular culture. Regardless of educational context-school-wide, classroom or individual students in need, all students should be engaged in culturally responsive, student-centered opportunities to learn marked by high expectation and tailored to their individual needs. Schools must work to implement effective, evidence-based programs.

The overrepresentation of students of color in special education is an important issue to examine as special education misplacement can result in negative educational and life consequences. As the demographics of our nation's schools become more racially, ethnically, and socioeconomically diverse, educators must closely examine disproportionality to ensure that we create equitable learning communities. Educators should take a close look at school practices that may reduce disproportionality, including pre-referral interventions, family involvement, and instructional practices in general education, personnel preparation, and professional development, to improve student outcomes and reduce overrepresentation. As these practices are implemented appropriately and consistently, the opportunity for all students to reach their potential can be achieved. This paper is the call to continue to the conversation to ensure that all children with disabilities, namely Black males, are provided with an appropriate education that meets their individual needs.

References

- Abrams, B. (2005). Becoming a therapeutic teacher for students with emotional and behavioral disorders. *Teaching Exceptional Children, 38*(2), 40-45.
- Anderson, K. A., & Sadler, C. I. (2009). The effects of school-based curricula on reading achievement of African American males in special education. *The Journal of Negro Education, 78*(3), 333-346.
- Anderson, M., Beard, K., Delgado, B., Kea, C. D., Raymond, E. B., & Singh, N. N. (2003). Excerpts from working with culturally and linguistically diverse children, youth, and their families: Promising practices in assessment, instruction, and personnel. *Beyond Behavior, 12*(2), 12-16.
- Artiles, A. J., & Ortiz, A. A. (Eds.). (2002). *English language learners with special needs: Identification, placement and instruction*. Washington, D.C.: Center for Applied Linguistics and Delta Systems Co., Inc.
- Banks, J. A. (2010). Multicultural education: Characteristics and goals. In J. A. Banks & C. A. M. Banks (Eds.), *Multicultural education: Issues and perspectives* (7th ed.), (pp. 1-30). New York: NY: John Wiley & Sons Inc.
- Cullinan, D., & Kauffman, J. M. (2005). Do race of students and race of teachers influence ratings of emotional and behavioral problem characteristics of students with emotional disturbance? *Behavioral Disorders, 30*(4), 393-402.
- Gasden, V. (2001). Cultural discontinuity, race, gender, and the school experiences of children. *The roles of history and society in education African American students*. Needham Heights, MA: Allyn & Bacon.

- Harry, B., & Anderson, M. G. (1995). The disproportionate placement of African American males in special education programs: A critique of the process. *Journal of Negro Education*, 63(4), 602-619.
- Irving, M. A. (2006). Practicing what we teach: Experiences with reflective practice and critical engagement. In J. Landsman & C. W. Lewis (Eds.), *White teachers/diverse classroom: A guide to building inclusive schools, promoting high expectations, and eliminating racism* (pp. 195-196). Sterling, VA: Stylus Publishing, LLC.
- Kauffman, J. (2005). *Characteristics of emotional and behavioral disorders of children and Youth*. Columbus, OH: Pearson Prentice Hall.
- Kendall, F. (1996). *Diversity in the classroom: New approaches to the education of young children* (2nd ed.). New York, NY: Teacher College Press.
- Kunjufu, J. (2005). *Keeping Black boys out of special education*. Chicago: African American Images.
- Lee, C. (2004). *Empowering young Black males: A systematic modular training program for Black male children and adolescents*. Chicago, IL: African American Images.
- Lehr, C., & McComas, J. (2004). *Students with emotional/behavioral disorders: Promoting positive outcomes*. Retrieved from www.ici.umn.edu/products/impact/182/over1.html
- Lopes, J. (2005). Intervention with students with learning, emotional and behavioral disorders: Why do we take so long to do it [Electron Version]. *Education & Treatment of Children*, 28(4), 345-360.
- Monroe, S. (2007). *Minorities in special education* [Adobe Digital Editions version]. Retrieved from www.ebook.com
- National Association of School Psychologists. (2004). *Position statement on students with emotional and behavioral disorders*. Retrieved from www.nasponline.org/information/pospaper_sebd.html
- Neal, L. I., McCray, A. D., Webb-Johnson, G., & Bridgest, S.T. (2003). The effects of African American movement styles on teacher's perceptions and reactions. *The Journal of Special Education*, 37(1), 49-57.
- Nieto, S., & Bode, P. (2008). *Affirming diversity: The sociopolitical context of multicultural education* (5th ed.). Boston/NY: Allyn & Bacon/Longman.
- Ortiz, A. A., & Yates, J. R. (2002). Considerations in the assessment of English language learners referred to special education. In A. Artiles and A. A. Ortiz (Eds.), *English language learners with special education needs: Identification, assessment, and instruction* (pp. 65-86). McHenry, IL: Center for Applied Linguistics and Delta Systems Co.
- Patton, J. (1998). The disproportionate representation of African Americans in special education: Looking behind the curtain for understanding and solutions. *The Journal of Special Education*, 32(1), 25-31.
- Pavri, S. (2001). Loneliness in children with disabilities: How teachers can help. *Teaching Exceptional Children*, 33(6), 52-58.
- Serpell, Z., Hayling, C. C., Stevenson, H., & Kern, L. (2009). Cultural considerations in the development of school-based interventions for African American adolescent boys with emotional and behavioral disorders. *The Journal of Negro Education*, 78(3), 321-332.
- Skiba, R., Michael, R., Nardo, A., & Peterson, R. L. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *The Urban Review*, 34(4), 317-342.

Generating Creative Capital in Mathematics for Elementary School Teacher Candidates

James M. Fetterly, Ph.D.
University of Arkansas at Little Rock

Abstract

Educational questions have been raised pertaining to the nation's mathematical prowess. In light of such staggering concerns, this quantitative study examined the notion of mathematical creativity and ways it might be developed with punctuated, intentional experiences with mathematical creativity. A one-group pretest-posttest design was employed to determine if significant differences (or increases) exist in mathematical creativity for elementary teacher candidates. Candidates were exposed to problem posing, divergent thought, and invented strategies, i.e., punctuated, intentional experience with mathematical creativity. The findings of this study suggest that mathematical creativity can be fostered given certain conditions. Furthermore, the results indicate that mathematical creativity is significantly impacted by intentional experiences with mathematical creativity – alternative algorithms, divergent thought, invented strategies, and problem posing. Therefore, is it possible that the development of mathematical creative, in part, could answer some of these concerns?

Introduction

In *Foundations for Success: The Final Report of the National Mathematics Advisory Panel*, the National Mathematics Advisory Panel (NMAP) (2008) submitted six broad recommendations demanding action to ensure “mathematical prowess” in the United States (p. 1). The NMAP also stated that action “must be taken to strengthen the American people in this central area of learning” (p. 1). Two of the nation's strengths are its ability to (1) problem solve creatively and (2) thrive economically. To sustain any economic stability in a technological world, however, the nation must advance in the disciplines of science, technology, engineering, and mathematics. If ignored, these recommendations suggest that mathematical prowess in the United States is in jeopardy.

The NMAP's concerns about the nation's mathematical prowess only heighten the mathematics education community's awareness of the need for mathematical problem solving. It is the opinion of the author that that the kind of mathematical problem solving must be creative. Many of the problems that today's kindergartners will face when they are in the workplace have not yet been defined or identified. This proposition means the next generation will have to create solutions to problems that do not already exist. Although more mathematics might not solve this dilemma, more of a certain, specific kind of mathematics might help. That is to say, old ways will not necessarily produce new remedies for the next generation's unseen predicament. This situation calls for a revision of problems and solutions, so that old paradigms are replaced with fresh frameworks to unravel these unknown problems. In short, problem solving mathematically must be reconceived to meet the challenges of the future.

This re-conception is exactly what the National Council of Teachers of Mathematics (NCTM) (2000) proposed in its vision for the state of school mathematics. NCTM's vision is to develop the kind of creative mathematics that will produce the changes necessary to meet the demands of the problems our children will face.

How will our nation produce mathematically creative problem solvers in classrooms as described by NCTM's vision? How can a nation sustain its mathematical prowess? One way is to examine the base and foundation of the nation's educational building blocks to maintain its mathematical might. Who are the key catalysts to creative mathematical classrooms? Are they not the classroom teachers of mathematics? These teachers must not be limited to the secondary school mathematics setting, but they must include classroom teachers of elementary school mathematics, as well. To achieve mathematically creative classrooms, one must look at the teacher candidates who will shape the students of tomorrow. Because they shape students during the crucial elementary school years, elementary school teacher candidates are the catalyst to initiate change.

Purpose of Study

The goal of this study was to explore the ways that punctuated, intentional experience with mathematical creativity and problem posing influenced mathematical creativity. If punctuated, intentional experience with mathematical creativity fosters more mathematical creativity, this information would be valuable to curriculum designers, mathematics educators, and teachers of mathematics. Also, if a relationship exists, the relationship would inform teachers and teacher educators that they could support their students with the potential to raise mathematical creativity and possibly the nation's mathematical prowess.

This quantitative study examined the notion of mathematical creativity. The participants were assessed in this study using the Creative Ability in Mathematics instrument. In this study, the guiding question investigated was: What effect does punctuated, intentional experience with mathematical creativity have on elementary school teacher candidates' mathematical creativity?

Defining Mathematical Creativity

No single definition exists for mathematical creativity. Often it is functionally defined and examined (Aiken, 1973; Chamberlin & Moon, 2005; Haylock, 1985; Jensen, 1973; Krutetskii, 1976). For instance, Jensen (1973) operationally defined mathematical creativity as "the ability to give numerous, different and applicable responses when presented with a mathematical situation in written, graphic, or chart form" (p. viii). Similarly, Chamberlin and Moon (2005) stated that, "[m]athematically, creativity may be existent when a nonstandard solution is created to solve a problem that may be solved with a standard algorithm" (p. 38). In other words, mathematical creativity can be seen as the capacity to invent algorithms and strategies or even alternative approaches to a standard problem. Another way mathematical creativity has been defined is overcoming fixations and divergent products (Haylock, 1985, 1997).

Fostering Mathematical Creativity

In the area of mathematics education, some researchers and theorists have suggested several ways to foster creativity. Aiken (1973) asserted that a "creative teacher produces creative students" (p. 420). Following that declaration, Aiken described the teacher fostering creativity as one who poses problems, asks questions, encourages discussion, and provides opportunity to observe and explore "in the mathematical laboratory" (p. 420). Jensen (1976) indicated that, in the elementary school, encouragement of students to find multiple methods, alternative algorithms, or unique solutions to problems increases the students' problem solving ability and divergent thinking.

If mathematical creativity is to manifest itself in the classroom, Sriraman (2004) conjectured that “students should be given the opportunity to tackle non-routine problems with complexity and structure--problems that require not only motivation and persistence but also considerable reflection” (p. 32). Elsewhere, Sriraman (2005, p. 27) suggested five overarching principles to maximize creativity at the K-12 level:

- a. the Gestalt principle--freedom of time and movement,
- b. the aesthetic principle--appreciating the beauty of unusual solution/connections to the arts and sciences,
- c. the free market principle--encouraging risk taking and atypical thinking,
- d. the scholarly principle--view creativity as contributing to, challenging known paradigms and extending the existing body of knowledge, and
- e. the uncertainty principle--open-ended and/or ill-posed problems and tolerating ambiguity.

The traditional tragedy of school mathematics is the overemphasis on *skill-and-drill* or *theorem-proof*, *theorem-proof* routines (Parr, 1974; Pehkonen, 1997). Mann (2005) states that “[c]reativity needs time to develop and thrives on experience” (p. 19). This sentiment corresponds to Silver’s (1997) statement that creativity “is often associated with long periods of work and reflection rather than rapid, exceptional insight; and is susceptible to instructional and experiential influences” (p. 75). Other researchers have indicated that, in sharp contrast to these inhibiting factors, ill-structured, open-ended, or multiple-solution problems, along with problem posing support creativity in the mathematical classroom (Becker & Shimada, 1997; Hashimoto, 1997; Haylock, 1997; Kwon, Park, & Park, 2006; Leikin & Lev, 2007; Pehkonen, 1997; Silver, 1997).

Methodology

Research Design

Thirty-two teacher candidates were pre- and post-tested. Mathematical creativity was measured using Balka’s (1974) Creativity Ability in Mathematics Test (CAMT). To establish a baseline measurement, the CAMT was administered to the participants at the beginning of the semester. During the semester at specific intervals, the teacher candidates received the treatment (punctuated, intentional experience with problem posing, divergent thought and invented strategies). At the end of the semester, the teacher candidates were assessed again with the CAMT, thus, completing the one-group pretest-posttest design.

Setting and Sample

This study employed a convenient sampling method. The participants who were selected as the sample for this study were college juniors entering into the elementary education program at a research institution in the southeast region of the United States. These teacher candidates met the University’s course requirements for mathematics (a minimum of six hours to include college algebra or higher) and the College of Education’s prerequisites as well (which comprises passing a general knowledge test and holding a minimum 2.5 grade point average). This sample of 32 students was studied in the students’ first mathematics methods course. With few minority students, this sample was rather homogeneous and overwhelmingly female. Specifically, the sample was comprised of 1 African American female and 31 Caucasian teacher candidates (of which one was a Caucasian male).

Treatment

Teacher candidates participated in two different 90-minute class sessions where the treatment (punctuated, intentional experience with problem posing, divergent thought and invented strategies) was administered during the semester at specific intervals. The following protocol was used to ensure the treatment was the same during both sessions. The session advanced through a four phase progression, which is the punctuated, intentional experience with mathematical creativity. The progression of the four phases was as follows:

1. expose to multiple perspectives
2. pose an open-ended problem
3. examine sample solutions
4. pose alternative problems

First, the teacher candidates were exposed to multiple perspectives given four numbers, shapes, or objects. (For an example see figure 1.) They were asked questions including: Which one does not belong? Which one is different? What do they have in common? Which ones are the same? What is the pattern? Each question was followed by the question “Why?” pressing the teacher candidate to justify the response. Not only were the teacher candidates asked to formulate one rule and reason, but then they were asked to find at least two rules for each scenario. After each teacher candidate responded to the prompt individually, the teacher candidates as a whole were given the opportunity to share their responses in groups and finally with the whole class (replicating a “Think-Pair-Share” model).

Figure 1. *Example of a Multiple Perspective Task.*

Directions: Which One Does Not Belong? Why?

$$\begin{array}{c|c} 2 & 6 \\ \hline 5 & 10 \end{array}$$

In the second phase, an open-ended problem was posed. The teacher candidates were given the opportunity to approach each problem from several vantage points. Time was allowed for them to explore the problem and to work it using several different methods to find numerous solutions. For instance, the task, “Given nine-dot unit-square grid draw as many shapes as possible with an area of 2 units²,” was adapted from Haylock (1997, p. 72).

Then, in the third phase, sample solutions of the open-ended problem were shown to the teacher candidates. Time was allowed for them to discuss and understand their variegated solutions. The solutions exposed the candidates to creative thought.

Finally, in the last phase, the teacher candidates problem posed. Given the previous open-ended problems, they were asked to pose alternative problems that stem from the original problem or its solution. Changing the parameters or conditions of the problem were suggested.

Instrumentation

Mathematical creativity was measured at the beginning and at the end of the semester. Candidates were tested using Balka’s (1974) *Creative Ability in Mathematics Test* (CAMT). Balka (1974) reported a Cronbach’s alpha of .72 and a standard error of measurement of 7.24 for CAMT reliability.

Data Collection and Analysis

To collect data on mathematical creativity, it was collected via the traditional means – paper and pencil. Data on mathematical creativity was collected in class using the *Creative*

Ability in Mathematics Test (CAMT). The participants were allowed the whole class period to respond to the CAMT at the beginning and the end of the semester.

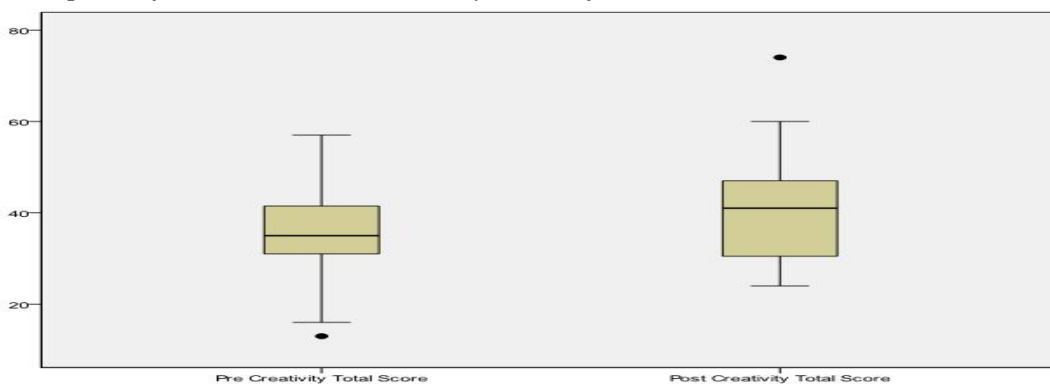
Results

Research Findings

What effect does a punctuated, intentional experience with mathematical creativity have on elementary teacher candidates' mathematical creativity?

A paired-samples t test was conducted to evaluate mathematical creativity as to whether the means of the pre-test was significantly different from the post-test. The results indicated that the pre-test sample mean for mathematical creativity ($M = 35.13$, $SD = 10.56$) was significantly different from the post-test sample ($M = 40.24$, $SD = 11.42$), $t(31) = 19.99$, $p < .01$. The effect size of d was 3.53. The 99% confidence interval for mathematical creativity mean ranged from 30.01 to 40.24 on the pre-test and 34.81 to 45.88 on the post-test. Figure 2 shows the distribution of the mathematical creativity scores. The results support the conclusion that punctuated, intentional experience with mathematical creativity increases or fosters elementary teacher candidates' mathematical creativity.

Figure 2. *Boxplots of Pre- and Post-Creativity Scores for CAMT*



Discussion

The import of the following data must be stressed. These data suggest that punctuated, intentional experience with mathematical creativity increases elementary school teacher candidate's mathematical creativity. More importantly, teacher candidates' mathematical creativity can be significantly enhanced in a relatively short period of time according to the data. If this outcome is indeed the case, how might this translate into school settings in the mathematics classroom? Is it possible that punctuated, intentional experiences with mathematical creativity could have the potential to redesign the landscape of the mathematics classroom?

As detailed earlier, Sriraman (2005) espoused that mathematical creativity and giftedness can be harmonized at the K-12 level using five principles: The Uncertainty Principle, The Scholarly Principle, The Free Market Principle, The Gestalt Principle, and The Aesthetic Principle. The current study suggests that punctuated, intentional experience with mathematical creativity (problem posing, divergent thinking, alternative algorithms, and invented strategies), corresponds to many of Sriraman's five principles. By fostering an environment that tolerates ambiguity through open-ended or ill-posed problems the Uncertainty Principle is supported. The Scholarly Principle states that creativity challenges existing trains of thoughts and extends

current knowledge. Creativity thrives where risk-taking is encouraged and atypical or divergent thinking is promoted. The Gestalt Principle contends that with the freedom of time and movement creativity can flourish illustrating the Free Market Principle. To behold solutions, methods, problems, or ways of thinking as objects of beauty is the Aesthetic Principle. In part, this study has maintained these five principles, and the data suggest that mathematical creativity has been developed.

Conclusion

The expectation was sustained by the data that punctuated, intentional experience with mathematical creativity would foster mathematical creativity. The findings of this study point to one overwhelming implication: if a punctuated, intentional experience with mathematical creativity fosters mathematical creativity, then conceivably this approach is a means to maintain and develop mathematical capital and prowess.

In conclusion, intentional experiences with mathematical creativity provide hope. It potentiates change in the mind that mathematics is, in fact, a creative endeavor. Therefore, mathematics can and should be approached with alternative algorithms, differing representations, invented strategies, problem posing, and multiple methods based upon the learner's prior knowledge and experiences. Could it be that mathematical capital and prowess is harvested through these intentional experiences with mathematical creativity? How might mathematics educators of today change the course of mathematical learning for the next generation? This study has suggested that there *can* be hope to foster mathematical creativity.

References

- Aiken, L. R. (1973). Ability and creativity in mathematics. *Review of Educational Research*, 43(4), 405-432.
- Balka, D. S. (1974). The development of an instrument to measure creative ability in mathematics. *Dissertation Abstracts International*, 36(01), 98.
- Becker, J. P., & Shimada, S. (Eds.). (1997). *The open-ended approach: A new proposal for teaching mathematics*. Reston, VA: National Council of Teachers of Mathematics.
- Chamberlin, S. A., & Moon, S. M. (2005). Model-eliciting activities as a tool to develop and identify creatively gifted mathematicians. *The Journal of Secondary Gifted Education*, 17(1), 37-47.
- Hashimoto, Y. (1997). The methods of fostering creativity through mathematical problem solving. *International Reviews on Mathematical Education*, 29(3), 86-87.
- Haylock, D. W. (1985). Conflicts in the assessment and encouragement of mathematical creativity in schoolchildren. *International Journal of Mathematical Education in Science and Technology*, 16(4), 547-553.
- Haylock, D. W. (1987). Mathematical creativity in schoolchildren. *The Journal of Creative Behavior*, 21(1), 49-59.
- Haylock, D. W. (1997). Recognizing mathematical creativity in school children. *International Reviews on Mathematical Education*, 29(3), 68-74.
- Jensen, L. R. (1973). *The relationships among mathematical creativity, numerical aptitude and mathematical achievement*. Unpublished doctoral dissertation, The University of Texas, Austin.
- Jensen, L. R. (1976). Using creativity in elementary school mathematics. *The Arithmetic Teacher*, 23(3), 210-215.

- Krutetskii, V. A. (1976). *The psychology of mathematical abilities in school children*. (J. Teller, trans. & J. Kilpatrick & I. Wirszup, Eds.). Chicago: University of Chicago Press.
- Kwon, O. N., Park, J. S., & Park, J. H. (2006). Cultivating divergent thinking in mathematics through an open-ended approach. *Asia Pacific Education Review*, 7(1), 51-61.
- Leikin, R. & Lev, M. (2007). Multiple solution tasks as a magnifying glass for observation of mathematical creativity. In Woo, J. H., Lew, H. C., Park, K. S. & Seo, D. Y. (Eds.). *Proceedings of the 31st Conference of the International Group for the Psychology of Mathematics Education*, Vol. 3, (pp. 161-168). Seoul: PME.
- Mann, E. L. (2005). *Mathematical creativity and school mathematics: Indicators of mathematical creativity in middle school students*. Unpublished doctoral dissertation, The University of Connecticut, Hartford.
- National Council of Teachers of Mathematics. (2000). *Principles and standards for school mathematics*. Reston, VA: Author.
- National Mathematics Advisory Panel. (2008). *Foundations for success: The final report of the National Mathematics Advisory Panel*. Washington, DC: U.S. Department of Education.
- Parr, P. G. (1974, March). The phenomenon of mathematical invention. *Mathematics Teaching*, 66, 56-58.
- Pehkonen, E. (1997). The state-of-art in mathematical creativity. *International Reviews on Mathematical Education*, 29(3),63-67.
- Silver, E. A. (1997). Fostering creativity though instruction rich in mathematical problem solving and problem posing. *International Reviews on Mathematical Education*, 29(3),75-80.
- Sriraman, B. (2004). The characteristics of mathematical creativity. *The Mathematics Educator*, 14(1), 19-34.
- Sriraman, B. (2005). Are giftedness and creativity synonyms in mathematics. *The Journal of Secondary Gifted Education*, 17(1), 20-36.

Cooperating Teachers' Uncertainty of Their Roles as Mentors

Shelley Y. Handcock, Ed.D.
University of Central Arkansas

Abstract

This multiple-case study involved 20 veteran teachers who had served as cooperating teachers at least once within the last seven years. The researcher conducted an initial in-depth interview, member check, and follow-up interview with each of the cooperating teachers. According to this study's findings, cooperating teachers were not always aware of the university's expectations of them. The cooperating teachers were willing to serve as mentors to the teacher candidates; however, they recognized the necessity of preparation for the role of mentor to future teachers.

Introduction

As the culminating experience for teacher candidates seeking graduation from a teacher preparation program, the professional semester "aims to prepare student teachers for a professional career by using knowledge, skills, and behaviors obtained during teaching seminars in real settings" (Karamustafaoglu, 2008, p. 1). For candidates enrolled in their professional semester, this period of their learning is critical, as it is designed to develop them into the professional teachers required to impart learning to today's youth (Roberts, Harlin, & Briers,

2009; Snyder, 2011). In his 1975 sociological study, Dan Lortie acknowledged that the student teaching experience could only be as good as the cooperating teacher, the veteran teacher who guides and mentors student teachers during their professional semester of their teacher preparation program. This study seeks to address the following question of cooperating teachers: What changes or additions would you make to the cooperating teacher preparation process?

Although research regarding student teaching has been conducted, little emphasis has been placed upon all aspects of the student teaching process, specifically the role of cooperating teachers (Rodgers & Keil, 2006; Russell & Russell, 2011; Sim, 2010; Valencia et al., 2009). The entire experience involves a triadic relationship among university supervisors, student teachers, and cooperating teachers who should ideally work collaboratively to ensure the student teachers participate in meaningful, positive professional semester experiences (Ardley, 2009; Castro, 2010; Luehmann, 2007; Smith, 2007; Valencia et al., 2009).

Despite the responsibility of providing such extensive guidance and support to student teachers, cooperating teachers do not always receive that same level of guidance and support they need to provide the most effective experiences for student teachers, as universities often provide minimal support to the cooperating teachers (Norman, 2011). Researchers agree that cooperating teachers should receive more adequate instruction or development regarding ways to serve student teachers effectively (Rodgers & Keil, 2006; Russell & Russell, 2011; Sim, 2010; Smith, 2007; Valencia, et al., 2009). It is possible that student teachers would experience increased improvement if their cooperating teachers were informed of the expectations of cooperating teachers (Edwards & Dendler, 2007; Karamustafaoglu, 2008) as support for the student teachers, not just as supervisors of the student teachers (Walkington, 2005).

The expectations of cooperating teachers create high standards, but cooperating teachers are not provided with enough direction to provide student teachers with the most meaningful professional semester experiences. Cooperating teachers should be given the opportunities to receive necessary development and instruction designed to equip them with the knowledge and skills to be most effective in providing learning opportunities to their student teachers (Rodgers & Keil, 2006; Russell & Russell, 2011; Sim, 2010; Smith, 2007; Valencia et al., 2009).

Overall, research asserts that several factors must be in place in order for student teachers to have the most effective experiences with their cooperating teachers and university supervisors, creating a three-point relationship sometimes referred to as the triad. Maintaining healthy triadic structures in conjunction with the teacher preparation programs, providing student teachers with adequate support and learning opportunities, and outlining the responsibilities and necessary professional development of cooperating teachers to support adult learning can be contributing factors for providing positive experiences during student teaching. However, research does not always address the needs of cooperating teachers, aside from the assertion that they would serve as better mentors for student teachers if given the opportunity to receive training designed to focus on their needs as cooperating teachers (Rodgers & Keil, 2006; Russell & Russell, 2011; Valencia et al., 2009).

The triad of the student teaching experience refers to the student teacher, cooperating teacher, and university supervisor--the three individuals working together to ensure the practicum fosters the development the student teacher requires. When the triad works together effectively, a sense of community among the three participants is promoted (Luehmann, 2007), a relationship that can become tense and difficult to develop if support is not offered within it (Bacharach, Heck, & Dahlberg, 2010; Cuenca, 2011). In a study of 40 cooperating teachers and 78 student teachers, only 6.3% of cooperating teachers and 9.3% of student teachers believed the

role of the cooperating teacher related to academics, assuming cooperating teachers would support student teachers with content, activities, and materials in the development of their lessons (Rajuan et al., 2007). Differences in the mindsets of the cooperating teachers who have received training and those who have not received training highlight the gaps that can exist for cooperating teachers who are not adequately prepared for their roles.

Cooperating Teachers' Responsibilities

Cooperating teachers have a significant responsibility, which is providing student teachers with a sense of the real world of education (Ediger, 2009; Lortie, 1975). Although cooperating teachers feel responsible for providing student teachers with support and guidance (Russell & Russell, 2011), the real world of education aspect of the job has been difficult to convey in the past (Karamustafaoglu, 2008). This struggle is evident as student teachers often identify lack of support as an area of concern. Two of the three participants in Stephens and Waters' (2009) study noted a lack of support from their cooperating teachers, as one cooperating teacher chose to leave the experience completely in the hands of the student teacher while the other cooperating teacher hesitated in providing what he considered too much support to the student teacher (Stephens & Waters, 2009).

Support, however, is not the sole element of cooperating teachers' responsibilities. Much of the responsibility ties into developing student teachers' abilities to present instruction to students. One aspect relates to planning instruction. Researchers found it imperative for cooperating teachers to involve student teachers in planning with them as well as guiding the student teachers as they plan their own lessons to present to students (Nilssen, 2010; Norman, 2011; Rajuan et al., 2007).

Another aspect of cooperating teachers' responsibilities relates to feedback. Student teachers, although dependent upon feedback from their cooperating teachers during this experience, must be able to enter the workforce and critique themselves through their own feedback. During the professional semester, cooperating teachers are responsible for not only providing this pertinent feedback to student teachers but also for encouraging reflective practices that allow student teachers to evaluate their work and provide themselves with critical feedback necessary to ensure student success (Alger & Kopcha, 2009; Goh & Matthews, 2011; Masunaga & Lewis, 2011; Minott, 2011; Moffett & Zhou, 2009; Ostorga & Estrada, 2009; Smith, 2007; Snyder, 2011).

Cooperating teachers can negatively or positively affect student teachers' development (Russell & Russell, 2011), so it is important for them to be cognizant of their multiple roles as cooperating teachers. Excluding the role as permanent teacher of their students at the placement school, to their student teachers, cooperating teachers serve as advisors, judges, informers, teachers, and reflective coaches (Portelance & Gervais, 2009). More importantly, failure to uphold these roles can impede the development of student teachers. Student teachers in the Stephens and Waters (2009) study experienced this outcome as their cooperating teachers refrained from offering support when the student teachers felt they needed it most. Ultimately, the university supervisor provided the necessary support to each student teacher in an effort to help them maintain a positive outlook toward the teaching profession (Stephens & Waters, 2009).

Russell and Russell (2011) underscored the import of the support cooperating teachers offer as they provide voices from the field: *I will certainly do whatever I am told to do, as well as be a support system for the intern, and I will be cooperative and sensitive to his or her needs,*

(p. 10) explained one cooperating teacher. Another reiterated, *I am willing to be flexible and receptive in working collaboratively. I am not too set in my ways, yet think I can be good for new teachers* (p. 11).

Part of supporting the student teachers requires cooperating teachers to relinquish control of their classrooms to student teachers while providing the guidance necessary to help shape their professional identities and to make the best decisions for student achievement. Hosting pre-observation and post-observation meetings with student teachers helps encourage the reflective practices student teachers need to become evaluative of their work in preparation of entering their own classrooms in the near future (Valencia et al., 2009). Further, providing them with access to other teachers allows student teachers the opportunities to communicate with others to acquire varying strategies and methods to employ in their teaching (Cuenca, 2011).

Cooperating teachers, though professionals in the area of education, do not always employ the same standards when mentoring student teachers as they employ when instructing the students in their own classrooms. Maintaining dual roles as teacher of record for the students and cooperating teacher for the student teacher requires expectations are met for both positions (Valencia et al., 2009). However, research alludes to the idea that cooperating teachers need to receive more adequate preparation before shouldering the responsibility of supervising a student teacher. Participants in Russell and Russell's (2011) qualitative research made the following suggestions:

Mentoring workshops should be provided for cooperating teachers to better prepare them for the mentoring of their student interns... Many participants in this study recommended that similar workshops on effective mentoring be a part of ongoing, mandatory professional development for cooperating mentor teachers who plan to host a student intern (p. 13).

Additionally, cooperating teachers interested in the development of their roles introduced research to their colleagues suggesting they receive a three full days of training in preparation for their roles as cooperating teachers. Hamilton's 2010 study of 10 cooperating teachers found that 5 of the 10 believed classes, workshops, or seminars would benefit their development as effective cooperating teachers, as none of those options had been provided to them. In her 2008 study, Draves suggested further research be conducted to identify the beliefs of cooperating teachers that will make them better in their roles.

Valencia et al. (2009) stated, *Cooperating teachers juggled classroom and school responsibilities with mentoring yet were given little support or training in how to serve these dual roles* (p.26). However, while various occupations look to exemplars as paradigms of success, Lortie (1975) believed the field of education is lacking such models.

Law students have their precedents, and engineers have exemplars dating back to ancient Rome; physicians recall Galen and centuries of empirical treatment; and clergymen can pore over thousands of published sermons and exegeses...But what meaningful record exists of the millions of teaching transactions that have occurred since the City on the Hill? (pp. 58, 59).

Further, even in the context of student teaching, cooperating teachers are not provided with specific training regarding expectations of them while student teachers are placed with them. With the low degree of support provided by universities to cooperating teachers (Valencia et al., 2009), researchers agree that professional development could be implemented to provide cooperating teachers with necessary information that would help identify student teachers' needs

and cooperating teachers responsibilities (Hamilton, 2010; Russell & Russell, 2011; Valencia et al., 2009).

Method

This qualitative research was conducted to understand cooperating teachers' perceptions of their needs based upon responsibilities they must uphold in their roles at the public high school as they support student teachers. With a purposive sample of 20 participants in this multiple-case study, the researcher conducted in-depth interviews of each of the 20 cases, as well as his or her corresponding administrator, analyzed participants' responses for emerging themes, and made recommendations based upon the findings. Ultimately, this study was designed to address the gap in student teaching literature that does not address the needs of cooperating teachers as sufficiently as it addresses the needs of student teachers.

This purposive sample, selected by the building principal of the study's location, consisted of the 20 participants from the total 44 veteran teachers who met the criteria of having served as cooperating teachers at least once within the past seven years at suburban high school in Texas. One cooperating teacher represented each case, accounting for a total of 20 cases from a suburban public high school that had many student teachers trained on its campus. Considering the research from the literature review encompassed studies from 2005 to 2012, this multiple-case study included 20 veteran teachers who had served as cooperating teachers to at least one student teacher between the years of 2005 and 2012.

The setting of this study was a large public high school of an independent school district located in the Dallas-Fort Worth metroplex. Enrolling over 4,000 students in 2012-2013, this high school employs more than 200 faculty. This site was chosen due to the large number of faculty from which to choose. The principal agreed to allow the study to be conducted on the campus. According to the principal, in the past several years, this high school has received teacher candidates from only one university, likely due to its close proximity in being located only six miles from the university's campus.

Instrumentation and Data

The primary source of data came from interviews conducted by the researcher with each participant. Considering the qualitative design of this study, two interviews were conducted for each participant. As a member check, the researcher conducted the initial interview, transcribed it, and returned it to each participant to ensure the responses were recorded accurately as they discussed their perceptions. Additional questions were asked of the participants if greater clarity was necessary. These additional questions were documented at the end of the handwritten notes the researcher took during the initial interviews of the cooperating teachers. This step was included in an effort to guide the focus of the follow-up interviews as they were conducted.

An interview was conducted with the administrator who served as the liaison between the cooperating teachers and the university supervisors. This person was employed as the associate principal of curriculum and instruction during the time the cooperating teachers mentored the teacher candidates. The cooperating teachers' administrator's interview was based on questions from the cooperating teachers' interview guide and served as an element of triangulation designed to monitor the dependability of cooperating teachers' responses in their interviews.

The cooperating teachers' interviews served as the primary source of data used to identify the teachers' perceptions of their preparedness to supervise a student teacher. Information from the Cooperating Teacher Handbook from the teacher preparation program was used in the data

collection process as well. No cooperating teachers had any information from specific meetings or trainings designed to support them during the semester they supervised a student teacher; therefore, no additional information was received from the participants. The researcher, however, secured a copy of the most recent Cooperating Teacher Handbook from the university placing the student teachers at the school. This Handbook served as documentation of the information provided to cooperating teachers during the professional semester of student teaching. The researcher focused on information regarding responsibilities of the cooperating teacher, communication with the university supervisor, and professional development. The purpose of this handbook was to gain an in-depth description of the information and training offered to cooperating teachers and to triangulate the participants' responses with documents provided by the university.

The handbook that outlined the roles and responsibilities of the cooperating teacher and student teacher provided the researcher with a clearer understanding of the information and direction given to cooperating teachers during the professional semester of an assigned student teacher. This handbook was analyzed based upon specific steps the university outlined for processes, forms of assistance or support offered to student teachers, and additional resources or points of contact in case any questions or needs arose during the student teacher's professional semester. These documents were used as a part of triangulation in an effort to analyze the cases through various lenses, which included the interviews, both the cooperating teacher and the administrator, as well as the document review.

Using NVivo 10, data were analyzed and organized by nodes in order to view the emerging categories as they developed throughout the analysis process. These categories formed based upon the information provided by the participants during the interview as well as the analysis of the handbooks or other information provided to the veteran teachers in preparation of their role as cooperating teachers. Codes and categories were analyzed in consideration of cooperating teachers' expectations provided in the literature review.

Findings

Some of the cooperating teachers expressed concerns regarding the amount of direction they were provided during the course of their mentorship of teacher candidates, especially at the beginning of the student teacher's placement. Of the cooperating teachers, 18 of the 20 cases explained that they needed more specific instructions so that they would know the expectations from the university regarding both the cooperating teachers as well as the teacher candidates. Cooperating teachers were found to have questions regarding three different elements of the professional semester and needed clarification on these specific expectations:

- the cooperating teachers' responsibilities;
- the student teachers' responsibilities; and
- the university's recommended timelines to relinquish control to student teachers.

Need for Information

The in-depth interviews conducted to gain the cooperating teachers' perceptions of their preparation brought responses that focused heavily upon expectations of themselves. According to many cooperating teachers interviewed during this study, student teachers received a more effective experience if the cooperating teachers knew their expectations as mentors to the student teachers. When asked "What changes or additions would you make to the preparation process?" some of the cases expressed their desires to receive more direction regarding the expectations of

them as cooperating teachers. Simply stated, Case Seven explained, that he needed to have a *better idea of what is expected of [him]*.

Case Eighteen expressed concerns regarding expectations:

I would like clear expectations for my role as the supervising teacher. Do they want me to sit in the classroom for a certain period of time? Do they want me to say that they have been prepared and I leave total control? Do they want me to offer them, the university, any feedback or just have feedback exchanges with student teachers? What? Do they want me to offer help, or do they want the student teachers just to follow whatever the university has given them?

This same case suggested, however, that this explicit information of expectation may be best reserved for those cooperating teachers who had not served in the capacity of a cooperating teacher previously, so rather than provide this same information to all cooperating teachers, she believed those who would truly benefit were cooperating teachers who had not yet served in the role previously. She continued:

I think it would be nice for the very first time you serve as a cooperating teacher, kind of an outline or guideline of expectations for what would be an effective cooperating teacher, what kind of assistance do student teachers need. I feel like once you're a cooperating teacher the first time, you kind of understand how the process works and you're sort of better prepared for the second and any other subsequent times. The first time a teacher serves as a cooperating teacher, there should be some guidelines and expectations of what being a cooperating teacher really means.

Case Eleven explained, *We really don't get expectations. We just get a student teacher, and they tell us, 'ok, go.'* With further prompting in the follow-up interview, Case Eleven acknowledged that a sheet was provided to him, but there were still some concerns about clear expectations. *I know they give you a sheet that says kids have to do this but maybe go over that sheet with you so you know exactly what should be done with the [teacher candidate] through that time period.*

Case Fifteen expressed a need for stated expectations:

I would probably say a little more interaction of expectation. We go with what we have and we do what we do, but there is not any expectation that is vocalized as to what they're looking for as far as their learning or what the school likes...what the goal is for bringing these student teachers in...that's never really expressed.

Considering the performance-based aspect of this cooperating teacher's class, he was specific in his concern, and he continued the explanation of his concerns during his follow-up interview as he went further regarding the types of specifics that would help him mentor student teachers better. When asked about what he would like from the university, he explained:

...what the university would like from the teachers of the district that they're using in that specific subject area and if the things that we're doing relate to what they're teaching at the university for the student teacher to know. As far as like content...is there a certain chronological or...because music is such a large scope of things that go into the categories of music...[are] there specifics that they are working on. Like for sight reading, we use the Solfege method. Some schools teach on numbers, so we don't know if that is in alignment, or if it's confusing the student teacher if they haven't used that method.

Some cases wanted to make certain they were providing instruction specific to the student teachers' needs. Case Twelve explained, *As her mentor, I would like to see objectives to*

help her. Case Fourteen expressed a similar idea when she stated, *I guess just to make sure what you're giving the person is relevant to them.* Case Nine stated concerns that she was not even certain she had helped her student teachers get what they needed in their experience:

I would like to know what they expect me to do. If you are going to give me somebody, I would like for you to tell me what you want me to do, how to work with them, what they are supposed to get out of it, what you want me to impart on them. Just interview me and see, even make sure that I'm doing what you want the student teacher to learn. I'm not even sure the student teacher got out of it what they wanted her to get.

The researcher asked Case Nine to explain areas for which she needed more explicit expectations, and she stated her concerns:

Okay, so they are a new teacher. Do you want them to know about discipline, do you want them to know about paperwork, do you want them to know about content....what I'm teaching in terms of content? Do you want me to provide them with content information, like I have a calendar? Give them handouts that I think would be useful? How far do you want me to go? How deep or how shallow? Content...discipline... school processes...I guess related to content...not content...discipline and keeping up with student behavior...how they're performing academically. Do they want me to share that with them...my procedures I use when a student is having difficulty...do I make parent contact? When do I make parent contact? How do I make the parent contact? What do I do to make the contact? Do I document it? As a new teacher, if I am remembering correctly, documentation is a big issue. Where do you keep it? Now, it's not like it was when I first started. Now, you need to write down what you do. Sometimes electronically, sometimes because I'm old school, I print it and write it by hand. Should I share that with them because I am not sure how deep they want me to go? If it's only content specific or do they want me to cover all aspects of teaching because it's more than just content. They have behavior. Kids have issues that cause their behavior. Should I sit down and talk to them about or demonstrate if I have to pull a kid out and talk to them, go back and explain why I handled one child this way and why I handled one child this way?

Case Thirteen, in response to the same question, expressed similar concerns and wanted additional feedback as well:

...just knowing the expectations...what is it that you want me to do? I need some feedback for myself to know if I'm actually effective. I don't want them coming in there thinking this lady doesn't know what she's talking about. I want to be overall effective for them. I want them to say, "She did this, and it really worked."

Case Seventeen had similar desires to know what was expected of her:

Well, I would like to get to know them. I would like to know the professors better. I would like to know, maybe have some one-on-one time with them and actually find out what they want from me exactly. I don't know if I'm doing exactly what they want.

Case Two reported concerns with not knowing how she was expected to guide the teacher candidates based upon what the university supervisor wanted them to know.

I think really knowing what the expectations of the specific supervisor were...not even the university itself because anybody that has done this for very long knows that who you have as an evaluator, whether it is in the school, your principal, assistant principal, curriculum director, or if it is a supporting cooperating staff from the university, the person you get has a tremendous amount to do with how successful your feedback is to

the student. It's like telling the kids "We're gonna have these objectives" and then giving them the tools to meet those objectives. How much do we let them teach?

This cooperating teacher wanted to make certain that she was providing the necessary support based upon the ways the university supervisor would be rating the teacher candidate.

Case Two voiced her concern and followed with a short question for the university. She went on to explain the reasons she needed to know these expectations. *I think really clear and concise guidelines and what they truly hope the student gets out of it...do they want the student [teacher] to see the real deal?*

Case Eight's concerns were similar as she explained it she needed to know that, *This is what we're looking for to grade; this is what points will be taken off in grading.* Both Cases Two and Eight wanted to know ways that they could support the teacher candidate specifically for the success of their evaluations, but they were not alone.

Case Sixteen also explained that she would like to know strategies to help her student teacher perform better based upon what the university required:

If a cooperating teacher is to prepare this person for a real classroom, it would help to have little things that the university is looking for, especially when they are being observed, so if I have a checklist and I'm observing, I can say, "you gotta do this...you have to do this..." so align with what the university is expecting, not just what the school district expects.

The level of instruction was a concern for one cooperating teacher. Case Twenty believed she may be better prepared if she knew what was required of her based upon the needs of the teacher candidate.

It'd just be nice to have what we're required to do, a rubric of kind of what I was supposed to do, what the level of instruction should be...if this person is brand new to this, if this person has ever taught a group of kids before, if I should be rating her on just the level of instruction or if I should be rating her on tone of voice and classroom management.

Some cooperating teachers conveyed concern regarding the expectations that were not communicated to them from the university. Case Three was specific in her questions. *Do they have to turn in lesson plans to me? Do I have to approve them? Those type of things...what am I expected to do?* Her further sentiments seemed to echo those of her colleagues:

I guess anything you did would be better because I never had any preparation. I think most people want to do what they are supposed to do as a cooperating teacher. I just don't always know what I was supposed to do. I am willing to do it.

Case One also had questions regarding what she needed to do as the cooperating teacher:

I guess more information about the expectations of the teacher...what my role is as a cooperating teacher, how much I am supposed to let them take over, how much I am supposed to release and keep for myself. Am I supposed to keep the class. I don't know. I still don't know. I mean, should I have given her that AP class? I don't know. So...um...just keep her with Art Is and Art IIs? Sometimes I let them move around into other art teachers and let them observe the other teachers so they can see how different teachers teach...the different styles. Other than that, I didn't really know what else I was supposed to do.

Case Six expressed that it would be beneficial to establish expectations in a face-to-face meeting prior to the start of the professional semester:

I think a simple sit-down of fifteen minutes, half hour tops, is all you need. Preferably between the liaison of the college and the mentoring teacher and maybe a few minutes also with the student teacher just so the expectations are clear in front of both of you so there is no miscommunication.

The desire to have explicit expectations provided to them as cooperating teachers overlapped from case to case. The expectations consisted of varied specifics in some instances, but the overall desire to receive those expectations remained constant among the cooperating teachers. Table 1 shows the cooperating teachers' concerns regarding expectations as voiced during their in-depth interviews.

Table 1
Cooperating Teachers Who Expressed Need for More Explicit Expectations

Case	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Need Explicit Expectations	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Gradual Release Expectations

Cooperating teachers of this study admitted to being unsure of the timeline by which they should relinquish control of their classes to the teacher candidates. As the culminating experience of a teacher preparation program, student teaching provides teacher candidates with their last opportunities to ready themselves for their own full-time classroom. According to the interviews, some cooperating teachers, however, found it difficult to determine when to give up control of their classrooms. For cooperating teachers who are willing to transfer their classroom control from themselves to the teacher candidates, they expressed the necessity of knowing the specifics of the procedures that should take place.

Case One acknowledged her bemusement regarding releasing her class completely to the teacher candidate:

I think it would help us to know how much to give. I didn't know how much to let go of my class for the student teacher. How much time to give her in there versus should I stay in and observe and critique...I've never really left the room, and if I did, it was for a very short period of time, maybe 15 or 20 minutes.

This same concern continued in Case One's follow-up interview:

I guess more information about the expectations of the teacher...what my role is as a cooperating teacher, how much I am supposed to let them take over, how much I am supposed to release and keep for myself. Am I supposed to keep the class? I don't know. I still don't know. I mean, should I have given her that AP class? I don't know.

Case Eighteen acknowledged personal concern for *how to tell when you need to relinquish control* as well as *how much you let go of control and how quickly*. Similarly, Case Six expressed his concern, explaining he wrestled with *how much should I be in the room versus how much I want to be in the room?* Overall, the cooperating teachers were unsure of the ways to relinquish control to the student teachers. Many of them had begun functioning based on their own understanding of the image that releasing that control should look like.

Case Two had her own thoughts regarding if she could leave the room or not. *I believe you can leave the room for 5 or 10 minutes, because I think that's the only way that sometimes they're ever [going to] be fully in charge, but you need to be right outside [in] the hall.*

Case Six believed teacher candidates needed to be in the room alone at some point:

After about the first week, you have to give them some time in the room so that the students aren't looking to you every time they say something, but I was always within a few feet. I normally found teachers who didn't teach during the block and went and sat in their rooms.

Case Seven echoed the beliefs of Case Six when he stated, *After about a couple of weeks, I kind of look at 'em and tell them if they have any questions, come find me.* Without the understanding of specific expectations provided by the university, these cooperating teachers have been left to make decisions based upon their own beliefs.

Teacher Candidates' Responsibilities

The teacher candidates enter the professional semester with their own set of responsibilities, as do the cooperating teachers, but some cooperating teachers in this study expressed that they were unaware of the responsibilities of the teacher candidates. Case Three, for instance, explained his uncertainty:

How many days should they observe? How many classes should they teach? What is the expectation? Do they have to turn in lesson plans to me? Do I have to approve them? Those types of things...what am I expected to do? What are they expected to do? What happens if we don't both live up to our end of the bargain? Who is the person in charge?

Case One expressed concern regarding an incident with a student teacher who did not want to teach a lesson because she did not have time to prepare for it.

It was near a vacation like spring break, and she was like, "Well, I'm going out of town, and I won't have time to do all that." So I was like that's not cool. You're doing your student teaching and trying to become a teacher, and I'm writing your recommendations. You don't tell me you're not going to do it.

This cooperating teacher explained that she was not aware of the student teachers' specific duties and the expectations she was required to fulfill at that point. The same cooperating teacher had further questions regarding student teachers' responsibilities.

Do you have them stand, do hall duty, and go to the pep rally when all the teachers are expected to go when your student teacher stands there and says, "No, I'm just gonna stand here and clean the room," when we are expected to be in the pep rally but they won't go?

Cases One and Three are the only cooperating teacher who seemed to have concerns regarding the responsibilities of the student teachers. Case One voiced specific concerns that she did not quite understand and seemed to desire clear answers.

Placement School Expectations

During interviews, all 20 cases were asked about the information they received from the high school at which they work. All cases indicated they did not receive any information, aside from e-mail or verbal notification from a school administrator, in preparation for their teacher candidate's practicum with them.

When asked about the specifics regarding the information sent to them prior to receiving the student teacher, Case Four explained that it was *just information saying she was coming, what her name was, what her major was, things like that.* Case Fifteen noted a similar e-mail, *Usually I'll get an e-mail that says this is what's happening.* Case Sixteen explained her notification a little differently. *Your student teacher will be here on...They will observe you for a*

certain amount of time and then with your help begin teaching and they're on their own and you can't mess with them.

All of these notifications contained the information regarding when the student teacher would be arriving; however, only Case Sixteen noted the expectation of gradually releasing responsibility to the student teacher. All other cases indicated they had received no information from the high school. When the administrator was asked if she was aware of any information that may have been provided to the cooperating teachers in preparation for receiving their student teachers, the administrator responded, *I don't know. I'm not aware of what that communication was.* According to the administrator, no information was provided to her from the university in order to help prepare cooperating teachers for their roles.

Discussion

Overall, cooperating teachers in this study believed they did not receive enough information regarding expectations, specifically, aligning teaching experiences with information that the teacher candidates learned in the college classroom and the timeline for gradually releasing responsibility of the classroom to the student teachers. The cooperating teachers' perception that they did not receive this direction led them to make judgments based upon the expectations that they believed would have been best. Providing the cooperating teachers with a manual that listed the expectations of both the cooperating teachers and the teacher candidates was not enough to provide the level of direction that most of the cooperating teachers believed they needed.

Further, it cannot be assumed that every cooperating teacher received a cooperating teacher manual. In this study, there were cooperating teachers who expressed concern for never having received a manual or any information from the university. Hearing one cooperating teacher explain that she was promised a manual but never received it casts doubt on certainty that all cooperating teachers actually received the manual during the professional semesters in which they served.

The cooperating teachers reported that they received insufficient guidance from the university supervisor. Most cooperating teachers believed they were left to make decisions on their own regarding the progression of the teacher candidates' learning opportunities. Even if the cooperating teachers' manual had been provided to each cooperating teacher during each assignment, the cooperating teacher may still have had little support to ensure they understood their expectations as they were outlined in the manual. The limited number of times they were contacted by the university supervisor, two to three times, does not seem to encourage the open communication between professionals who should be working together to provide the most effective professional development opportunity for the teacher candidate.

While the College of Education may have provided the cooperating teachers with copies of their handbook that included an outline of the university expectations from both the cooperating teachers as well as the teacher candidates, this provision alone does not guarantee the cooperating teachers' understanding of their expectations. Instead, cooperating teachers still had questions regarding the types of learning experiences they needed to offer the student teachers, not understanding that the handbook explained, *You and the teacher candidate will have different styles of teaching,*" (p. 14) so using a different strategy to teach a concept is not only accepted but expected.

While the information for the gradual release of responsibility to the teacher candidate was found in the copy of the handbook, some of the cooperating teachers still had questions

regarding this process, and the information in the book was not enough to provide a sufficient response. For those teachers who taught advanced placement classes, the handbook would do very little to provide them with the information regarding ways to ensure the teacher candidate receives the full learning experience of teaching all day, as they do not often have the graduate hours that qualify them to provide instruction in such courses. With student teaching as an integral portion of a teacher preparatory program, it is the responsibility of the university to ensure the professional semester provides their teacher candidates with adequate direction as they develop into professional teachers; the handbook cannot be a substitute for sufficient explanation of the expectations.

Limitations

This multiple case study was designed with the purpose of exploring cooperating teachers' perceptions of their preparation for their roles as well as their beliefs that could help them provide more effective professional development to teacher candidates assigned to them. The sample of 20 cooperating teachers is a small representation of all cooperating teachers in both the school district as well as those teachers who have mentored teacher candidates from the local university which partners with this school district. Additionally, all information that had been provided to the cooperating teachers previously had been discarded. Instead, the researcher relied on the most recently updated copy of the handbook provided to each cooperating teacher at the start of their teacher candidates' placements. There is no evidence of whether or not the same information was provided in previous versions of the handbook given to cooperating teachers within the last seven years.

Implications

Providing clearly stated expectations for each member of the triad outlines the responsibilities of each person involved. Though this outcome might be accomplished in written format so that it may be referred to at a later date, it does not ensure that everyone, especially cooperating teachers who are functioning in dual roles as both teacher and mentor, will know these expectations. These expectations become the basis of the entire professional semester, and failure to know them and meet them could have the potential to jeopardize teacher candidates' overall development during one of their most critical learning experiences of their college tenure. An effective preparation process for cooperating teachers may include their physical exposure to not only their expectations but also the expectations of the other two entities of the triad, the university supervisor and the teacher candidate. Knowledge of each person's responsibilities places accountability of the student teacher's professional growth in the cooperating teachers' hands.

Recommendations

Overall, cooperating teachers who participated in this qualitative study believed they had not been adequately prepared for their roles as cooperating teachers during the professional semesters of the teacher candidates placed with them. In fact, they were unaware of the expectations that had been set forth for them, regardless of the list of expectations included in the handbook that was ostensibly provided to each cooperating teacher. This finding indicates that the cooperating teachers either did not take the time to read the handbook provided to them by the university or never received the handbook from the university. Further, they did not use it as a reference point for any questions they posed. Had they researched their questions, the

cooperating teachers would have had a better understanding of their roles as cooperating teachers and the timeline for gradually releasing the responsibility of the class.

Considering the uncertainty the cooperating teachers reported in their lack of knowledge of their expectations, it may not be enough merely to put the Cooperating Teacher Handbook in their hands. Instead, the university, partnering with the local public high school, may think about providing professional development opportunities for the cooperating teachers and center those opportunities on the primary characteristics the cooperating teachers identified with effective professional development, teacher-led and practical in use. This learning opportunity may be held with the purpose of introducing the cooperating teachers to the handbook and showing them how to use it as a reference tool when questions arise.

In an effort to improve the handbook's quality as a resource, the university's College of Education may make strategic changes to it that may help cooperating teachers locate pertinent information more quickly. First, providing cooperating teachers with an electronic copy of the handbook could help them by giving them less to manage and an easily accessible resource on their computers. Also, an inclusion of a table of contents would make locating information more user-friendly, as readers currently must thumb through the 27 pages of the manual in search of the information they need. Providing a page of frequently asked questions, along with their responses, may prove to be a valuable resource as well, as it will allow cooperating teachers to access important information quickly. Making these same frequently asked questions available online, along with the manual, may add another element of convenience for the cooperating teachers.

Recommendations for Future Research

Additional study in this same area could be beneficial if it focused upon only one university but included representation from all of the schools that the university partners with to provide cooperating teachers. A study with this target population could give a better idea of how the university provides preparation to all of its cooperating teachers rather than just to those cooperating teachers from one school.

The body of knowledge surrounding this study may provide a researcher with information that may be generalized across a population in a quantitative study that seeks to compare cooperating teachers' preparation based upon the university that places the student teachers. Upon analysis of the post hoc data, the researcher could further explore the differences in preparation to gain a better understanding of reasons some cooperating teachers may have been better prepared from one school than other cooperative teachers.

References

- Alger, C., & Kopcha, T. J. (2009). eSupervision: A technology framework for the 21st century field experience in teacher education. *Issues in Teacher Education, 18*(2), 31-46.
- Ardley, J. (2009). Unanticipated findings: Gains by cooperating teachers via video-mediated conferencing. *Journal of Computing in Teacher Education, 25*(3), 81-86.
- Bacharach, N., Heck, T. W., & Dahlberg, K. (2010). Changing the face of student teaching through coteaching. *Action in Teacher Education, 32*(1), 3-14.
- Castro, A. J. (2010). Challenges in teaching for critical multicultural citizenship: Student teaching in an accountability-driven context. *Action in Teacher Education, 32*(2), 97-109.
- Cuenca, A. (2011). The role of legitimacy in student teaching: Learning to "feel" like a teacher. *Teacher Education Quarterly, 38*(2), 117-130.

- Draves, T. J. (2008). *Nurturing our future colleagues: Cooperating music teachers' relationships with their student teachers*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3312680)
- Ediger, M. (2009). Supervising the student teacher in the public school. *Education*, 13(2), 251-254.
- Edwards, K., & Dendler, D. (2007). Mentoring student teachers in the music classroom. *Music Educators Journal*, 93(5), 44-50.
- Goh, P. S., & Matthews, B. (2011). Listening to the concerns of student teachers in Malaysia during teaching practice. *Australian Journal of Teacher Education*, 36(3), 92-103.
- Hamilton, J. (2010). *Cooperating teachers: An investigation into their needs and training as mentors and supervisors of student teachers* (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3416990)
- Karamustafaoglu, O. (2008, March). *Reflected skills of the science student teachers in teaching practices*. Amasya University, Turkey. (Research Report for the Department of Science Education.) Retrieved from <http://files.eric.ed.gov/fulltext/ED500810.pdf>
- Lortie, D. C. (1975). *Schoolteacher: A sociological study*. Chicago, IL: The University of Chicago Press.
- Luehmann, A. L. (2007). Identity development as a lens to science teacher preparation. *Wiley InterScience*, 91(5), 822-839.
- Minott, M. A. (2011). The impact of a course in reflective teaching on student teachers at a local university college. *Canadian Journal of Education*, 34(2), 131-147.
- Moffett, D. W., & Zhou, Y. M. (2009, October). *Cooperating Teacher Evaluation of Candidates in Clinical Practice and Field Experiences*. Paper presented at annual meeting of the Georgia Educational Research Association, Savannah, GA.
- Nilssen, V. L. (2010). Guided planning in the first-year student teachers' teaching. *Scandinavian Journal of Educational Research*, 54(5), 431-449.
- Norman, P. J. (2011). Planning for what kind of teaching? Supporting cooperating teachers as teachers of planning. *Teacher Education Quarterly*, 38(3), 49-68.
- Ostorga, A. N., & Estrada, V. L. (2009). Impact of an action research instructional model: Student teachers as reflective thinkers. *Action in Teacher Education*, 30(4), 18-27.
- Portelance, L., & Gervais, C. (2009). Analysis of the dynamics of the sharing knowledge between cooperating teacher and teacher-in-training: The partners' respective roles. *U.S.-China Education*, 6(6), 71-80.
- Rajuan, M., Beijaard, D., & Verloop, N. (2007). The role of the cooperating teacher: Bridging the gap between expectations of cooperating teachers and student teachers. *Mentoring & Tutoring*, 15(3), 223-242.
- Roberts, T. G., Harlin, J. F., & Briers, G. E. (2009). Predicting agricultural education student teachers' intention to enter teaching. *Journal of Agricultural Education*, 50(3), 56-68.
- Rodgers, A., & Keil, V. L. (2006). Restructuring a traditional student teacher supervision model: Fostering enhanced professional development and mentoring within a professional development school context. *Teaching and Teacher Education*, 23(1), 63-80.
- Russell, M. L., & Russell, J. A. (2011). Mentoring relationships: Cooperating teachers' perspectives on mentoring student interns. *The Professional Educator*, 35(2) 1-22.
- Sim, C. (2010). Sustaining productive collaboration between faculties and schools. *Australian Journal of Teacher Education*, 35(5), 18-28.
- Smith, E. R. (2007). Negotiating power and pedagogy in student teaching: Expanding and

- shifting roles in expert-novice discourse. *Mentoring and Tutoring*, 15(1), 87-106.
- Snyder, D. W. (2011, March). Preparing for teaching through reflection. *Music Educators Journal*, 97(3), 56-60.
- Stephens, C. A., & Waters, R. (2009). The process of supervision with student teacher choice: A qualitative study. *Journal of Agricultural Education*, 50(3), 89-99.
- Valencia, S. W., Martin, S. D., Place, N. A., & Grossman, P. L. (2009). Complex interactions in student teaching: Lost opportunities for learning. *Journal of Teacher Education*, 60(3), 304-322.
- Walkington, J. (2005, March). Becoming a teacher: Encouraging development of teacher identity through reflective practice. *Asia-Pacific Journal of Teacher Education*, 33(1), 53-64.

Rethinking the Recruitment of African American Teacher Education Candidates

Angela Webster-Smith
University of Central Arkansas

Abstract

Teacher education programs aspire toward excellence and inclusivity. In order for them to attain their wishes and to meet the increasing needs of a multicultural and global world, however, Colleges of Education must rethink their teacher recruitment agendas. They must intensify their efforts in order to intentionally produce a sufficient number of African American teacher candidates to serve America's diverse schools. This manuscript challenges Colleges of Education to reconsider their efforts and offers their university, community, and national initiatives that could increase the enrollment of African American teacher candidates that, in turn, will strengthen the capacity of Colleges of Education to provide school districts and the nation with an abundance of diverse, highly effective teachers.

Introduction

Historically, African Americans have been attracted to teaching. What is more, they consider it to be an honorable and desirable profession for them (Lewis, 2006). Teaching continues to be seen as an opportunity to give back to the community as much as it is regarded as a profession with employment benefits and time off (Ramirez, 2010). As a plethora of professional options continue to become available to African Americans that were not accessible in the past, now teaching appears neither lucrative nor alluring to the masses. More plentiful opportunities coupled with the negative images of teaching as a low-paying, low social status, highly criticized profession marked by strict government licensure regulations and poor working conditions have brought to bear striking impediments (Carrington & Tomlin, 2000; Eubanks, 2005; Ramirez, 2010; Ramirez, 2009). Increasingly, teaching is viewed a career worth considering only if other ambitions do not develop as planned (Ramirez, 2009). At the same time, the National Center for Education Statistics (NCES) in its congressional charge to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States has continuously reported the mounting enrollment of students of color in P-12 public schools along with an ever increasing need to include multiculturalism and differentiation into the teaching and learning equation (NCES, 2013a; NCES, 2013b; NCES, 2012a; NCES, 2010). Besides, Baby Boomers are retiring (Society of Human Resources Management, 2013) from the teaching force at a time when the achievement gap has rendered a multitude of African

American students as unprepared for the rigors of the college experience and, therefore, underrepresented in the teacher pipeline (Duncan, 2009).

Until recent years, Colleges of Education positioned themselves to be the bedrock of teacher preparation. With that reputation, they were expected to prepare highly effective teachers that could meet the needs of America's diverse student populations. However, Colleges of Education have not always met the needs of their surrounding communities (Cibulka, 2009). This opening has afforded alternative, non-university providers such as The New Teacher Project (n.d.), Teach for America (n.d.), and Recruiting New Teachers (Education Commission of the States, 2013; Recruiting New Teachers, 2002) to name a few, to proliferate and to help meet the increasing demand for more diverse teachers. As Colleges of Education could find themselves at the precipice of inconsequence, it may prove instructive for them to rethink the insightfulness, the inventiveness, and the inspiration of their African-American teacher recruitment efforts.

The long-standing accrediting agency, National Council for the Accreditation of Teacher Education (NCATE, 2008), addressed this concern in its conceptual framework for diversity by requiring Colleges of Education to maintain (and/or increase) a diverse pool of teacher candidates as well as afford candidates opportunities to work with other candidates from diverse socio-economic and ethnic/racial groups. Even in the exit phase from NCATE, the newly designed Council for the Accreditation of Educator Preparation (CAEP, 2013a) addresses this concern in its standard for candidate quality, recruitment, and selection by compelling Colleges of Education to recruit and support the completion of candidates from diverse backgrounds and populations. In fact, CAEP's (2013b) Transformation Initiative calls for education preparation providers to investigate and address their policies and practices to ensure that they recruit and retain a diverse, highly talented candidate pool. The aforementioned are clear indicators that Colleges of Education need to rethink their teacher recruitment initiatives in order to more strategically recruit, retain, and graduate African American teacher candidates. Therefore, this paper offers Colleges of Education initiatives to increase enrollment of African American teacher candidates. Some of these initiatives could be implemented from campus while others necessitate reaching out into the community or tapping into national resources. In all cases, the initiatives strengthen the capacity of Colleges of Education to provide school districts and the nation with greater numbers of diverse, highly effective teachers.

Conceptual Framework

A brief state of the union is provided here to substantiate the need for additional African American teacher candidates. According to the NCES (1998) in as recent as academic year 1993-94, nearly half of all public school districts had no minority teacher on their faculty. During that academic year, as a whole, minority teachers only represented 13% of public school faculty even though minority students represented one-third of the public school population.

In almost a 10-year span, there was only a slight increase in minority teaching staff. During academic year 2011-12, 82% of public school teachers were White and approximately seven percent were African American, eight percent Latino, and three percent, other (NCES, 2013b) while the student population of African American students in 2012 was 15.8% and the overall minority P-12 population was 45.2 % (NCES, 2012b).

With regards to higher education, the NCES (2012a), reported that postsecondary attendance rates in 2011 remained lower, in general, for youth from lower socioeconomic backgrounds and those from various racial/ethnic groups (e.g., Blacks and Hispanics) when compared to Whites and Asians. Similarly, the report confirmed lower college attendance and

graduation rates for men of color. The 30-year, high attrition rate for African American college students has contributed to the void (Allen, Jayakumar, Griffin, Korn & Hurtado, 2005).

Nonetheless, the promotion of African American teachers maintains significance because minority teachers are overwhelmingly employed in public schools serving high-poverty, high-minority, and urban communities and are two to three times more likely than White teachers to desire to work in such schools. Moreover, their tenure at schools that are “difficult to staff” is longer than their Caucasian counterparts (Ingersoll & May, 2011). Not only do “teachers of color tend to teach in schools with a high number of ethnic diversity, students achieve at a higher rate if they are taught by teachers that represent their racial background” (Hill, Bachler, Allen, & Coble, 2004, p.5). These data are corroborated by the NCES (2010) in that another concern is that the ranks of school leadership cannot become more diversified without diversity among high-performing teachers. Minority teacher staffing concerns are, in essence, well-established in the front end of the teacher supply pipeline (Villegas & Irvine, 2010). Together, these data support the necessity for additional African American teachers.

This notion of recruiting African American teacher candidates is not to suggest that any African American fits the bill. For instance, this author does not campaign for African American teachers so they can merely “secure, administer, and govern the unruly Black boy” (Brown, 2012, p. 299). There are higher purposes. The author speaks of interested, highly intelligent, and creative individuals who can serve as role models to African American students and can provide diversity appreciation among Caucasian and other students. For certain, highly effective African American teachers can serve African American children well. However, it is imperative to also debunk the impression that African American teachers only serve African American children. To the contrary, teachers of color serve as role models for all students (Clewell, Puma, & McKay, 2005) and factor into the total success of the organization. Racial and ethnic composition of the teaching force is important in that it sends strong messages to all children about the distribution of power in American society (Villegas & Irvine, 2010). When students do not see individuals of color in professional roles in schools and only see them over-represented in non-professional positions, they implicitly learn that Caucasians are better suited to hold positions of authority in society than people of color. Hence, it is critical that all students see individuals of diverse racial/ethnic minority backgrounds as successful and making the full gamut of contributions to society (Villegas & Irvine, 2010).

Moreover, Ladson-Billings (1995) and Morris (2004) purport that African American teachers can help African American students to succeed academically by engaging in culturally relevant instruction, establishing a home-school connection, and advocating for equity. McNulty and Brown (2009) assert that African American teachers can often translate the culture, create a sense of school belonging, and develop a sense of school community for minority children. In his study, Dee (2004) revealed that African American teachers can boost the self-worth of African American children and decrease the sense of isolation many African American students feel in school. This study further unveiled that racial pairing of teachers and students significantly increased the reading and math achievement scores of African American students. The race effects were especially strong among poor African American students in racially segregated schools.

Whereas teacher quality remains an essential feature of teaching and is influential in student achievement, culture still matters. It is of great magnitude that students are taught by some teachers with similar cultural experiences (Buxton, 2006) and children of color, more than ever, need teachers who look like them and can serve as role models. Further, teachers of color

improve the quality of education for all students by bringing diverse life experiences and perspectives into the teaching and learning arena (Eubanks, 2005).

To this end, Colleges of Education must intensify their efforts to produce a diverse, highly effective teacher pool for America's diverse schools. When one considers that America's high-needs schools are less likely to have highly qualified teachers but are more likely to have a diverse student population (Learning First Alliance, 2005), Colleges of Education might better serve surrounding districts and the nation if they rethink their teacher recruitment enterprises and implement some of the successful initiatives elucidated below.

Campus Initiatives

There are a multitude of initiatives that universities could investigate, execute, and make their own. A few of them include educational access initiatives, recruitment and admissions standards, special programs, in addition to teacher education program inventiveness.

Educational Access Initiatives. Colleges of Education, much like colleges that are recruiting diverse populations into the STEM areas of science, technology, engineering, and mathematics must give attention to college access initiatives early in the education pipeline. Education, as a profession, could target minority populations for inclusion in academic enrichment and other college preparatory opportunities at various points along the education pipeline (Moyer-Packenham, P., Parker, J., Kitsantas, A. & Bolyard, J., 2009). Colleges of Education could, for instance, join forces with school districts where partnerships have already been forged for clinical experiences. Within P-12 schools, teacher educators could obtain permission to recruit para-professionals into teacher education programs (Pasternak & Longwell-Grice, 2010). This collaboration could also seek to secure the support of school counselors to identify students who are gifted to teach as demonstrated by their class and student body presentations as well as their penchant for peer-tutoring and nurturing students. Faculty could make counselors more knowledgeable of contemporary teacher education programs, the help that is available to students i.e. (academic – Praxis; social – support groups; fiscal - scholarships), and the various benefits that attend education careers. As an example, minority teacher education faculty could visit school counselors with materials on education career options that include a variety of teaching and leadership roles, even university teaching (Ramirez, 2009). One reason students feel that teaching is not a worthy occupation is due to the comparatively low national salary averages. What the students may not be aware of are the figures from local school districts (Ramirez, 2009) and how their salary would increase as they become National Board Certified Teachers (NBCT), take on leadership roles within the school, and/or become administrators.

Within middle and high schools, university faculty could also establish a Future Teacher Academy (FTA) to induct minority students into education careers (Schmitz, Nourse, & Ross, 2012) through academic enrichment and college campus exposure. Minority faculty and teacher candidates could go into schools to serve as mentors, to facilitate learning and development workshops, to give demonstrations of contemporary instructional methods (Ward, Fernandez, & Wells, 2001), to help students explore the various areas of education, to expose students to teaching activities such as academic intervention/tutorial programs/peer-teaching (Moyer-Packenham, Parker, Kitsantas, & Bolyard, 2009) and to debunk the myths of a college education. Studies of at-risk students have cited the crucial link between student recruitment and retention that occurs through interaction with diverse faculty, staff, and university students of color who serve as mentors/facilitators when they work in close proximity to high school students of color

on a regular basis (Longwell-Grice & Longwell-Grice 2008; Pastermak & Longwell-Grice, 2010). FTAs could also include excerpts from university course work and offer some semblance of field experiences. Colleges of Education could also tap into current educational access programs such as the federal TRIO programs (i.e., different Upward Bound programs, Talent Search programs, and Educational Opportunity Centers programs). All of these educational access initiatives raise awareness of and interest in teaching as a profession and they support and encourage students to prepare for and enter the profession. At the very least, more students could be encouraged to enroll in college preparation courses and then into introductory education courses (Lewis, 2006). Further, these efforts would help to build student confidence in education activities and college degree attainment. For certain these initiatives would strengthen the P-12/ higher education network.

Admissions and Recruitment Standards. Although controversial, some scholars argue that American College Testing (ACT) and Scholastic Aptitude Test (SAT) scores should not serve as eliminating factors for the admission of African Americans as such scores are less predictive of their academic performance. The divergent theory is that non-cognitive identifiers more consistently predict their persistence and academic success (Allen, Jayakumar, Griffin, Korn, & Hurtado, 2005; National Center for Open and Fair Testing, 2008; Sedlacek, 2004; Sedlacek & Sheu, 2004; Sedlacek, 2005; Tracey & Sedlacek, 1987a; Tracey & Sedlacek, 1987b). Stern and Briggs (2001) purported that despite the fact that the SAT was originally designed to predict grades for the first year of college, it has almost no correlation with grades beyond the first year, retention in any year, or graduation. The National Center for Open and Fair Testing (2008) asserted that race, class, and gender biases give Caucasian, affluent and male test-takers an unfair edge. It further upheld that better tools for predicting college success were class rank, high school grades, and rigor of high school classes.

For more than 20 years, some scholars have recommended that universities consider non-cognitive qualifications in the interest of increasing minority enrollment (Allen, Epps & Hanif, 1991; Tracey & Sedlacek, 1987a; Tracey & Sedlacek, 1987b). Studies have shown that traditional variables for predicting college academic performance of African Americans are less valid just as non-cognitive dimensions have less effect on Caucasian students. The non-cognitive variables that were found to correlate particularly well with grades, retention, and graduation for African American students include students' pre-college intentions, goals and expectations, self-confidence, positive self-concept, realistic self-appraisal, capacity to interact skillfully with individuals from other cultures, preference of long-range goals over immediate needs, availability of a strong support person in one's life, successful leadership experience, demonstrated community service, non-traditional/culturally related knowledge acquired in a field, and/or unique talents and references (Allen, Jayakumar, Griffin, Korn, & Hurtado, 2005; Sedlacek, 2004; Sedlacek & Sheu, 2004; Sedlacek, 2005; Tracey & Sedlacek, 1987 a; Tracey & Sedlacek, 1987b). These efforts are not intended to lower standards or to exempt African American candidates from the prescribed knowledge, skills, and dispositions of the profession. Actually they leave intact criteria and standards of quality. However, they do require more time, data collection, and unconventional measurements. Admissions standards notwithstanding, these less quantifiable measures have been shown to be more predictive of the long-term success of African American college students.

Based on a survey of African American teacher candidates at a predominantly white university as well as those at a historically black university, Webster (2002) revealed some basic steps universities can take to attract African Americans. The teacher candidates in the study

want universities to forge a relationship with them and their families. It is their desire for the university to visit their schools and homes, if necessary. Candidates also want universities to make them feel as if they would become a welcomed addition to the fabric of the campus. Some of the initiatives that attracted the African American teacher candidates to their respective universities include recruitment teams that visited them with a plethora of information about the campus and about activities in which to get involved. They were invited to peer counseling, recruitment orientations, tours, seminars, summer programs, cook-outs and various meals on campus, in addition to other academic and social events that appeal to their individual, cultural, and cross-cultural interests. While visiting campus, African American teacher candidates want universities to show them the depth and breadth of what the university offers such as student-leadership, honors' college, and spiritual opportunities, not just the Gospel Choir and the Black Student Association. Moreover, African American teacher candidates want universities to offer scholarships and other monetary options to ensure that economic scarcity does not become an impediment to their completion. Candidates pointed to funding for tuition, housing, employment or work-study, books, supplies, transportation, and food. They expressed the need for enough funds to last throughout each semester and for the duration of their college experience, not just the first semester or year. Decisively, candidates reported that when they had confidence that a university would be a good fit--academically, socially, and fiscally--they were likely to select that university and persist through graduation.

Special Programs. Designing special programs has been found to attract a critical mass of African Americans into teacher preparation programs. In order to sustain matriculation for their professional and educational development, however, universities must work in partnership with professional and private agencies to offer financial and non-financial incentives (Ramirez, 2010). Some successful initiatives have state-wide university partnerships while others have national partnerships in other states as well as corporate partnerships (Clemson, 2013). Several Colleges of Education have become trendsetters in reaching out to potential African American teacher candidates.

Indiana University-Bloomington instituted a program to recruit ethnic minorities into their Project TEAM: Project Transformative Education Achievement Model. Established in 1996 it offers academic, social, personal, and financial support for students to become teachers. The honors seminar focuses on the mission of strengthening social justice through education and attracts ethnic minority middle school students to the university (Bennett, Cole & Thompson, 2000).

Deutsche Bank Americas (n.d.) launched the Teachers as Leaders program. This program is in partnership with the City University of New York (CUNY) Black Male Initiative and the Schott Foundation for Public Education. Operating on 11 CUNY campuses, the goal is to increase the number of Black male teachers in underserved New York City Public Schools (Deutsch, n.d.).

Call Me MISTER, an acronym for Mentors Instructing Students Toward Effective Role Models is a part of Clemson University's Eugene T. Moore School of Education. It targets African American males and other historically underserved, socio-economically disadvantaged, and educationally at-risk communities to complete the teacher education program. (Clemson, 2013).

The Griot Program is the Marygrove College (2013) School of Education African American male career initiative. This program was designed to provide qualifying individuals with the opportunity to make a rewarding career change. The name for this cohort is derived

from the African word for a storyteller whose knowledge and wisdom is shared and passed on from generation to generation. The program is geared toward the African American male career changer who wants to make a difference by serving as a primary role model for students in urban school systems. Students who have degrees, or work in fields outside of education, serve as emergency substitutes in disadvantaged areas. As emergency substitutes, these men are able to learn the profession and earn certification as well as their master's degree.

A BCS (Bowl Championship Series) Division university in the south gave birth to the notion that since athletic programs team with African American males, Colleges of Education could create a path from student-athlete to student-teacher for African American males. Lewis et al. (2008) reported a shortage of student-athletes enrolled in teacher preparation programs as compared to other collegiate majors (Lewis, 2006). This should not be the case because student-athletes have a psychological commitment to their sport from having been around it much of their lives. With a teacher education initiative, they could stay involved with the sport they love but could also work with youth. They could move from being coached to becoming a coach. As a teacher and a coach, they would be afforded rich opportunities to give back in ways that they were, themselves, served. In order for any of the aforementioned to occur, the pre-education academic advisor must cultivate relationships with the general academic advising unit (Byrd, Butler, Lewis, Rutledge, & Watson, 2011) and with the athletic academic advising unit to ensure that athletes see education as a viable, financially sustainable career option. It is important to note that in order for the recruitment of student-athletes to work, it must be as timely and as structured as student-athletes have experienced from athletic coaches (Byrd, Butler, Lewis, Rutledge, & Watson, 2011).

TEACH a federal recruitment program was launched in 2010 under the leadership of the Commissioner of Education, Arne Duncan. The main crux of this program is to diversify the pool of teacher applicants. Known as the *5 by 2015* campaign, it hopes to increase the percentage of Black male teachers to 5 percent of the U.S. teaching force by 2015 which means placing 80,000 new Black male teachers in U.S. classrooms (Williamson, 2011).

Each of these initiatives is laudable. The reasons for which Black male teachers are sought as teachers must be examined, all the same. They should not be recruited for stereotypical role entrapment (Kelley, 2007) or to become the aggressive disciplinarian to wield their brute and physical prowess to govern unruly, endangered, and in-crisis youth, nor should they be recruited for overall black boy redemption (Brown, 2012). Ideally, they are recruited for the further development of their intellectual and pedagogical prowess to offer myriad roles, contributions, and perspectives to the school in general, and to the faculty and general student body, in particular. This line of reasoning is made because the intentions for which black males are recruited will determine the manner in which they are prepared as teachers.

Teacher Education Program Inventiveness. Once in the teacher education program, Colleges of Educations must put in place academic, social, and financial systems that support the licensure attainment of African Americans (Moyer-Packenham, Parker, Kitsantas, & Bolyard, 2009). For instance, the teacher education program must provide academic assistance with standardized achievement test-taking in general and the Praxis exam, in particular. A cohort system for social and cultural support might prove helpful (Clemson, 2013). Also, students must be able to pay for licensure exams from their financial aid packages.

Rather than randomly pairing teacher candidates with in-service teachers, perhaps African American teacher candidates could be paired with NBCTs to ensure that are exposed to best practices in the field and to ensure that during their clinical practice, their mentor teacher

discusses evidence-based teaching, instructional decision-making, and overall teaching and learning. NBCTs would mentor African American candidates to also plant the seed of becoming a NBCT. Considering that minorities who experience difficulty completing teaching programs may choose not to enter the profession even though they attain licensure (Moyer-Packenham, Parker, Kitsantas, & Bolyard, 2009) makes these initiatives worthy of consideration. The optimal goals are teaching effectiveness and student achievement with the understanding that those who are able to realize teaching quality are likely to remain in the profession (Ohio, 2006). To that end, preparing African Americans to become highly effective teachers is notable because they are more accepting of teaching in schools with the most diverse and/or high-needs student populations (Learning First Alliance, 2005).

Community Initiatives

Universities should not set themselves apart as ivory towers, isolated from their surrounding communities. To the contrary, they should become visible in the community so they can promote mutually beneficial partnerships. Just as it is of great consequence to invite prospective students, their families, and the African American community to campus events, it is equally valuable for university representatives to be visible at African American community events.

Colleges of Education could readily marshal the support of African Americans who already have an investment in their university such as current students, faculty, administrators, advisory board members, trustees, other community leaders, and alumni. Partnering with African American fraternities and sororities, local clergy, businesses, non-profit, and community service organizations are other noteworthy sources (Lewis, Garrison-Wade, Scott, Douglas, & Middleton, 2004). Having this group of individuals involved in recruitment to make introductions, personal visits, and phone calls to African American prospects and their families has been known to reap benefits (Webster, 2002). Other individuals to target in community recruiting are recent graduates, military veterans, retirees, individuals interested in career changes and others who have a passion to make a meaningful difference in the lives of children/youth and/or an interest in making a meaningful contribution to humanity (Duncan, 2009; National Education Association, 2001).

An aggressive plan of recruiting talented and promising minority candidates is the military model that uses television, radio, and the internet to supply recruits with abundant information then follows-up repeatedly by phone, text, and e-mail to reiterate all the benefits and available financial assistance (Kelley, 2007).

Yet another community recruitment effort is to establish articulation agreements with two-year institutions for students completing associate's degrees in education. The core courses for teacher preparation programs could be taken at two-year institutions where some African American students attend due to their economic status and the way community colleges help them shore up their college readiness skills (Lewis & Middleton, 2003). All of the aforementioned community efforts could construct a pipeline for refilling the looming shortage of diverse, highly effective teachers.

National Initiatives

In addition to campus and community initiatives, Colleges of Education have rich opportunities to adopt initiatives that have been successful across the nation. A pervasive means of recruiting might involve the enlistment of national, African American organizations that could

identify critical masses of talented African Americans (Lewis, 2006). Such organizations include the 100 Black Men of America, Blacks in Government, Jack and Jill of America, the National Alliance of Black School Educators, the National Association for the Advancement of Colored People, the National Black Child Development Institute, the National Black Church Initiative, the National Coalition of 100 Black Women, the Southern Christian Leadership Conference, the Urban League, discipline specific national organizations (i.e., Black criminal justice professionals, engineers, journalists, law enforcement, psychiatrists, social workers, etc.), and other long-standing leadership and professional organizations that routinely serve African Americans. As these organizations were established to improve the quality of life for African Americans, they are typically eager to forge creative and customized partnerships that benefit those they serve. Such organizations could partner with Colleges of Education and/or districts/states to provide academic and service scholarships to prepare African Americans to teach in shortage disciplines and in schools with insufficient numbers of highly-talented teachers.

Conclusions

Considering the rapid increase of diversity and pluralism in America and in America's schools, a rethinking of teacher recruitment is in order. But before the commencement of any of the campus, community, or national initiatives, Colleges of Education should be prepared to articulate and demonstrate the affirmative steps they take to ensure an inclusive environment and to support the success of all candidates. They must also remain current with minority population percentages for the university, in general and for the College of Education, in particular. If there are specific, controversial points of contention between the university and the African American community, there should be a consistent means of verbalizing and addressing them.

While teacher preparation remains at the heart of Colleges of Education, they must strategically recruit African American teacher candidates if they are to retain their position as the major producer of teachers for America's diverse schools. Colleges of Education must assess their climate to be sure that they are warm and welcoming to diverse students and to make certain that they are not what Hall and Sandler (1984) call a *chilly climate*. With the recommendations prescribed here, Colleges of Education can chart a course of research-based initiatives. Some of these initiatives can be accomplished without leaving campus whereas others require community and national outreach. Essentially the options are endless when considering Susan Taylor's advice to *distinguish people's hearts from their habits and conditioning*. These efforts could afford a wide-reaching group of Americans the opportunity to take part in what U.S. Secretary of Education, Arne Duncan, calls the *great public mission of our time* (2009).

References

- Allen, W., Epps, E., & Hanif, N. (1991). *College in Black and White: African American students in predominantly white and historically Black public universities*. Albany, NY: State University of New York Press.
- Allen, W., Jayakumar, U., Griffin, K., Korn, W., & Hurtado, S. (2005). *Black undergraduates from Bakke to Grutter: Freshmen status, trends and prospects, 1971-2004*. Los Angeles: UCLA Higher Education Research Institute.

- Bennett, C., Cole, D., & Thompson, J. N. (2000). Preparing teachers of color at a predominantly White university: A case study of project TEAM. *Teaching and Teacher Education, 16*, 445-464.
- Brown, A. L. (2012). On human kinds and role models: A critical discussion about the African American male teacher. *Educational Studies, 48*, 296–315.
- Buxton, M. (2006). The African American teacher: The missing link. *The Black Collegian*. Retrieved from <http://www.black-collegian.com/career/career-reports/misslink2000-2nd.shtml>
- Byrd, D., Butler, B. R., Lewis, C., Rutledge, M., & Watson, J. J. (2011). Identifying new sources of African American male pre-service teachers: Creating a path from student-athlete to student-teacher. *The Journal of Negro Education, 80*(3), 384-397.
- Carrington, B., & Tomlin, R. (2000). Towards a more inclusive profession: Teacher recruitment and ethnicity. *European Journal of Teacher Education, 23*(2), 139-157.
- Clemson University. (2013). *Call me MISTER initiative*. Retrieved from <http://www.clemson.edu/hehd/departments/education/research/callmemister/>
- Clewell, B. C., Puma, M. J., & McKay, S. A. (2005). *Does it matter if my teacher looks like me? The impact of teacher race and ethnicity on student academic achievement*. Paper presented at the meeting of the American Educational Research Association.
- Cibulka, J. (2009). Quality teaching: The redesign of accreditation to inform the simultaneous transformation of educator preparation and P-12 schools. *The Newsletter of the National Council for the Accreditation of Teacher Education, 18*(2), 1-4.
- Council for the Accreditation of Educator Preparation (CAEP). (2013a). *Standard 3: Candidate quality, recruitment, and selectivity*. Retrieved from <http://caepnet.org/accreditation/standards/standard-3-candidate-quality-recruitment-and-selectivity/>
- Council for the Accreditation of Educator Preparation (CAEP). (2013b). *Transformation initiative*. Retrieved from <http://caepnet.org/accreditation/transformation-initiative/>
- Dee, T. (2004, February). Teachers, race, and student achievement in a randomized experiment. *The Review of Economics and Statistics, 86*, 195–210.
- Deutsche Bank Foundation. (n.d.). *Teachers as leaders*. Retrieved from <http://www.db.com/us/content/en/1776.html#>
- Duncan, A. (2009). *A call to teach: Secretary Arne Duncan's remarks at The Rotunda at the University of Virginia*. Retrieved from <http://www.edgovblogs.org/duncan/2009/10/a-call-to-teach/>
- Education Commission of the States. (2013). Recruiting new teachers. Retrieved from <http://www.ecs.org/html/Document.asp?chouseid=1165>
- Eubanks, S. (2005). African-American teacher recruitment: An urgent issue. *The Black Collegian*. Retrieved from <http://www.black-collegian.com/issues/2ndsem01/seubanks2001-2nd.shtml>
- Hall, R. M., & Sandler, B. R. (1984). Out of the classroom: A chilly campus climate for women? *Project on the Status and Education of Women*. Association of American Colleges: Washington, DC.
- Hill, T., Bachler, S., Allen, M., & Coble, C. (2004). *Assessment of diversity in America's teaching force: A call to action*. National Education Association Report. Retrieved from <http://www.new.org/teacherquality/images/diversityreport.pdf>

- Ingersoll, R. & May, H. (2011, September). Recruitment, retention and the minority teacher shortage. *The Consortium for Policy Research in Education*. CPRE Research Report No. RR-69.
- Kelley, B. (2007a). Teacher recruitment, preparation, induction, retention, and distribution. In B. Wehling (Ed). *Building a 21st Century U.S. Education System*. (pp. 75-86). National Commission on Teaching and America's Future.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32, 465-491.
- Learning First Alliance. (2005). A shared responsibility: Staffing all high-poverty, low-performing schools with effective teachers and administrators. In *A Framework for Action*. Retrieved from <http://www.learningfirst.org/issues/staffing/>
- Lewis, C., Bonner, F., Byrd, D., & James, M. (2008). Recruiting African American males into urban teacher preparation programs from university athletic departments. *The National Journal of Urban Education & Practice*, 1(3), 224-238.
- Lewis, C. (February 2006). African American male teachers in public schools: An examination of three urban school districts. *Teachers College Record*, 108(2), 224-245.
- Lewis, C., & Middleton, V. (2003). African-Americans in community colleges: A review of research reported in the *Community College Journal of Research and Practice: 1990-2000* [Special issue]. *Community College Journal of Research and Practice*, 27(9-10), 787-798.
- Lewis, C., Garrison-Wade, D., Scott, M., Douglas, B., & Middleton, V. (2004). A synthesis of evidence-based research on the status of African American teachers 50 years after Brown and its impact on African American student achievement: Implications for teachers and administrators. *E-Journal of Teaching and Learning in Diverse Settings*, 2(1), 99-124.
- Longwell-Grice, R., & Longwell-Grice, H. (2008). Testing Tinto: How do retention theories work for first generation, working-class students? *Journal of College Student Retention: Research, Theory and Practice*, 9(4), 407-420.
- Marygrove College. (2013). *Griot Program*. Retrieved from <http://www.marygrove.edu/home/urban-leadership-mainmenu/marygrove-urban-leader.html>
- McNulty, C. P., & Brown, M. S. (2009). Help wanted: Seeking the critical confluence of minorities in teaching. *Childhood Education*, 85(3), 179-181.
- Morris, J. (2004). Can anything good come from Nazareth? Race, class, and African American schooling and community in the urban south and Midwest. *American Educational Research Journal*, 41, 69-112.
- Moyer-Packenham, P., Parker, J., Kitsantas, A., & Bolyard, J. (2009, Fall). Increasing the diversity of teachers in mathematics and science partnerships. *Journal of Educational Research & Policy Studies*, 9(2), 43-72.
- National Center for Education Statistics. (2013a). *The condition of education*. U.S. Department of Education. Washington, DC.
- National Center for Education Statistics. (2013b). *Characteristics of public and private elementary and secondary school principals in the United States: Results from the 2011-12 school and staff survey*. U.S. Department of Education. Washington, DC.
- National Center for Education Statistics (NCES). (2012a). *Higher education: Gaps in access and persistence study*. Retrieved from <http://nces.ed.gov/pubs2012/2012046.pdf>

- National Center for Education Statistics (NCES). (2012b). *State postsecondary enrollment distributions by race/ethnicity before and after changes to reporting categories: Fall 2004, 2007, and 2010*. Retrieved from <http://nces.ed.gov/pubs2012/2012264.pdf>
- National Center for Education Statistics (NCES). (2010). *Status and trends in the education of racial and ethnic minorities*. Retrieved from <https://nces.ed.gov/pubs2010/2010015/>
- National Center for Education Statistics. (1998, February). *Public school districts in the United States: A statistical profile, 1987-88 to 1993-94*. Retrieved from nces.ed.gov/pubs98/web/98203
- National Center for Open and Fair Testing. (2008). *The ACT: Biased, inaccurate, coachable, and misused*. Retrieved from http://www.education.com/reference/article/Ref_ACT_Biased/
- National Council for Accreditation of Teacher Education (NCATE). (2008). *Professional standards for the accreditation of teacher preparation institutions*. Washington, DC: Author.
- Ohio Board Certified Teachers. (2006). Retrieved from http://www.ohionbctsummit.org/documents/Meeting%20All%20Students%20Needs_10-25-06.pdf
- Pastermak, D., & Longwell-Grice, R. (2010, October). Urban teacher world: Teacher recruitment from theory to practice. *New Horizons in Education*, 58(2), 1-17.
- Ramirez, A. Y. (2010, Spring). Why teach? Ethnic minority college students' views on teaching. *Multicultural Education*, 29-35.
- Ramirez, A. Y. (2009, Summer). Ethnic minorities and teaching: An examination of the low numbers in the teaching profession. *Multicultural Education*, 19-24.
- Recruiting New Teachers, Inc. (2002). *A guide to today's recruitment challenges*. Belmont, MA: Author.
- Schmitz, S., Nourse, S., & Ross, M. (2012, September). Increasing teacher diversity: Growing your own through partnerships. *Education*, 133(1), 181-187.
- Sedlacek, W. (2005). The case for noncognitive measures. In W. Camara and E. Kimmel (Eds.). *Choosing students: Higher education admission tools for the 21st century*. (pp. 177-193) Mahwah, NJ: Lawrence Erlbaum.
- Sedlacek, W. (2004). *Beyond the big test: Noncognitive assessment in higher education*. San Francisco, CA: Jossey-Bass.
- Sedlacek, W. E., & Sheu, H. B. (2004). Academic success of Gates Millennium Scholars. In E. P. St. John (Ed.), *Readings on Equal Education: Vol. 20. Improving access and college success for diverse students: Studies of the Gates Millennium Scholars Program* (pp. 181-197). New York, NY: AMS Press.
- Society of Human Resources Management. (2013). *SHRM workplace forecast: The top workplace trends according to HR professionals*. Author: Alexandria, VA
- Stern, D. & Briggs, D. (2001) Changing admissions policies: Mounting pressures, new developments, more questions. *Change*, 33(1), 34-41.
- Teach for America. (n.d.). *Diversity in the corps*. Retrieved from <http://www.teachforamerica.org> http://www.teachforamerica.org/admissions/our_commitment_to_diversity.htm
- The New Teacher Project. (n.d.). *Teachers matter*. Retrieved from <http://www.tntp.org/>
- Tracey, T., & Sedlacek, W. (1987a). A comparison of White and Black student academic success using noncognitive variables: A LISREL analysis. *Research in Higher Education*, 27(14), 333-348.

- Tracey, T., & Sedlacek, W. (1987b). Prediction of college graduation using noncognitive variables by race. *Measurement and Evaluation in Counseling and Development*, 19, 177-184.
- Villegas, A. M., & Irvine, J. J. (2010). Diversifying the teaching force: An examination of major arguments. *Urban Review*, 42, 175-192.
- Ward, M., Fernandez, D., & Wells, T. (2001). *Building the profession through faculty recruitment of future teachers*. Washington, DC: U.S. Department of Education. ED 452 163.
- Webster, A. (2002). *Comparing racial identity attitudes in African American teacher education students at a predominantly White university and a historically Black university*. Doctoral dissertation, The University of Memphis, 2002. Dissertation Abstracts International, 63, 05A.
- Williamson, L. (2011). Getting more black men into the classroom. *Teaching Tolerance*. Retrieved from <http://www.tolerance.org/blog/getting-more-black-men-classroom>