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Building the House While We're Living in It: Conceptualizing Place-Based Teacher Education

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Abstract: In this article, the authors, a cross-disciplinary team of secondary teacher educators, provide a conceptual framework for place-based teacher education (PBTE). Situating the framework within current practices in teacher education, the authors seek to open up new conversations around secondary educator preparation. They begin by describing their context and providing a brief overview of place-based education in P-12 schools. Their conceptualization of PBTE is organized around three ideas: knowledge, learning, and teacher educators themselves. The authors weave these singular ideas together to illuminate how their integration is what makes PBTE such a promising practice. In keeping with the desire to open a dialogue, the authors conclude with some key considerations when building capacity to undertake this work.

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INTRODUCTION

We hold the ideal that education is an equalizing promise, bringing schools and communities together to work in tandem. To work toward this ideal, teachers must possess an imaginative mindset and feel a sense of affection and responsibility for students and schools, as well as the communities in which they both reside. Characterizing, then, the kinds of teachers we believe schools and society need, we imagine teacher education as a place to prepare teacher candidates to be courageous, curious, imaginative, creative, subversive, mindful, relational, empowered, flexible, resilient, persistent, and empathetic.

Through the process of sharing our experiences and observations at our particular institution, we realized that our candidates were not prepared to be the kind of teachers we sought. Specifically, our candidates did not understand how intimately connected place is to self and identity and did not know how to learn from

and be transformed by the communities in which they were teaching. We also had not consistently honored our candidates' views, beliefs, thoughts, cares, and considerations, thus perpetuating the norms and practices we were seeking to interrupt. Therefore, as a cross-disciplinary team of secondary teacher educators, we named and explored the disillusionment around our work and explored these concerns within our programs.

This process of self-revelation and exploration led us to place-based education as it is currently practiced in P-12 schools. It was through our exploration of place-based education that we witnessed the characteristics in teachers that we sought and the kinds of teaching practices that we wanted candidates to enact. Believing that teacher education should model these teaching practices, we imagined teacher education as place-based teacher education (PBTE). In this paper we offer PBTE as a reconceptualization of teacher education. To this end, we first share an overview of our place and our desire to think more broadly about teacher education.

We then present a brief description of literature that discusses the power of place and place-based education. From there we explicate three core components of place-based teacher education. We conclude with a series of questions to consider when building capacity to undertake this work.

OUR PLACE

In the summer of 2012, our administration presented us with a rare opportunity to create a secondary teacher education program that was based on what we believed was possible. We desired a powerful model that would intrigue both current and potential candidates, that would resonate with practitioners, and that would revitalize us all as we sought to change our realities as teacher educators.

Initial discussions of our curriculum created a space where we gave voice to our beliefs about students, learning, and teaching and shared our visions of what teacher preparation at our institution might look like. We revealed our hopes for our professional identities and lives as we considered how to continue to develop and sustain relationships with colleagues and students. It was through these discussions that we realized that we came to this curricular project with a sense of longing—maybe even a vague sense of loss. Dickinson (2011) asserts that “humans increasingly live in ways that are evanescent and dependent on frantic mobility” (p. 313). Dickinson’s words seemed to apply to our lives, where we rapidly moved from semester to semester without feeling rooted in what, where, or who we were teaching. We realized that the frantic mobility we experienced prevented us from feeling connected to anything real and meaningful; we were longing for a connection to a place. As Noddings (2002) explains:

When the heart longs for home, it sometimes... longs for the sights, sounds, and smells of a beloved region ... Infused with the spirit of a place, we may live more fully in relation with both the physical place and its various inhabitants. Deprived of the place and its people, we may suffer a chronic homesickness very like a mortal wound (pp. 150-153).

What Noddings (2002) describes is a visceral connection to place. Everyone has remembered places where they feel a physical, emotional, and spiritual connection. Yet we were not living or working in a remembered place for any of us, so we could not (or perhaps would not) identify the homesickness Noddings describes; nor were we living or working in a shared place. As Dickinson

(2011) suggests, these elemental connections to place can get lost, so much so that it becomes difficult, at times impossible, to identify. But remembered places get to the heart of who we are and what matters most to us. They comfort and layer a salve on our longing. Therefore, we worked to create such a longing in ourselves for a new, shared place that would hold the same power as a remembered place.

One of the most evocative ideas that emerged from our introspection - one that we intuitively knew might soothe our own spirits, as well as shape our work with future teachers - was place-based education. Leveraging the deepening relationships we had been cultivating with members of our university, we connected with an initiative already in place through our Office of University Outreach, Discovering PLACE. Working with local-area teachers and community partners, Discovering PLACE is funded by the Great Lakes Stewardship Initiative and aims to help P-12 students develop into community and environmental stewards. Further, Discovering PLACE supports place-based education projects to help students connect with their surroundings. Learning more about place-based education through this initiative, as well as through the relationships we formed with the teachers within, we conceptualized that teacher education should provide intentional and structured opportunities for candidates to experience place-based education – with a focus on learning to teach – as a means to prepare them to enact place-based education themselves.

Before offering the conceptual framework that constitutes place-based teacher education, we first provide brief descriptions of place and place-based education as a means to ground our conceptualization within relevant literature.

PLACE AND PLACE-BASED EDUCATION

One might argue that, like us, the power of a remembered place matters to students. While students who attend school together may or may not have shared remembered places, they are likely to possess some collective knowledge of shared places where they all live, work, and play that can make learning more meaningful. However, much of education has not focused on those places; nor has it learned how to more fully harness the power of the local (Demarest, 2015; Sobel, 2004).

Instead, “[e]ducation in ‘advanced’ societies has long been characterized by the aim of transcending place” (Noddings, 2002, p. 157, emphasis added). We can no

longer deny the consequences of this desire to transcend place:

...that too many of us . . . have lost the necessary knowledge and love of local places to nurture and sustain healthy human and natural communities. According to this diagnosis, disconnection from singular places constitutes a significant cultural condition of the dissolution of community fabric as well as the degradation of ecosystems. (Edelgass, 2009, p. 71)

Place-based education (PBE), on the other hand, is seen as a promising antidote, as it focuses on one's surroundings--on one's place--and acknowledges the centrality of that place to one's identity and understanding of the world. We all have questions about who we are, where we come from, and our place in the world. Students are innately curious about their local surroundings and community. PBE intentionally attends to this curiosity with its imperative of inquiry-based learning. In an inquiry-based approach, students themselves become more central to learning and the learning process. It "offers students opportunities to explore topics and issues that matter to them personally, to the community, and to our collective future" (Demarest, 2015, p. ix) and works to guide and support students as they propose and enact real solutions to real problems. Further, because an inquiry-based approach promotes connections to the immediacies of students' lives, students' engagement with the academic material is enhanced.

The brief description above suggests how PBE guides and supports students in their exploration of real solutions to real problems. Further, it provides a model for how teacher education can develop strong interrelationships between the community and P-12 schools. So, instead of being more of the same--more coursework, more reading, more writing, more observation, more classroom experience--PBTE engages candidates in collaborative efforts with peers, community members, teachers, and university faculty to explore salient and immediate questions and issues and to contribute in real and meaningful ways to the local community.

CONCEPTUAL FRAMEWORK: PLACE-BASED TEACHER EDUCATION

Although Darling-Hammond (2006) identified exemplary teacher education programs as those that have worked to bring greater curricular coherence in university coursework, as well as more thoughtful

integration between teacher education programs and the P-12 schools, the intentional inclusion of the local community is still missing. PBTE speaks to this in both its commitment and sense of accountability to the local community, its adherence to the belief that the community is a necessary element of the work in P-12 schools, and its aim to more fully harness the power of learning about and from the local community.

An intentional and systematic focus on place within teacher education affords teacher candidates with opportunities to develop more nuanced understandings of the lived realities of P-12 students. This focus necessarily challenges or pushes upon traditional teacher education, specifically in the areas of requisite candidate knowledge, how to best engage teacher candidates in learning, and who is uniquely positioned (or who counts) as teacher educators.

Knowledge

A deep dive into place is imperative if candidates are to learn from and be transformed by that place. One might argue that teacher candidates currently *do* learn *from*, though traditionally they learn *from* practice. Yet, as Vascarello (2011) critiques, the nature of this practice tends to be limited to the ability to perform specific teaching techniques, essentially, "how-tos."

... An education that focuses narrowly on teaching technique may help teachers get through a Monday morning, but what of the rest of their career?...It's much easier and requires so much less time to focus exclusively on what has to be covered than to reflect on and be responsive to individuals. (p. 198)

We posit that this kind of knowledge from practice is not enough, as candidates still tend to see that practice as a set of technical and fixed discrete skills.

Without criticizing previous efforts in teacher education or denigrating the scholars whose work has so greatly influenced our own thinking and learning as teacher educators, teacher education in general tends to depict the reality of teaching "as if it were motionless, static, compartmentalized, and predictable" (Freire, 1968/2014, p. 71). Further, the knowledge base for teaching seems to be approached as a "gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing" (Freire, 1968/2014, p. 72). If we consider Freire's banking concept of education within the context of teacher preparation, then teacher candidates are perceived as "adaptable,

manageable beings” (p. 73). Contrary to this perception, the curriculum for PBTE reveals space for candidates to act, not simply adapt.

Within the context of one of our introductory seminars, one candidate, an art and art history major, learned that the high school in the community she was exploring had cut all of its fine arts programs due to financial constraints. This realization resulted in her examining the history of fine arts education, as well as the importance of arts education in students’ cognitive and emotional development. Her discoveries were the catalyst for her working to develop an after-school art opportunity for students at this high school.

This experience illuminates Freire’s claim below about why a place-based focus is so powerful to candidates’ development:

Whereas banking education anesthetizes and inhibits creative power, problem-posing education involves a constant unveiling of reality. The former attempts to maintain the submersion of consciousness; the latter strives for the emergence of consciousness and critical intervention in reality... (p. 81).

Through the process of identifying a problem, this candidate’s view of reality changed and became more nuanced. Her emerging consciousness drove her to intervene and to not accept a passive role. A teacher education program that makes space for this kind of problem-posing can lead to critical intervention and action.

In PBTE, candidates develop knowledge through local investigations that are framed by the juxtaposition of candidates’ questions and concerns with issues that are salient to the local community. “What big ideas can be learned in what places?” (Demarest, 2015, p. 130) may be the single-most important question that merits specific attention in PBTE. Another related question is: “How do the big ideas we are studying play out or manifest in this local place?” An approach to teacher preparation that is framed with these kinds of questions lends a greater immediacy and relevance to those aspects of the curriculum that seem like abstractions (Gruenewald, 2003; Sobel, 2004).

Knowledge generated from essential questions and big ideas extends beyond the problems of education and into disciplinary knowledge, as candidates will most likely gravitate to the problems associated within their chosen discipline. Through PBTE, candidates consider how the ideas and questions of their disciplines might

be reflected--and become objects of study--in their local places. Therefore, it is essential that candidates understand their content as disciplinary knowledge, as opposed to a school subject. This includes learning their respective disciplines’ ways and methods of exploring and investigating questions, as well as the enduring themes and ideas of their disciplines and the big questions with which the various disciplines wrestle.

One of our English language arts (ELA) student teachers taught the novel *The Jungle* (Sinclair, 1906/2012). Understanding the novel as a critique of capitalism that examines corruption and its resulting exploitation of powerless and voiceless people, the student teacher contextualized her study of the novel within the local community and a significant, ongoing crisis that the community was enduring. This contextualization of her students’ learning through reading and writing illustrates the student teacher’s ability to work within a literacy practices framework (Beach, Thein, & Webb, 2012). A literacy practices framework incorporates reading and writing in a real-world, social context and demonstrates an integrated approach to instruction that results in students’ engaging in sustained collaborative work. In turn, this perspective also lends itself to salient issues and concerns that can then also be explored within the local place.

When candidates understand the disciplinary nature of their content, they increase their capacity for interdisciplinary collaboration as they see the overlaps across disciplines. It is through these interdisciplinary collaborations where the potential exists for rich and empowering place-based opportunities and thus results in powerful student learning (Sobel, 2004). For example, our ELA student teacher’s “comfort” with her discipline allowed her to better see interdisciplinary connections. In particular, she partnered with a science teacher in her building who worked with the same group of students within the context of a biology classroom where the students examined related environmental issues that were pertinent to both the novel and within the community. Essentially, acquiring and developing an enduring understanding of place and how place anchors the academic substance of a curriculum requires a deep and sophisticated understanding of one’s discipline, as well as an ability to see how disciplines inform each other.

In what ways can we consider how to approach this development of knowledge so that our candidates do not revert back to what was ingrained through years of schooling? We argue that (re-)framing approaches in teacher education through inquiry-based learning

pulls the focus from the act of teaching candidates information to helping candidates develop as problem-solvers, as teachers.

Learning

Demarest (2015) argues: “I think schools try to package everything like it’s already done” (p. 4). The same could be said of teacher preparation. If we present the content of teacher education as “finished,” it does not suggest to candidates that their current knowledge and experiences are valuable or worthwhile starting points. It does not suggest to them that they have the capacity to teach each other. It does not honor their budding and developing understandings of schools, students, teaching, and learning from the perspective of teacher, rather than student.

Therefore, we would argue that PBTE demands inquiry-based learning, just as PBE demands inquiry-based learning. Inquiry-based learning allows candidates to self-direct investigations pertaining to their own salient questions about, and of, the local community or place. It also acknowledges and communicates that the continually shifting landscape of the local place is an ever-constant source of questions and possibilities. Thus, inquiry-based learning cannot be planned in advance, but happens in the moment with the teacher candidates. The instructor’s role, then, is to provide scaffolding and framing as a means “to help [candidates] discover their own capacity to learn, rather than to deliver information” (Howe et al, 2014, p. 49).

Thinking again of the art major in the introductory seminar, none of us had any way of knowing ahead of time about her knowledge (and especially her beliefs and values) and how she would synthesize her newly-developing understandings with what she was bringing. We did not realize that her experience would put her in a state of disequilibrium; nor did we know how she (and we) might work to help alleviate this dissonance. However, this experience was powerful and transformative. As Demarest (2015) argues: “You cannot always plan what stories students will experience” (p. 132). PBTE affords candidates empowering experiences because candidates can write their own stories, making their investment in the process greater.

In order to support each other through these inquiries, candidates must learn to collaborate effectively with each other; with course instructors; and with members of the community, both in and out of schools. One specific instance of this occurred for a recent graduate. During her student teaching experience, she found herself

consumed with questions around what it means to teach to the “whole child;” how to consistently meet the needs of individual students, specifically differentiating in both instruction and assessment; and how to speak to students’ emotional investment in learning. Throughout the semester she talked to teachers, students, parents, administrators, and faculty. She facilitated a student teaching seminar around these ideas, experimented with different teaching methods in her classroom, and engaged in extensive reading. At the end of her student teaching, she admitted that while she learned a great deal, she still did not have “answers” to her questions. However, she also stated that in time she believed she would come to accept that this would be a continual area of inquiry for her throughout her teaching career. Given the opportunity to inquire into what most concerned her, this candidate ultimately came to a greater appreciation of the process and an acceptance of the need to persevere in that inquiry.

Not all candidates respond in the ways illustrated by the art major and this recent graduate. Candidates, many of whom have gone through an educational system that dictates what and when they should learn, may have a difficult time when faced with the enormity of freedom that can be present in this type of environment. Furthermore, when candidates feel desperate for concrete solutions and answers, the more open-ended and multi-faceted nature of inquiry can create more cognitive dissonance than they are willing to tolerate. It can be challenging for them to engage in inquiry and reach the end only to discover that they have more questions than answers and that this will be a residual occurrence.

Thus, it is imperative for candidates to have multiple opportunities to engage in inquiry--guided, structured, and free inquiry--if they are to successfully create similar opportunities for their own students. In other words, teacher education must model the kind of education we advocate for P-12 students (Vascarello, 2011). But who provides this modeling? Who guides and frames candidates’ inquiries and experiences? If we argue that it is teacher educators, then by what and whose rules do we determine who is and is not a teacher educator?

Teacher Educators

In PBTE, teacher education becomes less about the job of educating candidates through a single body standing in front of the room imparting knowledge or through the careful guidance from mentors in the field and more about any and all encounters or interactions between

candidates and anyone who furthers their learning and thinking about teaching and teaching practice. Therefore, educating future teachers rests in the hands of interdisciplinary teams of experts, community members with wide and varied community knowledge and history and areas of expertise, classroom practitioners, P-12 students, and candidates themselves.

However, traditionally teacher educators are university faculty with credentials in some field of teacher education who teach foundations courses and/or methods courses (Murray & Male, 2005). Dinkelman (2011) asserts that because of the positions these university faculty hold, they possess an institutional identity as teacher educators. We cannot avoid the fact, though, that institutional identity as a teacher educator represents power, power to help others also begin to create and enact identities as teacher educators. To do so, we must be willing to relinquish some of that power in order for others without institutional identity to step into that role.

Place-based teacher education interrupts the narrow, institutionalized conception of teacher educator to include those with other kinds of teacher educator identities: discursive - “identity by what [is] done and in dialogue with others” (Dinkelman, 2011, p. 311) - and affinity - “identity by allegiance to practices and perspectives of group affiliation” (Dinkelman, 2011, p. 311). Therefore, instead of considering who counts or who does not count as a teacher educator, PBTE helps to cultivate a teacher educator identity within and among all of those involved in teacher education, because “[i]n no small part, the success or failure of any changes witnessed by teacher education...will turn on teacher educator identity” (Dinkelman, 2011, p. 321).

One of the most powerful ways to cultivate this identity is to consistently make community members central to the program’s coursework, as they bring unique perspectives and knowledge of the complex and nuanced history and reality of--as well as a deep affinity for--the community. As university faculty with institutional identity seek out and involve these community members, the community members begin to see their contributions as integral to the program, thus cultivating a budding identity of teacher educator. In addition, engaging P-12 practitioners beyond their mentor roles for teacher candidates can also effectively cultivate their teacher educator identity. Collaborating with university faculty in the development of course curricula and assessments, as well as co-teaching with university faculty, communicates to teachers that they are integral to the preparation of future teachers.

Given that place-based teacher education values student voice in both the content of what is studied and how it is studied, PBTE also challenges the usual boundaries that separate course instructors and candidates. Through shared dialogue as discussed by both Freire (1968/2014) and Dinkelman (2011), teachers and candidates work to develop candidates’ discursive identity as teacher educators through continual and repeated discussions. Further, this kind of dialogue provides space for candidates to also begin to develop identities as teacher educators through a more collaborative relationship with their instructors, P-12 practitioners, community members, each other, and all of those who are committed to the same kinds of practices and perspectives.

A teacher educator also does not necessarily have to be a person. Central to PBTE is the idea of learning from place itself, specifically the natural world and built world. These are both teacher educators if they serve to inform candidates’ learning. While one might argue that a knowledgeable other--a person--creates the opportunities to learn from the physical or natural world, that world itself is teaching as much as the person who created the opportunity. Therefore, it is not entirely illogical or impossible to identify the natural and built world as fulfilling the role of teacher educator. Yet, we acknowledge that our current language around teacher educator identity does not necessarily make room for their inclusion nor suggest how place acts as a teacher educator.

At its core, place-based teacher education moves away from viewing any aspect of teacher education as a “universal truth [that] underlies all knowledge and [that] should guide all educational efforts...[a truth that] some group, a group necessarily ‘im-placed,’ has possession of...or the path to...” (Noddings, 2002, p. 157). We remain acutely aware that achieving the vision of place-based teacher education requires a collective effort, as without it, we and all those who take on the identity of teacher educator will fall into the trap Noddings alludes to. Therefore, a framework for place-based teacher education requires repeated opportunities for candidates to engage in dialogue and discourse around our articulated commitments. If place-based teacher education is to be truly transformative, those with institutional identity as teacher educators must act together with those without that institutional identity and strive to help those individuals create and develop both discursive and affinity identities as teacher educators.

BRINGING IT ALL TOGETHER

As we constructed a framework for place-based teacher education, we explored the nature of the experiences that we might afford candidates and made a commitment to foreground the following:

[candidates']...previous knowledge and experience; authentic problem solving in real situations...the need for deep understanding rather than shallow factual knowledge; and many varied interactions with peers and other community members...[who view] community well-being as one of their professional obligations...and who promote the value of community. (Theobald & Curtiss, 2000, pp. 108-110)

Preliminary results from researching our secondary education program, coupled with anecdotal information from informal conversations and observations, show that a focus on place does provide space for deep understanding, as well as varied interactions with peers and other community members. Additionally, it addresses some of the concerns about our candidates that we identified in the introduction of this paper. For example, candidates have shared that their pedagogical courses have provided them with deeper understandings of both the community and the school, as well as a greater appreciation for the people of the community. The candidates also discussed how the courses have been transformative for them personally and that this transformation is a result of their becoming more intimately familiar with a local place.

What candidates learn about the community and school transfers to their work with specific students, as they begin to see these students as possessing specific experiences and identities shaped by their place. Once candidates are more cognizant of students' "placed" lives, they begin to see students more as unique individuals, as whole beings, as human. They are also much more likely to see themselves in students and the students in themselves. Ongoing analyses of candidates' written work and discussions reveal that candidates in our program are beginning to interrogate their own subjectivities and are recognizing and valuing the subjectivities of these students as valid and consequential.

As we consider the kinds of experiences that engender this kind of teacher candidate learning, we align with Dewey (1938/1997), who notes that just because "all education comes about through experiences does not mean that all experiences are genuinely or

equally educative" (p. 25). While Dewey is clear that experiences make up education--all education--not all experiences are educative. Educative experiences are those that are agreeable to or engage students in the present, as well as promoting their "having desirable future experiences...Hence the central problem of an education based on experience is to select the kind of present experiences that live fruitfully and creatively in subsequent experiences" (Dewey, 1938/1997, pp. 27-28).

Any experience that is a part of PBTE, whether it is a traditionally academic assignment or task, a place-based project in the community, a task to be carried out in a school setting, or a combination of any or all of the above, should: engage candidates in solving problems or exploring relevant questions; integrate themes within the context of projects; focus on tasks that are carried out in the field and worked through in coursework; and teach the "pedagogy, processes, and politics of education grounded in place" (Dubel & Sobel, 2014, p. 311). Therefore, candidates need to encounter and live these experiences, immersing themselves in the work of a variety of communities and cultural contexts, not solely for the sake of diversity, but primarily so that they might discover and appreciate how individuals and groups experience life within those communities and contexts. Moreover, candidates need to make use of the knowledge they gain to both serve their communities and to effect positive change in their classrooms, schools, and communities, wherever those might be.

Making the commitment to foreground what Theobald and Curtiss outline can only occur with carefully sequenced and scaffolded educative (in the Deweyan sense) experiences that span both the university classroom setting and the community and that simultaneously move in and through both. Further, these experiences need to be intimately connected to place, as candidates will only gain a deep understanding of the teaching profession through a deep engagement with place. This engagement with place makes the learning relevant to candidates' presently-lived realities, so it stands to reason that the experiences would be agreeable and enjoyable to them. Moreover, when these experiences are thoughtfully and intentionally scaffolded across courses, then each experience influences and shapes subsequent experiences.

These kinds of experiences are only possible when the instructional orientation to the curriculum is focused on student voice, inquiry, and problem-solving in combination with "childhood memories, the neighborhood park, students' out-of-school experiences, the Historical Society, a grandparent, and

the store owner” (Dubel & Sobel, 2014, p. 322). In this curricular orientation, candidates read across both their experiences and traditional text-based or classroom-based resources and are then guided in how to reflect on the significance of both.

Finally, these kinds of experiences capitalize on the knowledge and passion of others in the community, both in and out of schools, who occupy various roles, who hold diverse interests, or who possess unique knowledge and skills. When those with institutional identity as teacher educators seek out these human resources in the community and cultivate relationships with them, then those resources begin to take on the identity of teacher educator, either through discourse and/or affinity.

If we look at the experiences that comprise PBTE, they reflect a problem-solving approach to real and actual community problems and seek to support adult learners as they pursue questions that most resonate with them. The experiences communicate the imperative of community well-being, and through developing relationships with others, candidates connect with their local communities (Dubel & Sobel, 2014). The experiences, taken as a whole, give candidates multiple opportunities to engage with both peers and community members around these real problems and complete tasks that are intended for a real audience that extends beyond the university.

We do not mean to imply that the more traditional range of experiences that comprise teacher education are not educative. Experiences such as observing in classrooms, teaching micro-lessons, completing a child study, interviewing teachers or administrators, planning units, reading texts from well-known theorists and practitioners, or writing reflectively are educative. What makes these more traditional experiences unique in PBTE is the inquiry-driven orientation to the experiences and related tasks; the commitment to take a thematic approach to the tasks where candidates are called upon to make use of a wide variety of resources at once; and most importantly, the grounding of all experiences and related tasks in the local place.

BUILDING CAPACITY

The purpose of this paper was not to represent our efforts as if we have determined every answer. Instead, the purpose was to reconceptualize what is possible in secondary educator preparation. Our conceptual framework for PBTE showcases one such possibility, one in which teacher candidates and teacher educators

experience and develop a deep connection to the local based on issues and ideas that stem from candidates’ inquiries and the leveraging of expertise outside the walls of the institution.

As one moves to reifying PBTE within their institution, there are a number of questions that must be considered. We have identified four questions that we see as critical to enacting PBTE:

- How to make the curriculum continually “present?”
- How to measure the impact of PBTE on candidates’ practice?
- How to meaningfully and strategically engage P-12 partners?
- How to enculturate P-16 teachers into this work?

Working toward answering these questions requires a collaborative spirit and an explicit and continual acknowledgement of the limitations of personal experience, as PBTE is an explicitly value-laden approach to teacher education. Yet not all who participate in teacher education at any given institution share the same values. Because PBTE is an overarching philosophical or theoretical framework, it is necessary to build consensus when faced with the inability to reconcile the disparate values, beliefs, dispositions, and personalities of those who work within the program. This means a shared commitment to engaging in consensus-building without privileging some while marginalizing others. It also means a vigilance to honor each other’s voices, just as candidates’ voices are honored. Our coming together to conceptualize what PBTE would look like within our institution and to answer the questions above was not, and is not, easy work. Indeed, we continue to grapple with and negotiate amidst our individual beliefs and values.

Yet, we remain committed to this work. As Nevin, Thousand, and Villa (2009) conclude, collaborative efforts are both workable and worthwhile. They argue that in order “...to be effective in collaborative work, future teachers need opportunities to practise and learn about shared decision making, communication, and planning...which implies that those who prepare future teachers should model the collaboration that teachers are expected to acquire” (Nevin et al., 2009, p. 570). We have already asserted that PBTE seeks to provide teacher candidates with the same kind of learning and experiences that are found in place-based education. Collaboration is central to place-based education; therefore, it is imperative that we strive to effectively

collaborate with each other. The benefits of practicing a collaborative model merit the efforts to overcome the challenges.

CONCLUSION

As members of the teacher education community, we possess the knowledge and skills necessary to work within the paradigm of place-based teacher education. However, we must collectively give ourselves permission to feel vulnerable and exposed within our teaching

when we abandon the mantle of expert. Further we must permit ourselves to admit that we are all continually learning (about ourselves, about our students, about our place, and about each other). We will only continue to improve and develop if we are open to new ideas, new ways of thinking, and new approaches to teaching. In the end, we are only limited by our own imaginations. As teacher educators exploring an innovative approach to teacher preparation, we found that place-based teacher education changed, moved, perturbed, and informed us. And this is where transformation begins.

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Professional Educators' Perceptions of Implementing Virtual Education in a Rural Georgia School District

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Abstract: This research focused on how to effectively implement a virtual high school diploma program in a rural school district with limited resources (Hall, 2015; Tankersley, 2006). The researcher interviewed six professional educators using a three-interview series to understand interpretation and meaning of their experiences implementing the GaVS program (Seidman, 2006). The data analysis produced two main themes: expanding educational opportunities and integrating resources and support. Integrating resources and support included three sub-themes: school leadership and the GaVS program, virtual school counseling and technical support, and ensuring compliance of state virtual learning mandates and GaVS oversight. The researcher recommended prospective rural school districts implementing a virtual learning program focus on program pre-planning, with special focus on employee training and the technology required for an online learning platform. The greatest barrier for the participants was developing new leadership and school counseling practices to meet the new demands of virtual education.

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Keywords: Blended Learning, e-Learning, Learning Management System, Massive Open On-line Course, Synchronous Learning, Virtual School

INTRODUCTION

Costly school reforms over the last fifty years have resulted in very little progress being made toward America regaining its status as a global leader in education (Klein, 2015). Many reform efforts have been implemented through the years in an attempt to increase student achievement and graduation rates and to decrease student drop-out rates (CCSS Initiative, 2012; Executive Office of the President, 2015; National Commission on Excellence in Education, 1983; USDOE, 2009, 2011a, 2011b). Continued high school student drop-out rates affect the nation's education rates, costing the United

States billions of dollars annually (Alliance for Excellent Education et al., 2015). Brenner (2007) believed online learning could serve as a resource to help decrease the student dropout rate and increase the graduation rate.

During the No Child Left Behind (NCLB) era, virtual schools became a tool to help supplement the curriculum of local schools by offering a multitude of courses, from Advanced Placement (AP) to remedial classes (Winoguard, 2002). Virtual schools allow teachers and students the flexibility to access classroom instruction and materials anytime and anywhere. This especially applies to students who attended rural schools that do

not have access to courses taught by highly qualified teachers (Winoguard, 2002).

Rural schools are serving a more diverse and larger population of students that schools in the past have not served effectively (Johnson et al., 2014). Currently, one in four rural students is failing to graduate from high school. This rate is lower for minority youth (Alliance for Excellent Education et al., 2015). According to Johnson et al. (2014), the percentage of rural students who qualified for free and reduced meals, the percentage of rural minority students, and the number of rural students who qualified for special education services increased from 2008-09 to 2010-11. These areas of the rural population assisted in bringing awareness to policymakers about the “challenges faced by rural schools and the students they serve, or what those challenges mean to the state and national goals of improving achievement and narrowing the achievement gap” (Johnson et al., 2014, p. 28).

According to Archambault and Crippen (2009), in order to help increase academic achievement and graduation rates, schools are searching for new ways to reach students today, and virtual learning is becoming a viable option. As Archambault and Crippen (2009) noted, “... the 21st century educational landscape has been altered. One of these changes has been the addition of online distance education, specifically the proliferation of virtual schools in K-12 settings” (p. 363). Students in grades K-12 are electing to enroll in virtual programs/schools, with the majority of these students representing middle and high school students who are seeking an alternative path in earning their high school diploma (Archambault & Crippen, 2009).

PURPOSE

The purpose of this study was to determine how an identified rural Georgia school district with limited resources implemented the Georgia Virtual School (GaVS) program with the intent to increase student access and achievement by utilizing strategies to mitigate significant implementation barriers.

Soehner and Ryan (2011) noted the role of the school-level administrator is well documented concerning student achievement, school climate, and the use of innovative practices within a school. The school counselor at the high school level assists students in selecting appropriate courses that relate to students’ future aspirations, as well encourages and monitors students’ success in their courses. Because of their

leadership roles, school-level administrators and school counselors affect the success of virtual school programs (Soehner & Ryan, 2011).

This study explored how the GaVS program supported the professional educators’ goals of increasing student access and achievement.

RESEARCH QUESTIONS

The following research questions guided this study:

RQ1: What are the experiences of the professional educators who implemented the GaVS program in a rural Georgia school district and what were the lessons learned during the GaVS program implementation process?

RQ2: What implementation barriers did the professional educators in a rural Georgia school district experience while implementing the GaVS program with the intent to increase student access and achievement?

RQ3: What strategies to mitigate implementation barriers did the professional educators in a rural Georgia school district use while implementing the GaVS program with the intent to increase student access and achievement?

METHODOLOGY

Research Design: Using a basic qualitative interpretive research design for this study helped the researcher understand the perceptions of the professional educators who implemented the GaVS program (Merriam, 2002) by allowing their experiences to emerge in their own voices (Maxwell, 2013). This qualitative research method is the best method to use when working with perception data and is the most common form of research used in an educational setting (Merriam, 2002).

Site Selection: The research site for this study was a public high school located in rural South Georgia. For the purposes of this study, the high school will be identified as Southern High School. This high school had an active enrollment of approximately 1,414 students in grades 9-12 at the end of the 2015-16 school year (Southern High School, 2016). The student population comprised of 53% females and 47% males consisting of 60% white, 33% black, 4% Hispanic, and 3% Asian, Indian, and mixed. In 2015-16, 77% of the students were considered economically disadvantaged based on the free and reduced meal percentage and 63% at Southern High School (Southern High School, 2016).

Southern High School's graduation rate in 2015-16 was 93.7%. One hundred traditional Southern High School students were retained at the end of the 2014-15 school year due to an insufficient number of high school credits earned in order to be promoted to the next grade level (GOSA, 2015).

Participant Selection: Purposeful sampling strategies were used to identify participants for this study (Creswell, 2007). The professional educators who worked to implement the GaVS program at Southern High School were recruited to participate in this study. These participants included two high school administrators (a principal and an assistant principal), two school counselors, the virtual program technician, and a Georgia Department of Education (GaDOE) GaVS support specialist. Their individual voices were critical to the study because they were familiar with the program, the administrative structure, and the procedures of the program.

Data Collection: The following three sources were used to collect data for this study: Seidman's (2006) three-series interviews, observations, and document review. The data collected consisted of a descriptive narrative of the participants, activities, and their context (Merriam, 2002). The data collected from the study's participants helped relay in detail the perceptions and the barriers experienced by the professional educators during the implementation of the GaVS program and the strategies used to overcome the barriers.

Interviews: Semi-structured, in-depth interviews with open-ended questions were conducted with the study's participants using Seidman's (2006) three-interview series. Through such interviews, participants' voices were used to provide vivid descriptions of their experiences during the implementation of the GaVS program at Southern High School. The first interview allowed the participants to focus on their professional and relevant personal history up until the present time. The second interview focused on the details of the participants' experiences in the topic area of study. In the third interview, the participants reflected on the meaning of their experiences (Seidman, 2006). A total of 18 interviews were conducted and each interview was scheduled to last 90 minutes (Seidman, 2006) or until the interviewees fully expressed their perceptions. This model of interviewing was used to gain a deeper understanding of any barriers experienced during the implementation of the GaVS program in the rural Georgia school district and strategies developed to overcome the barriers (Seidman, 2006). The semi-structured interviews were conducted on dates and

times convenient to the participants. Based on Seidman's interview schedule recommendation, the interviews were scheduled three to five days apart.

The open-ended questions used in the interviews correlated with previous research to gain knowledge about the participants' attitudes toward the program implementation. Interviews were audio recorded and transcribed. The researcher used in-depth qualitative interviewing to gain a deeper understanding of the professional educators' perceptions in regards to the program implementation with the intent to increase student access and achievement. Researcher memos were taken during data collection and analysis. The researcher conducted interviews until the continuing interview process gleaned no new information. Face-to-face interviews were conducted in the offices of the study's participants to add to the comfort level of the participants during the interviews, and phone interviews with the GaDOE GaVS support specialist. Guiding open-ended questions were prepared for each participant prior to the interviews to assist in framing the interview and to create a climate of trust. This format allowed for the interviews to be guided by the interviewees' experiences and not by the researcher's assumptions. By having questions prepared ahead of time, the participants were allowed a sense of comfort knowing a certain structure existed to the interview. Participants knew what to expect while also allowing the discussion to develop based on answers to the open-ended questions.

Observation: The researchers also observed the study's participants in their roles to help gain a better understanding of the participants' implementation of the GaVS program. The researchers used non-participant observations, to study participants' actions and interactions with other stakeholders. These observations yielded rich contextual descriptive data, which further enhanced credibility of this study (Maxwell, 2013).

Document Review: Finally, the document review included analysis of organizational records (Patton 2002). The organizational records consisted of items such as the Southern High School's GaVS program course informational materials, enrollment data, course access and completion data, school and program demographics, and school and program achievement data. The researchers reviewed all documents and records relevant to the implementation of the program. Data from document reviews was triangulated with data from interviews and observations boosting the credibility of this study.

DATA ANALYSIS

Memos were utilized throughout the data analysis process to track the researcher's thoughts, biases, and to bridge ideas together. The recordings were reviewed immediately following each interview. Each audio recording was sent via email to a professional transcription service company after the completion of each interview. The transcriptions were returned to the researcher via email within a one to two day period. After retrieval of the finished transcriptions and the completion of the member checking process, the data analysis process began.

In using categorizing strategies, the researcher analyzed data to identify codes, categories and themes to help make sense and gain new understanding of the phenomenon under study (Patton, 2002). First, open coding was used to identify distinct concepts and categories in the data. This formed the basic units of the analysis. The data was broken down to master headings or first-level concepts, and subheadings or second-level categories (Merriam, 2002). Second, axial coding was used to confirm the concepts and categories accurately represent the responses from the interviews and explore how the concepts and categories were related (Merriam, 2002). Finally, selective coding was used to integrate the categories to form broad themes (Merriam, 2002). Analysis of the data continued until no additional themes emerged. The final step of the data analysis process included focusing on connecting strategies that examined relationships between the categories created (Maxwell, 2013).

RESULTS

Data analysis resulted in two major themes emerging that captured the essence of the experiences of the study's six participants. The two major themes consist of the following: expanding educational opportunities for students and integrating resources and support. Within the major theme of integrating resources and support, three sub-themes were developed reflecting the experiences of the participants. These include: school leadership and the GaVS program, school counselor and program technician support, and ensuring compliance of State virtual learning mandates and GaVS oversight.

The two administrators (principal and assistant principal), two school counselors, one virtual technician and a GaDOE GaVS support specialist in this study affirmed the following issues: First, the participants raised the notion of expanding educational opportunities for rural

high school students. Participants in this study exhibited keen awareness of the educational challenges facing the US (Alliance for Excellent Education et al., 2015; Johnson et al., 2014). This reflects the disappointing data reports on the US educational performance compared with other developed nations (Obama, 2011, May 27). Numerous initiatives at the national and state levels have been put into practice as an attempt to increase student achievement and graduation rates (CCSS Initiative, 2012; Executive Office of the President, 2015; National Commission on Excellence in Education, 1983; USDOE, 2009, 2011, 2011a). One of these initiatives is the implementation of an online educational program, specifically GaVS (Barge, n.d.; Ingram, 2016; Teague, 2013). School districts, especially rural districts with limited resources, have been restricted in their ability to effectively implement GaVS (Hall, 2015; Tankersley, 2006).

Second, the participants reflected on the importance of integration of resources and support in the implementation of the GaVS virtual program at Southern High School. Participants understood integration of resources to mean integration of personal skills and technologies. The school counselors in this study looked up to the administrators to create an environment where the virtual program could thrive and prosper.

The following sub-themes school leadership and the GaVS program, virtual school counseling and technical support, and ensuring compliance of State virtual learning mandates and GaVS oversight emanate from the more encompassing idea of integrating resources, including technologies and support. The sub-themes should not be treated as conceptual isolates but overlapping concepts.

DISCUSSION

All Southern High School GaVS program staff involved in this study had positive and negative experiences. All shared a common vision of expanded learning opportunities offering flexibility and convenience. The school principal and assistant principal believed they were playing a role in making education in the US more competitive. They suggested adaptive leadership helps to empower and embrace for changes to occur. This type of leadership helped to shape their experiences at Southern High School. Throughout the study, all the principals had similar experiences centered around technology issues and the expanded roles and responsibilities they faced. For example, two of the participants had to modify and expand their leadership roles to serve both

virtual and traditional leaders. Similarly, two additional participants had to step out of their traditional school counseling practices and serve the unique needs of virtual students.

Although all participants expressed satisfaction and a large degree of success with the implementation of the program, they also reflected on issues they could have done differently. For example, they felt more preparation and planning could have helped them overcome some of the initial implementation problems. One participant regretted not having enough support to meet the needs of virtual teachers and students. She shared, “We did learn from the implementation of the virtual program to make sure that we have enough support in place for the students who are using the program.” Another participant, on the other hand, felt an increase in program monitoring could help more students be successful. These problems suggest the need for thorough planning of resources and support before implementation.

Uniquely, their approaches of implementation are aligned with the Virtual Program/School as an Educational Alternative framework that highlighted the following: alternative programs/schools, such as GaVS, were designed to improve student achievement while providing a flexible structure, supportive environment, alternative choices, family support, specific services, well-defined standards and procedures, and an individualized curriculum (Franklin, 1992).

The main characteristics of alternative schools include a supportive environment, smaller size, individualized curriculum, flexible structure, alternative choices, specific services, family support, consistent evaluation, and well-defined standards and procedures (Franklin, 1992). The establishment of alternative schools emerged due to two educational movements: a reactionary movement in protest against the impersonal structure found in public schools, and the educational reform movement designed to improve achievement of all students (Franklin, 1992).

The alternative structures and ideologies help many students find educational success (Franklin, 1992). As other states have successfully implemented virtual alternative educational programs (Greenway & Vanourek, 2006), the state of Georgia has also implemented a virtual alternative educational program, GaVS (GaDOE, 2012; Ingram, 2016). GaVS served as the basis for this study.

All six participants expressed different barriers to successful implementation.

First, the two counselors regretted not having sufficient preparation to balance their roles as traditional and virtual school counselors. Based on the findings of this study, virtual school counseling posed unique challenges in the delivery of school counseling practices and providing the students a safe and secure online learning environment.

Second, all participants struggled with a shortage of computer devices and internet access for all learners. In the beginning of the implementation of the program, there was a limited supply of older computers students could check out and use at home to access their virtual courses. Because the computers were outdated, some of the virtual course content could not be accessed due to the limited capability of the computer’s hardware. This was a very serious implementation constraint as all learning was done through an online LMS. Therefore, having use of a computer that would allow for the course to be accessed in its entirety, was a necessity for the success of the virtual learning program.

Third, all participants expressed communication problems at different levels. Fourth, the two school counselors expressed a lack of connection with virtual teachers. In a traditional school setup the school counselors have the freedom to interact directly with teachers on issues pertaining to student work. In contrast, in a virtual program they have no interaction with teachers and find it difficult to address specific students’ learning problems.

FINAL CONCLUSIONS

A number of beneficial findings emerged from the data that may assist prospective rural high schools seeking to implement a GaVS program. The study identified two major themes: expanding educational opportunities for students and integrating resources and support. The theme of integrating resources and support produced three sub-themes: school leadership and the GaVS program, school counselor and program technician support, and ensuring compliance of State virtual learning mandates and GaVS oversight. These themes and sub-themes were examined through the study’s frameworks. The combination of the conceptual and the theoretical frameworks may help prepare schools with the planning and implementing of the GaVS program.

The participants of this study revealed their beliefs of the benefits of expanding educational opportunities for their students by providing the virtual learning program, GaVS, as an educational alternative. The

researchers highlighted the barriers experienced during the implementation of the GaVS program and the strategies utilized by the participants to overcome the barriers. It also brought to light the importance of providing resources and support to allow for program and student success. The findings of the current study closely align with those of current literature indicating the importance and benefits of expanding educational opportunities for students by offering virtual learning as an option. Researchers confirmed providing resources and support to those participating in virtual learning, further enhances their ability to succeed in the program.

The planning stage is a critical component of program implementation. Based on the analysis of the data derived from this study, the planning stage that occurred before implementing the program was not sufficient. This is based on the school counselors' complaints of not feeling fully prepared to assist students in the enrollment and utilization of the virtual program. This was also made apparent when one participant voiced her concerns of not having enough computers initially for the virtual students to use. The planning stage allows for these types of issues to be thought out and for measures to be put into place before the implementation gets underway.

The study brought to light the importance of communication on many different levels. The school counselors had to adapt their traditional counseling techniques to include communication with their virtual students through different modes of delivery, such

as email, social media, text, and video chats. It was critical for effective communication to occur between the administrators and the school counselors to ensure coherence within the program. It was the responsibility of the school counselors to keep the administration informed of the status of the program, including the number of participants, the number of virtual courses, and the number of courses completed.

Based on the analysis of the data, it is apparent the implementation of the virtual program requires a leadership style beyond adaptive leadership. It was determined visionary leadership is also required for the implementation of the virtual program. With visionary leadership, the leader inspires others. One participant conveyed that she had a vision for the students and the parents. She talked of buying into the vision, so she could explain the vision to others.

Individuals often assume any leader can lead any program. In other words, if you are a principal of a school, then you should not have trouble with leading a virtual school or program. The belief any principal can be uprooted and placed in a different situation and function effectively is misguided. The virtual platform requires special leadership and school counseling styles that may not be required in a traditional setting. More importantly, virtual programs require special counseling techniques for online students. The researchers strongly recommend special training for school leaders and school counselors for smooth implementation of virtual programs similar to the GaVS program.

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Becoming Critical Friends: Developmental Portraits of Three Professional Learning Communities

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Abstract: This descriptive, holistic multiple-case study examined three professional learning communities (i.e., Critical Friends Groups [CFGs]) with distinctive contexts, features, and participants, including: (a) cross-career educators at an urban Professional Development School (PDS), (b) first-year teachers in a master's degree cohort using a virtual format, and (c) veteran literacy coordinators in a rural school district. The process, content, sustainability, and impact of the CFGs were explored across a school year. Qualitative and quantitative data (n=36) were collected via individual and focus group interviews, written reflections, and meeting observations. The findings reveal the groups as situated on a developmental continuum, with the PDS CFG in the initial stage of establishing, the virtual CFG in the next stage of consolidating, and the veteran educator CFG in the mature stage of advocating. Considerations and implications for teacher development via CFGs are discussed in light of the growth stages.

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Professional learning communities (PLCs) as a context for professional development of teachers have been heralded as key to reform in U.S. K-12 education and accordingly, the governing agency for K-12 schools in our state advocates for teacher involvement in them. PLCs are conceptualized as having shared values and norms, a focus on student learning and school improvement, reflective dialogue, public teaching practices, and collaboration (DuFour & Eaker, 1998; Newman, 1996). One type of PLC, Critical Friends Groups (CFGs), aims to have these components but is also characterized by intentional use of structured conversations via protocols to guide the group's learning as well as group leadership by a facilitator trained according to the National School Reform Faculty (NSRF) guidelines.

CFGs are typically comprised of a group of 8-12 educators who meet regularly; however, varying iterations of CFGs have recently emerged, while staying true to the two key elements of skillful facilitation and protocol usage (Fahey & Ippolito, 2015). These emergent versions are in response to changing "external demands, policies, and practices that increasingly inform the work of schools" (Fahey & Ippolito, 2015, p. 49), such as the widespread adoption in the U.S. of the Common Core State Standards (2010). For example, the literature has shown as of late CFGs have been comprised of atypical participants, including: cross-district school administrators (Fahey, 2011, 2012), university and school partners (Rigelman & Ruben, 2012), faculty at an institution of higher education (Moore & Carter-Hicks,

2014), and district- and school-wide personnel (Burke, Marx, & Berry, 2011).

In addition to these varying iterations, the differences in PLCs have been characterized through the lens of developmental stages since “creating a real collegial community takes more than just giving teachers more face time with each other” (Mindich & Liberman, 2012, p. 4). There is a wide degree of variability in the development of PLCs into highly functioning groups. McLaughlin and Talbert (2006) examined the growth phases of PLCs across 20 schools using the descriptors of novice, intermediate, and advanced stages; they reported rarely finding advanced collegial work. Similarly, Dunne and Honts (1998) postulated that CFGs progress through three common phases of development, including trust setting, pedagogical improvement, and addressing questions about the fundamental practices and purposes of schools. One critique of CFGs is spending too much time in the trust setting stage and not advancing to a more mature stage where group experiences lead to meaningful changes in classroom instruction and schools.

Since the inception of CFGs in 1994, they have been touted as an efficacious means of prompting teacher change and school reform (Curlette & Granville, 2014; Curry, 2008; Fahey & Ippolito, 2015; NSRF, 2015; Wood, 2007a), though limited empirical study has confirmed these claims. This dearth of research, coupled with our involvement in three distinct CFGs, compelled us to conduct a critical analysis of their “process, sustainability, content, and impact” (Key, 2006, p. 7) and consider how the findings can be situated in growth stages.

RELATED RESEARCH

CFG Processes

The literature on CFGs reveals two processes typically evident across groups including: (a) collective norm setting that provides a framework for collaboration, and (b) time-managed protocols and guidelines for addressing classroom dilemmas, texts, student work, and data (Curry, 2008; Little, Gearhart, Curry, & Kafka, 2003; NSRF, 2015; Wood, 2007a). The intent of CFG protocols is to provide a structure for efficient, focused, and productive discussions of the topic at hand with equitable participation by all teachers (Curry, 2008; Wood, 2007a). Protocols work to organize discussion and participation, allowing group members to embrace discomfort in a way that is safe and manageable so

they can raise questions, provide clarifications and recommendations, examine assumptions, and challenge each other to think differently about their students’ work and teaching practices (Curry, 2008; Little et al., 2003; McDonald, Mohr, Dichter, & McDonald, 2013; Wood, 2007a). Protocols by design are timed and thus formatted for efficiency to honor teachers’ most limited resource: time. As such, Little et al. (2003, p. 188) found examples of protocols that contradictorily “open up” or “close off” opportunities to delve deeply into questions of student learning or teaching practice. Further, Curry’s (2008) longitudinal, qualitative study of six CFGs (n=25) reveals protocols were limited to consensus building and restricted critical analyses by teachers.

CFG Content

The content addressed by CFGs “depends upon the ability of participants to set goals for student learning, to access relevant outside resources, to identify appropriate student and teacher work samples for the group to examine, to develop questions for framing protocols and observations, and to challenge one another to think in new ways” (Key, 2006, p. 6). The content is also influenced by the developmental phase of the group, and Dunne and Honts (1998) proposed CFGs move through three stages of growth, including a support stage focusing on building trust, an improvement phase emphasizing refinement of teaching tools and practices, and lastly a stage of addressing questions about central practices and purposes of schools. The content emphasis of CFG meetings is determined by a variety of stakeholders, including the group’s participants and their interests, the group’s facilitators and their interests, school or district mandates, and school reform initiatives (Curry, 2008; Little et al., 2003; Wood, 2007). For example, the pervasive focus on standards and testing has contributed to an emphasis on improving student outcomes by analyzing student work (Dunne, Nave, & Lewis, 2000; Fahey, 2012). In addition, the widespread adoption in the U.S. of the Common Core State Standards (2010) has prompted a focus on aligning instructional practices with these standards (Ippolito, Charner-Laird, & Dobbs, 2014).

CFG Sustainability

Sustainability of CFGs hinges on various factors including: time to meet, supportive administration, resource availability, and members’ feelings of professional growth (Achinstein & Meyer, 1997; Little et al., 2003; Wood, 2007a). In addition, ineffective facilitators, particularly in asking questions, using

protocols, and coaching peers, have been associated with limited sustainability (Achinstein & Meyer, 1997; Armstrong, 2003; Little et. al, 2003; Murphy, 2001; Nave, 2000). In a longitudinal study of sustainability, Wood (2007a) investigated a district-wide implementation of mandatory teacher (n=251) participation in CFGs. The findings revealed: a) participants in the CFGs did not link their collaborative work with student achievement and learning, b) mandatory participation in the CFGs, high-stakes accountability policies, and district dictation of CFG content were counterproductive to teachers' feelings of self-efficacy and autonomy, and c) too much time was spent on the initial trust and community building stage instead of analysis of student work. Further, top down district mandates constrained reform efforts, and district personnel and administration did not place value on teacher authority and autonomy, which stifled the CFGs' abilities to function as a model for school reform, consistent with other findings (Burke, Marx, & Berry, 2011).

CFG Impact

The limited inquiry on CFGs' impacts has mostly focused on issues of collegiality, trust building, and teacher development, with little attention to effects on student learning (Key, 2006). For example, Franzak's (2002) case study of a CFG reveals the participants spent an entire year in the trust setting stage, never evolving to a stage that would impact teaching practices and student learning. Curry's (2008) qualitative case study of 25 teachers across six groups shows the CFGs enhanced their: collegial relationships, awareness of research-based instruction, and capacity to undertake instructional improvement. However, the CFGs held some limitations for supporting teacher professional development and had minimal influence of improving teachers' pedagogical content knowledge. In another related investigation, Dunne, Nave, and Lewis' (2000) 2-year, mixed methods study of 12 schools implementing CFGs, teachers typically reported: (a) higher levels of teaching efficacy and academic expectations for their student; (b) deeper levels of reflection about connections between curriculum, assessment, and pedagogy; and (c) a shift from teacher-centered to student-centered instructional practices. The researchers concluded time spent on rigorous analysis of student work, as opposed to time spent building trust between group members, was associated with greater impacts on student learning.

Influences of CFG Facilitators

While protocols and norms provide guidelines for

discussing dilemmas, texts, student work, and data, CFG facilitators greatly influence a group's functioning (Little et al., 2003; McDonald et al., 2013). Linking theory to practice, choosing and facilitating protocols, identifying texts, and modeling questioning and reflective dialogue are responsibilities of the facilitator that profoundly influence participation, trust, and development of the group (Little et. al, 2003; Wood, 2007a). Successful facilitation involves: a) understanding and teaching the NSRF protocols and rationales; b) embracing the challenges faced when hierarchical power relations of traditional school cultures clash with the CFG model of school reform; c) providing members more time, space, and autonomy to develop their own agendas and not those of the school district; d) balancing community and trust building with improved teaching and learning; e) limiting number of participants; and f) meeting more than once a month. Further, while CFG facilitators are influenced by their members' interests, participation, and motivation, it is essential facilitators are cognizant of the obstacles and challenges of outside forces that can hinder functioning of the group.

RESEARCH QUESTIONS

This study of three distinct CFGs investigated the following:

1. What are the processes of the CFGs?
2. What is the content focus of the CFGs?
3. How is sustainability of the CFGs reported as accomplished?
4. What are the reported impacts of the CFGs?

METHOD

The design of this study includes a descriptive, holistic multiple-case approach (Yin, 2003). The multiple cases were three CFGs, and the purpose of the study was to provide a thick description of each.

Participants and Contexts

The 36 participants were in three different CFGs referred to as: Professional Development School (PDS) CFG, virtual CFG, and veteran educator CFG. All groups were characterized as CFGs as they used protocols to structure discussion, functioned in collaborative ways, and were led by trained facilitators. The study was conducted in the southeastern U.S.

Research team.

The research team consisted of three university faculty members and two doctoral students; all had experience with qualitative methodology, including conducting interviews, verbatim transcription, data coding, establishing consensus, and maintaining audit trails. One faculty member participated in the PDS CFG, while another facilitated the virtual CFG.

PDS CFG.

The PDS CFG met at a large, urban elementary school in a PDS relationship with the researchers' university. Two of the university researchers had worked at this school for over 8 years and had conducted other studies at the site. The school had Title I status with 93% of students eligible for free or reduced lunch and a diverse student population, including 69% Hispanic, 22% African American, 5% Asian, and 4% Caucasian. Seventy-two percent of the students were non-native English speakers, and the English as a Second Language (ESL) program served 55% of the student population. The PDS CFG was comprised of seven teachers and one university professor who were cross-career educators, ranging from those in their first year of teaching to those with over 40 years of teaching experience. All participants were female, and they included seven Caucasian and one African American. The educational attainment of the group was diverse, ranging from a bachelor's to a doctoral degree. Two of the teachers were facilitators of the group, while the other six were group members. The leaders of the CFG were recently certified facilitators, and this was their first experience leading such a group. The group was scheduled to meet monthly for 90 minutes after school. At the time of this study, the CFG had been in place for 1 year.

Virtual CFG.

The virtual CFG met in a virtual format using the ELLUMINATE LIVE! website interface. This virtual environment allowed participants to interact remotely as if they were in a face-to-face classroom and offered the opportunity to hold audible discussions, post comments on a white board, share Power Point presentations and documents, and even raise one's virtual hand. Participants included 14 first-year elementary teachers enrolled in a master's degree program at the researchers' university, as well as a university faculty member serving as the CFG facilitator. All participants were female, and they included nine Caucasian, four African American, and one Latina. The group's members

were in their first year of teaching and completing the second year of a 2-year alternative elementary teacher certification (year one) and master's degree (year two) program after receiving a bachelor's degree in a field other than education. While completing this program, they were teaching in high-poverty classrooms across three metropolitan school systems. The leader of the CFG was a recently certified facilitator, and this was her second experience with leading such a group. Participation in the CFG was a course requirement. The participants chose between two meeting dates each month to meet as a CFG. Thus, they met in small groups comprised of four to eight teachers for 90 minutes monthly over 6 months. At the time of this study, the participants had been meeting and working together for 1 year as a cohort completing courses in the program.

Veteran educator CFG.

The veteran educator CFG was comprised of experienced elementary literacy coordinators. They worked at various schools in a rural district, where the student population was 66% Caucasian and 25% Hispanic, with 48% eligible for the free and reduced lunch program. Ten percent of the students were characterized as English Language Learners. The group included 15 literacy coordinators and two facilitators who were university faculty members. All participants were female and Caucasian. The veteran educators' years of teaching experience ranged from 7 to 37 years, with educational backgrounds varying from Bachelor's to Doctoral degrees. The group's leaders had extensive experiences with leading CFGs and were certified national CFG facilitators. CFG meetings were held every 6 to 8 weeks at a school district office for the entire day. The CFG approach was used in conjunction with the Literacy Collaborative trainings required in their role as literacy coordinators. At the time of this study, the group had been using the CFG approach for meetings for 3 years. However, many of the members had long standing relationships, as they had worked and met together for many years.

DATA COLLECTION AND ANALYSIS

Qualitative and quantitative data were collected across a school year. Due to the inherent differences of the three groups, the data sources varied somewhat (see TABLE 1). The analysis of the data focused within each group, with comparisons and contrasts during interpretation.

Table 1 : Summary of Data Collection for the CFGs

	PDS CFG	Virtual CFG	Veteran educator CFG
Interviews	7 semi-structured individual interviews with members and leaders at the beginning of the study 6 semi-structured individual interviews with members and leaders at the end of the study	1 semi-structured individual interview with leader at the end of the study	2 semi-structured individual interviews with leaders at the end of the study 2 semi-structured focus group interviews with members at the end of the study
Reflections	2 sets of reflections	10 sets of reflections	4 sets of reflections
Meeting transcripts	2 complete meeting transcripts	10 complete meeting transcripts	
Norms	1 set of unchanged norms	1 set of unchanged norms	Norms and history of changed norms
Agendas	2 agendas set before the meetings	1 agenda unchanged over the duration of the study	6 tentative agendas subject to change at the meetings

Interview data were collected via semi-structured individual and focus group interviews. A 13-question interview protocol was used for all interviews with questions related to process, content, sustainability, and impact. Examples include: “What have you gained from participation in your CFG?”; “What topics are discussed at your CFG?”; “What do you think about the structures of your CFG meetings?”; and “What keeps your CFG going?” The interviews were audio taped and transcribed verbatim for accuracy. Written reflection data were also collected after CFG meetings, with prompts such as: “I used to think... and now I think...”; “What did I learn from today’s CFG meeting?”; and “What would I change about the CFG meeting?”

Analysis of the interview and reflection data initially involved applying the a priori codes of process, content, sustainability, and impact. Researchers used constant comparative methods (Lincoln & Guba, 1985) to generate categories within these codes. Specifically, researchers individually analyzed the qualitative data through open coding, which generated numerous categories and subcategories representing observed phenomenon found in the data. Researchers periodically met and discussed the subcategories to reach consensus on their meanings related to the categories. This recursive process of analysis and discussion initiated

development of a coding manual used in subsequent analysis. The researchers then engaged in data reduction by recoding data using the coding manual for guidance in comparing and refining categories. Coded categories were collapsed and renamed related to the themes of process, content, sustainability, and impact.

Some CFG meetings were recorded and transcribed for two of the groups. Using conversational turn as the unit of analysis, the a priori codes of process, content, sustainability, and impact were independently applied by two researchers to the meeting transcripts from the PDS CFG and virtual CFG. Through this process, two additional codes emerged: technology and other. Cohen’s kappa was used for inter-rater reliability on all of the meeting transcripts. A Cohen’s kappa of .86 for the PDS group and .84 for the virtual group were obtained. Bakeman and Gottman (1986) consider a Cohen’s kappa of .75 or higher to be excellent for establishing reliability.

Trustworthiness

Trustworthiness of the study was established in several ways: prolonged engagement of the researchers (2 years), multiple researchers with in-depth knowledge of the contexts, multiple data sources both qualitative

and quantitative in nature, use of constant comparative methods, and maintenance of an audit trail. Further, consensus-building procedures around interpretation of the data, which involved multiple examinations of transcripts by the researchers, contribute to the trustworthiness of the analysis and findings.

RESULTS

The findings reveal the CFGs as situated on a developmental continuum with three growth stages. The PDS CFG exemplifies the initial stage of establishing, the virtual CFG illustrates the next stage of consolidating, and the veteran educator CFG embodies the mature stage of advocating, with descriptive portraits provided below.

Portrait of the Establishing Stage of Professional Learning: PDS CFG

The PDS CFG meeting transcripts show the percentages of discourse focused on process, content, sustainability, impact, and other. The results show a majority of the conversational turns were spent on content (67%), followed by other (17%), process (11%), and sustainability (4%). Notably, impact was not addressed during these meetings.

Process.

Three key findings emerged from the interview and reflection data related to the PDS CFG's processes: structure of meeting protocols, trust and community building, and balance of power regarding decision-making. The participants highly valued the rigid and predictable format of meetings, particularly the use of protocols, for several reasons. First, nearly all participants spoke to the satisfaction of being given "equal opportunity" to share thoughts, ask questions, and express opinions and relevant experiences. This led to participants perceiving all voices were appreciated: "It [protocol] gives everybody the same respect. Everybody gets the same amount of time and everybody gets to share what they're thinking." Second, participants expressed unequivocal support for protocol rigidity because they felt strongly about conversations remaining focused and time limits being honored. Teachers reported that in other school meetings, content rarely remains agenda-focused and time is often not respected. Finally, the participants also commonly shared positive testimonies of learning to become better listeners in a group setting due to the protocols: "It [protocol] helps you to be respectful of others . . . it forces you to listen to other

people and really think about what they are saying so it's a good thing."

The processes of trust and community building were also viewed as important by the participants. The fundamental CFG process of norm setting at the outset allowed participants the opportunity to develop familiarity with meeting procedures and was viewed as an integral early step of trust building. Participants reported that trust was built gradually. Many described trust in terms of "respect," "candor," and "a willingness to open up to one another" by sharing private classroom or school-related experiences, regardless of the likelihood that the very act of sharing exposed members to the threat of criticism. All participants reported that community building protocols were instrumental in allowing members to get to know each other better and many underscored this community building as a prerequisite to the process of collaboration in such a large school. With approximately 200 teachers on staff, opportunities to build relationships with teachers across grade levels or departments are rare. Although a majority of the group expressed a significant degree of concern with meeting content "leaving the room" or not discussing meeting information "outside of the group," all participants felt these fears were quelled by the sense of community and trust established through both norm setting and the collective act of sharing sensitive information with one another.

A final key finding related to the group's processes is the balance of power with regard to decision-making, particularly whether decisions were made by group members or leaders. Although a CFG is structured to give all members equal opportunity to contribute to meeting content and processes, the group leaders reported these decisions almost always fell solely upon themselves for a couple of reasons. First, the CFG was a relatively small group, with only eight members (including two leaders and one university professor). Second, leaders requested input for upcoming meetings monthly via emails and reported that members rarely responded to these emails. The group leaders expressed concern with this lack of input from group members and identified this process as one of the most pressing areas for improvement.

Content.

Although CFG participants covered a wide range of topics in meetings, the content focus was largely elusive of examination of student work and instructional practices. The interview and reflection data suggest a protracted emphasis on norm-setting, community

building activities designed to better acquaint members, and discussions centered on educational philosophies and beliefs, including topics like “why we teach” and memoirs and attributes of favorite teachers. The content focus of this group appeared to be in the initial stage of trust building (Duune & Honts, 1998). Members were encouraged to bring their own dilemmas to meetings and when this happened, topics usually dealt with how to better reach troubled students, such as those with self-esteem issues or behavioral challenges. There was some discussion of issues related to classroom management, conflicts with high-maintenance parents (and in some cases, colleagues), and general roles as educators, although these issues typically were presented only once or twice the entire year.

When the group members did not choose their own topics, the group leaders were compelled to do so. The leaders reported that because members rarely brought dilemmas to meetings, they selected topics presumed to resonate with the majority of the group, such as collegiality or team building activities. One said, “We try to encourage the teachers who are part of the group to bring dilemmas so we can help solve them, but sometimes people don’t bring anything, so we work, we focus on team building and goals that we have.” Both leaders expressed reservations and exasperation with choosing topics, but felt they had to when members had not brought issues to them in advance:

Our goal is to kind of facilitate the dilemmas that our group members have. And we were finding that we were the ones pretty much coming up with the dilemmas. And maybe teachers were just busy. And, even when they had things going on, they had to do a little work to think about what they wanted to bring to the group. Sometimes, we needed a little background information from the student that they wanted to talk about. And maybe they just didn’t have the time. But we found ourselves pulling at them. “Do you have anything you wanna (sic) share?” And, if they didn’t, because we had a meeting scheduled, the responsibility of coming up with a dilemma or maybe an article for the text rendering protocol was on us. It became burdensome almost. So, that wasn’t good.

However, members did not report the leaders’ selection of topics as problematic; they were satisfied despite not playing a significant role in selecting them.

Sustainability.

The perceived quality of the group leaders had the most significant influence on members’ decisions to continue participation in the CFG: “They’re [leaders] committed. Committed enough to even go on even if only one person shows up, or two, which is remarkable.” Affective benefits of participation also emerged as a sustaining theme, in particular, feelings of elevated self-efficacy, strengthened relational bonds, and the therapeutic nature of meetings.

However, the interview and reflection data show the number of impeding factors outweighed the number of sustaining factors, and the most significant impediment was lack of time and prioritization. All members spoke of overwhelming competition from other mandatory school reform initiatives and the challenges of meeting after school. Most participants felt the CFG would flourish if it were allowed to meet during instructional planning blocks (instead, teachers are required to spend 3 days per week collaborating under a different reform model). Other weekly after-school meetings took away available time for CFG meetings. One teacher elaborated:

We have a balanced literacy workshop. We have Spanish. There is so much going on that I think teachers look at it as they are doing these other things, so why would they do *one more thing?* . . . I think time is the biggest thing and just feeling like it’s one more thing to do.

Level of support from administrators was also perceived as an impeding factor by most participants. Aside from “allowing the CFG to meet” and providing money for snacks (which only lasted for part of the year), CFG members were uncertain of the administration’s degree of endorsement or knowledge of the group. Members expressed ambivalence with respect to the administration’s ideal role in the CFG, with some open to having administrators fully participate and others reserved about this prospect. Most agreed the level of support should extend beyond mere knowledge of the group’s existence; some questioned the potential efficacy of the group without administrators playing a more substantive role:

I want them to know, to ask questions... They never check in. “Is there anything we need to know? Is there anything we can help with?” Or, maybe there are things that happened in the school that they may want us to bring to the CFG group. It’s totally disconnected.

Impact.

The interview and reflection data reveal three key findings related to impact on teacher development: reduction of isolation, personal growth and satisfaction, and professional growth. Members stated the most important impact of CFG participation was the opportunities to interact with colleagues with whom otherwise they would not. Getting to know other teachers better, and therefore becoming more comfortable about seeking advice and consultation, were common responses when questioned about impacts and gains of participation. One participant explained how the CFG helped abate the overwhelming sense of isolation: “It helps me to see that I am not alone and that I am not the only one that has dilemmas and I think, again, with a school this big, you forget that other people are experiencing the same things. . . . I think it’s just allowed me to see that I do have a support system.”

Affective impacts, including personal growth and satisfaction, were also commonly reported outcomes of CFG participation. Many members stated that regular participation helped relieve stress and some described meetings as therapy sessions. Several participants reported that meeting protocols improved their interpersonal skills (e.g., speaking, listening, and asking questions). Many participants expressed professional affirmation as a direct impact of participation: “It affirms me as an educator. I am glad I’m an educator”; and “It makes you reflect, and affirm, why you are where you are. And why you keep plugging away.”

Professional growth was also a reported impact. Some participants stated the group provided alternative ideas and perspectives for solving classroom dilemmas, such as brainstorming solutions to a challenging behavior problem. One member recalled being presented with various strategies for meeting the needs of an emotionally immature student who had become a significant classroom management issue: “Some of the ideas that I got from the veteran teachers, like having her tutor because she was so strong academically but had very low self-esteem . . . really helped. I saw lots of improvement.” Notably, there were no reports of improved student academic performance related to CFG participation.

PORTRAIT OF THE CONSOLIDATING STAGE OF PROFESSIONAL LEARNING: VIRTUAL CFG

The meeting transcripts illuminated the percentages of discourse spent on process, content, sustainability, impact, technology, and “other” during the virtual CFG meetings. The results show a majority of the conversational turns were spent on content (65%), followed by process (21%), technology (11%), and other (3%). The findings show no conversational turns related to impact and sustainability.

Processes.

The data reveal the unique online forum and the membership characteristics of the virtual CFG were major influences on the group’s processes. Given that the virtual CFG consisted of novice teachers in an alternative teacher certification and Master’s degree program who taught at different schools throughout the metropolitan area, the online format was optimal for their schedules and varying locations. In addition, the teachers reported the parameters of the online environment, which allowed only one person to speak at a time, created exchanges that were equitable. The virtual context also created a setting that prompted the teachers to actively listen and reflect before speaking, since they could not interrupt. However, while the online format was viewed as effectively meeting the needs of the group, the findings of the discourse analysis reveal there were times when technology interfered with an individual’s participation and when meeting time was spent resolving technology problems.

As neophytes encountering the challenges of teaching for the first time, the NSRF’s Consultancy Protocol was most useful. This protocol provided opportunities for members to bring dilemmas they face as teachers to the group in order to problem-solve possible solutions. Unlike veteran teachers, who do not have as many classroom management concerns and are ready to focus on protocols for analyzing student work, the leader found the novice teachers’ topics and concerns were most easily served by the Consultancy Protocol. The meeting transcripts show the dilemmas to be discussed during the group meeting were chosen based upon critical need and negotiation after everyone posted their dilemma online.

Leader: Tammy, you are raising your hand, does that mean you want to say something or that you are in dire need?

Tammy: Dire need.

Leader: Ok, anybody else in dire need? Ok, it doesn't look like anybody else is in dire need, so Tammy, we can definitely start off with you and then we can come back to the board, and we will see who else feels somewhat pressed or a need to get feedback.

As members presented their own dilemmas or offered advice in response to other's dilemmas, they transitioned between the roles of novice and expert by exploring solutions based on their own knowledge and experiences related to the topic. For instance, in the following discussion part of the consultancy, Cathy asked to discuss a problem with a child who is not completing classwork but is very capable. She is frustrated and looking for guidance from her peers. Having had similar situations, her peers offer advice and strategies they are currently using, placing them in the roles of expert and problem solver.

Leader: Ok then we'll spend the next 5-10 minutes discussing while Cathy is just listening, and speak from the "I". We are now open for discussion.

Mimi: I know certainly we all have students that we have that have distractions. I know that Laura has suggested for me to just be very explicit with instructions like okay, get out your reading book, and nobody needs a pencil, so put your pencil away in the cup or inside your desk. And talking about exactly what is going to happen. I just give real step-by-step instructions.

Linda: I, also have a student that um, takes a long time to get his work done. And I just had a conference with his parents and what we talked about was making a list for him to accomplish by the end of the day. This was the first day of it, so it was okay, but I can definitely see a potential in the child in being able to check off the list, yes I did this, yes I did that, and taking that note home to his parents so they could see it.

These novice and expert roles were repeated for each consultancy as peers offered solutions and strategies stemming from their own knowledge and experience with similar situations. In addition, by using the Consultancy Protocol each meeting, less time was spent on learning new processes, so more time was spent on content as shown by the percentages of conversational turns.

Another aspect of the virtual CFG's process that was affected by the nature of the group was that these teachers did not spend any time on building trust, creating norms, or building community, as illuminated in the analysis of the meeting transcripts. This group was already an established university cohort, whom had shared experiences via a retreat and classes that focused on creating norms and building a trusting community, which was easily adopted into the virtual CFG meetings.

Content.

The group's processes, the Consultancy Protocol, and the group's membership characteristics influenced the virtual CFG's content addressed during meetings. Content or topics for discussion were offered on a voluntary basis by the members, with the most critical ("dire need") dilemmas being brought to the group first. Analysis of the meeting transcripts categorized as content reveal that over 51% of the conversational turns were coded as behavioral concerns, followed by teaching and learning (25%), parental concerns (11%), administrative concerns (9%), and colleague concerns (4%). These findings are consistent with the literature on new teachers' challenges and feelings of isolation as one participant reflected, "The CFG is helpful in that it allows us to have a forum to be honest about the experiences we are having in our first year of teaching." The meetings transcripts and reflections show the group members had very similar dilemmas, as well as a clear pension for supporting members in these challenges: "It is nice to know that some problems are universal."

Sustainability.

Since involvement in the virtual CFG was part of a required Master's degree course and points were assigned for participation, sustainability of the group during the course was assured. Reflection data show the mandatory nature of the virtual CFG did not negatively affect feedback regarding CFG work. However, because the CFG was part of a Master's degree program, sustainability beyond the program would be unlikely. Without the set structure of the course context, facilitation by a trained leader, and the readily available technology provided by the university, face-to-face meetings would be difficult to schedule as the group was comprised of teachers at various schools within a 30-mile radius.

Impact.

After each CFG meeting, members were asked to reflect on: What was most helpful in regard to participating in

the CFG meeting?; What strategy have you tried that you heard about during a CFG session?; and Do you have suggestions for improving the CFG meetings? The most prevalent theme in these data was the sense of community that developed from participation in the CFG:

It has impacted me in that it has allowed me to stay in touch with a community of educators who are concerned about teaching their students . . . there have been several good ideas posed by my colleagues for me and for others, and I have tweaked some of the ideas to suit my needs. It helps me to remember that I have people I can talk to, and that there are other ideas out there.

This support helped teachers to not feel as isolated: “I think it is helpful to know that others have issues they are struggling with. Not that I’m glad for that, but sometimes I feel like I am all alone with my problems.”

Other impacts evident in the reflection data involve improving relationships with parents (e.g., “gained strategies to help communicate with a parent that is avoiding phone calls”), implementing classroom management strategies (e.g., “developed a checklist of responsibilities,” “assigned a buddy”), and building teacher-student relationships (e.g., “having one-on-one conversations to develop common grounds,” “getting to know the students and getting to know their interests”). The data also included a request that time be allotted during meetings to discuss previous dilemmas and how the advice impacted it. However, the priority of covering as many dilemmas as possible in each meeting was of greater importance than spending time reviewing past dilemmas and resultant outcomes. Notably, the data reveal nothing related to impact on student academic performance.

PORTRAIT OF THE ADVOCATING STAGE OF PROFESSIONAL LEARNING: VETERAN EDUCATOR CFG

Process.

When considering the processes of the veteran educator CFG, the members reported during the interviews that the group’s norms were crucial for building trust. This finding is somewhat surprising, as many of them had worked together for over 8 years. Further, they viewed the norms as a living document that had evolved

significantly over time, with a considerable amount of time spent revising the norms on a regular basis. While the group started with “a small set of norms,” over time “they’ve developed into a huge set of norms that come from the group.” After many modifications, the norms are viewed as a defining characteristic of the veteran educator CFG. Norms such as “willing to step up and be vulnerable” and “keeping it in the circle” made members feel safe to speak their minds. They acknowledged trust was built over time, especially through norm building. To illustrate the power of the norms, one member enthusiastically proclaimed: “May the norms be with you!”

Another key finding related to process was the high value placed on protocols during group meetings. The veteran educators felt strongly about the importance of their CFG work and attributed much of their success to the protocols. They perceived the protocols kept them on task and helped to “work really hard and really fast.” They found comfort in the known structures while sometimes working in uncomfortable arenas, as illustrated in these statements: “In that safety [of protocols] you are able to bring things that are not safe,” and “It [protocols] pushes you outside your comfort just enough to grow you just a little bit every time, so that’s good about the structure.”

Yet, the veteran educators did not view the protocols as set-in-stone. They challenged the protocols, including adapting them to their needs and discarding the ones not productive for the group. A member stated:

I can’t remember which protocol it was, but at the table, there were things that were said and I think that if I had been in any other group, I wouldn’t have had the courage to say, “Oh my gosh you guys made me feel like I had done, I forgot what it was. . . . It wasn’t that you all were being hateful or mean. You were following the protocol.” And what we found was that it was not a good protocol to use.

The protocols were not regarded as absolute guidelines; the members used them to support their work.

Another prevalent process of the group included the setting of meeting agendas and with this group of well-seasoned educators, they used a highly member-driven process. The leaders requested topics ahead of time and also the day of the meeting. All participants wanted to address pressing “hot topics,” and the agenda was created over a period of time through several cycles of revisions with finalization of the agenda at the beginning of the

meeting, supported by group consensus. Members agreed that the topics on the agenda came from the group and not the leaders and that members' problems are placed on the agenda if pressing. The word "need" was used extensively when members talked about the formation of the agenda: "Sometimes the whole agenda gets changed to what is needed."

However, the leaders aimed to increase members' participation beyond their input regarding the agenda or to the extent that all protocols expect engagement. The leaders of the veteran educator CFG wanted the members to facilitate protocols themselves with the hopes of decreasing the power differential between the leaders and members. The reflection data revealed that many of the members were not comfortable with this role and asked for repeated scaffolding, and the leaders did this via a process called "whispering in" when they would assist the members in facilitating protocols. One member stated, "They [leaders] are always asking for people to step in to see who wants to be a facilitator for whatever we are going to do. When I step in to that, I want them to be 'whispering in' my ears." In fact, none of the members expressed comfort or enjoyment in facilitating protocols during the CFG meetings. This was an unexpected finding as the members of this CFG are seasoned educators who train other teachers.

Content.

The veteran educator CFG had met and worked together for a long time, and the content focus of the group was situated in the higher developmental stages of Dunne and Honts' (1998) framework. The veteran educator CFG spent some time reading text pertaining to professional development as literacy coaches. They also frequently discussed student work in an in-depth way, which was reported as an especially meaningful aspect of the CFG work. They reported fulfillment in "getting to see student work through our processes." Furthermore, they worked on dilemmas related to: literacy curricula, roles as educators, and issues related to administrators. They shared how they approached their roles differently and similarly, including "practices and challenges."

Notably, the veteran educators allotted time for revisiting previously discussed dilemmas and any developments or changes related to these issues. That is, the members used some of their meeting time to report back on what they tried in their individual schools and how successful they were. This aspect is important given that traditional CFG protocols do not include any follow-up processes.

Sustainability.

Due to the mandatory attendance of the members, the veteran educator CFG had a baseline sustainability that was not challenged. Yet, an interview statement indicated that some members had missed a number of meetings. The long period of time over which many of the educators had worked together aided its stability. This was confirmed by the exclusively positive comments of the participants in one of the focus group interviews in regard to their community. On the contrary, discussion in the other focus group interview reveals embedded problems. Some members reported being new to the group and feeling excluded. The others in the room were puzzled by these statements and not aware of these issues. Moreover, some interviewees in the focus group mentioned they did not understand the purpose of the group and one said "[I] sat through a day not knowing what CFG stood for."

The veteran educators praised their leaders for their qualities and attributed much of the CFG's success to their competence. They were described as "positive and driven" and a requisite component for the group to thrive. Members complimented the group leaders' wisdom and their ". . . recognizing and honoring the needs of our learning community. They [the leaders] help us maintain focus and grow."

The reflection data reveal constraints related to time, including a desire to do more during the meetings but being restricted by time; the interview data illuminated the time issues more clearly. For example, members complained about a general lack of time, while expressing CFG work is time well spent. Some members expressed the long CFG meetings are a challenge because they take away from the daily duties at their schools. They also reported their administrators and peers were not happy about them spending a full day at CFG meetings, with questions about the necessity of the meetings arising, prompting some members to voice frustration with lack of administrator support. They suggested their administrators should experience the CFG so they could "know the depth of the work"; the members proposed starting CFGs at their respective schools with administrators as participants.

Impact.

Several impacts, including those both professional and personal in nature, were reported by the members of the veteran educator CFG. They described benefits related to reduction of isolation and to meaningful collaboration. While the members were seasoned educators, they were

the only literacy coach in their schools, contributing to feelings of isolation. One stated: "I used to think I was the only LC weak in coaching. Now I realize that this weakness is felt by other LCs." They indicated many positive effects from addressing problems and exchanging ideas in the group setting, and that this collaboration extended beyond the CFG. For many, collaboration became a way of working with others to the point that they "can no longer conceptualize doing the work without the support of a CFG," contributing to increased use of collaborative methods when working with teachers in their respective schools.

Also, the veteran educators described affective benefits related to their CFG work, as they reported in the interviews of being "energized" and "uplifted," as well as "having fun during the meetings." They described the group as being therapeutic while "challenging sometimes, crying sometimes, and laughing sometimes." Often the reflections are ended with affective statements such as "I loved it!!" without being solicited through the prompts.

In addition, the members described growth on a personal level, including how their relationships outside of the professional setting had been influenced by their CFG participation. They reported using norms within their families as well as changes in conversation styles and interactions with others, including improved listening skills. Many specific aspects carried over into their personal lives:

I'll even take it a step further with the norms, the Assume Good Will [norm] . . . when you have so many relationships with so many different people that one [norm] continues to stand out to me when there is an uncomfortable situation, to assume good will even beyond school. It's just one of those lifelong lessons.

The impact of CFG participation on the members' professional work was also revealed in the reflection data, particularly as members responded to the prompt "I used to think... Now I think..." The responses indicated that CFG participation had a positive influence on their reflective thinking regarding topics discussed, for example the member's professional roles as literacy coaches:

I used to think that being a literacy coordinator was only about work in literacy, but now I think that our role is much bigger. A catalyst for change. I used to think in boxes . . . too much of what I thought about the framework and my

role was segmented, and that made it more difficult to see how the role could shift without losing integrity. Now I think more holistically.

The members also found the content focus of their CFG work as meaningful to them. Therefore, many expressed their intentions to apply the newly gained insights to their work at the schools. Trying new things was not restricted to content but also extended to newly introduced protocols. Many reported they implemented protocols in non-CFG settings, including classrooms and other meeting-like settings. The successes and failures of the protocol implementations were discussed as follow-up in CFG meetings.

DISCUSSION AND CONCLUSIONS

The findings of this study confirm, challenge, and extend the extant research on CFGs. The results affirm: the value of using protocols and group norms for building community and trust (Curry, 2008; McDonald et al., 2013; NSRF, 2015); the importance of member-driven decision making (Feiman-Nemser, 2001; Fullan, 2001, Hargreaves, 2004); the criticism of CFGs stagnating in the trust setting stage without shifts in the content focus (Wood, 2007a); the salience of quality group facilitators for success and sustainability (Atchinstein & Meyer, 1997; Armstrong, 2003; Little et. al, 2003; McDonald et al., 2013; Murphy, 2001; Nave, 2000); and benefits of participation related to teacher affect and development, (Atchinstein & Meyer, 1987; Burke, Marx, & Berry, 2011; Little et. al, 2003; Wood, 2007b), including reduction of isolationism and individualism that has traditionally characterized teachers' work (DuFour, 2011; Heider, 2005; Lortie, 1975; Saranson, 1971). This study also examined CFGs with distinctive features not prevalent in the research literature, a well-established CFG and a virtual CFG, thus adding to the research base. The findings show that though the online forum afforded much, sometimes technology-related issues constrained teacher participation. In addition, the mandatory nature of participation in both these distinctive groups did not seem to cause participant resistance, contrary to previous findings (Wood, 2007b). Further, when considering the veteran educator CFG, the participants used their meeting time to report back on what they tried in their individual schools and how successful they were; this practice is in stark contrast to the other groups in this study and is a new consideration for the literature. Finally and notably, consistent with previous study, there were no reports of improved student academic performance related to CFG participation.

Growth Stages with Group Comparisons

Similar to the progressive stages proposed by Dunne and Honts (1998), the results reveal the CFGs as situated on a developmental continuum with three growth stages. Portraits of the CFGs and the three accompanying growth stages of establishing (PDS CFG), consolidating (virtual CFG), and advocating (veteran educator CFG), with associated stage nuances grounded in the findings, were a lens for the results. This conceptualization emphasizes the collective characterization of the sequence of predictable milestones, with each stage functioning as a necessary precursor for maturity on the developmental continuum. As such, each stage is essential and enables the required work of the stage in order for a CFG to grow and mature. Such characterizations parallel the work of noted theorists focusing on stages of teacher development (cf. Burden [1990], Fuller [1969], and Katz [1972]).

When comparing the three groups and accompanying growth stages, the establishing stage group's processes were marked with leader driven attributes, while the advocating stage group's processes were definitively characterized as member driven. In addition, for all stages the protocols and group norms were important to the groups' processes, though the virtual CFG's functioning was mostly influenced by the virtual environment. However, only the advocating stage group's processes included the flexible and adaptable use of protocols and norms based on the needs of the group.

In regard to content, the establishing stage group largely focused on community building and professional affirmation, while the consolidating stage group of novice teachers focused on problems of practice typical of beginning teachers such as classroom management and relationships with parents. The advocating stage group was notably characterized by content focused on student learning and work, as well as broader issues related to education. Only the advocating stage group revisited topics previously discussed and considered any changes in practices. This willingness to scrutinize and reexamine issues of teaching and learning was a hallmark of this group and stands in contrast to the other groups' tendencies toward more expedient group practices.

When considering sustainability, the findings suggest administrators should have a working knowledge of CFGs and provide support in both tangible and intangible ways for groups across the stages. In addition, leaders who are well-trained and well-suited for facilitating

CFGs were also important for sustainability regardless of stage. Time and competing school priorities were noted impediments. Teachers would benefit from having embedded time during the school day for CFG meetings, coupled with administrators' recognition of the added value of these meetings as a means of teacher development.

In terms of impact, all three groups reported reduced feelings of isolation and increased feelings of community. Across the stages, the groups' members valued the meetings as therapeutic, providing encouragement and motivation, and also noted improvements in interpersonal skills (e.g., listening, questioning, etc.). Disconcertedly, across all stages there were no reports of impacts on student learning and achievement, though the advocating stage group had a protracted focus on student learning and work. In addition, noteworthy impacts for this group include changing practices based on learning in the meetings, attempting to work more collaboratively in their respective schools, and becoming more reflective professionally. Interestingly, though for two groups (i.e., consolidating and advocating stages) member participation was mandatory, this did not adversely affect productivity. In fact, only the establishing stage group members were not required to participate, and this group could be characterized as the least productive.

REPRESENTATION OF DEVELOPMENTAL CONTINUUM OF THE STAGES: BECOMING CRITICAL FRIENDS

As shown in Figure 1, the findings of this study are presented on the developmental continuum of CFGs as related to process, content, sustainability, and impact and the associated growth stages. We recognize the fluidity and complexity of such a representation, including that CFGs could function at differing stages related to the four dimensions. The two extremes of the continuum, the initial stage of establishing and the mature stage of advocating, are described with the consolidating stage as situated between them. The representation is dynamic, such that within each stage there are gradations of growth. In general, the establishing stage represents a group of CFG members in their entry phase of becoming critical friends. As members of CFGs gain experience and build trust and a sense of community, these ways of functioning are becoming habits of practice in the consolidating stage. As groups become more cohesive and fluent in working together, over time there is a graduated progression toward the advocating

stage, with a focus on critical issues of supporting student learning and broader issues related to the lives of teachers. Ideally, a mature CFG would function at the advocating stage across all the dimensions of process, content, sustainability, and impact.

Based on the findings of this study, a neophyte group in the initial stage has a limited repertoire of knowledge and experience functioning as a professional group of learners, so it is not surprising that this group would be more rule-bound, rigid, and leader-driven. Whereas, the seasoned group at the mature stage has the experiences and synchronicity that permits them to be responsive

and flexible to best meet the needs and preferences of the group's members. Such findings parallel teacher developmental theory, with beginning teachers often focusing on self as teacher and progressing to a focus on students, colleagues, school culture, and school climate. In this study, the neophyte CFG members seemed to be absorbed in their own professional affirmation, whereas the consolidating stage group members began to focus on their students, including managing the classroom. The critical friends in the advocating stage group consistently prioritized student learning and work, as well as their professional roles as literacy coordinators and associated responsibilities.

Figure 1: Representation of the development continuum of the CFGs.

	Establishing Stage	Consolidating Stage	Advocating Stage
Process	<ul style="list-style-type: none"> • Leader driven • Rigid adherence to protocols and norms 		<ul style="list-style-type: none"> • Member driven • Adaptation of protocols, norms, and agendas based on group needs
Content	<ul style="list-style-type: none"> • Community building • Group norm setting • Affirmation as educator 		<ul style="list-style-type: none"> • Student work and learning • Roles as educators and influences on broader education context • Issues of curricula and instruction • Revisiting of content
Sustainability	<ul style="list-style-type: none"> • Effective group leaders • Affective benefits of participation 		<ul style="list-style-type: none"> • Effective group leaders • Affective benefits of participation • Group longevity • Similar educational roles with benefits of multiple perspectives
Impact	<ul style="list-style-type: none"> • Affective benefits • Increased collaboration with those inside group • Improved interpersonal skills 		<ul style="list-style-type: none"> • Affective benefits • Increased collaboration with those inside and outside group • Improved interpersonal skills • Improved reflective thinking • Changes in educational practices and thinking

One valid criticism of CFGs is spending too much time in the establishing stage and not progressing to a focus on student work and changes in teaching practice (Wood, 2007a). In our proposed developmental continuum, groups can become mired in a holding pattern of the typical work of a stage (e.g., protracted focus on setting norms) as exemplified to the PDS CFG. We argue that CFGs need to efficaciously engage in the work typical of a growth stage in order to progress to the work of a more developed stage. For example, CFGs in the establishing stage need to spend time building trust and community in order to have the habits of practice for effectively addressing student learning and work typical of a group at a more mature stage. CFGs will progress at different rates, with potential influencing factors including individual characteristics of members and facilitators, group context, changes in group membership and facilitator, and changes in school administration. Notably, the findings show the importance of the More Knowledgeable Other (MKO) (Vygotsky, 1978) in order for CFGs to flourish and mature. The MKO refers to anyone who has a better understanding or a higher ability level than the learner, with respect to a particular task, process, or concept. The MKO is normally thought of as being a teacher, coach, or older adult, but the MKO can also be a peer. The MKO in this study, the CFGs facilitators, were crucial to each group's functioning and development. When considering the practical implications of the proposed growth stages, CFG facilitators could benefit from knowledge of the stages, including the essential work of each stage, in order to move the group toward maturity. Moreover, group members and school administrators might similarly benefit. Within an educational context of increasing expectations often from external sources, for example the widely adopted Common Core State Standards (2010), CFGs need to function at higher levels of productivity focusing on improving instruction, student learning, and schools with the MKO playing a key role.

In addition, our representation of growth stages is linked with Wenger's (2010) conceptualization of communities of practice (CoP). CoP has been defined as groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly, with the learning that takes place as not necessarily intentional. The ways in which CoP become more effective parallel our examination of the three CFGs. The veteran educator CFG at the advocating stage had regularly worked together over many years and shared a common passion related to their role as literacy coordinators. The neophyte group, the PDS CFG at the establishing stage, needed to learn about one another over time and develop trust. In conclusion, as CFGs are increasingly embraced by U.S. K-12 schools as a model for reform and professional development of teachers, more empirical work needs to examine the efficacy of this approach. As happens too often, reform approaches in K-12 schools are implemented prior to careful scrutiny and vetting related to effectiveness (i.e., popularity preceding empiricism), as is the case with CFGs. In addition, inquiry focused on CFGs has largely been conducted by researchers associated with the NSRF, possibly posing the potential risk of introducing bias. For these reasons, we still have questions that need exploring related to our study. The proposed representation of the three growth stages warrants further investigation, particularly as related to the characteristics of the stages and associate nuances. In addition, what factors afford groups moving beyond the trust and community building of the initial stage toward maturity? What school supports need to be in place for CFGs to sustain functioning at the advocating stage marked with notable impacts? In addition to key components related to sustainability shown in the representation, the participants in this study also indicated endorsement by administrators, creation of time for meeting embedded in the school day, and a school culture that values CFG work as a model for reform. It is incumbent upon educational researchers to consider questions and issues such as these, especially in a context of widespread belief of CFGs as one panacea to the challenges facing school reform and teacher effectiveness.

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Images and Words that Reveal One Pre-Service Teacher's Ideological Becoming

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Abstract: This qualitative study examined tensions related to ideological becoming for Kassie, a preservice English language arts teacher, as she moved through her initial certification program. Data included words and images from Kassie's admission essay, two Draw A Teacher images, responses to two culturally responsive pedagogy surveys, and an interview post student teaching. Thematic analyses revealed Kassie's conflicting theoretical orientations to teacher education and afforded insights into our roles in shaping prospective teachers' ideological becoming. We realized that ideological tensions can function as resources for teacher educators who seek to foster transformative perspectives and critical sociocultural teaching practices.

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Keywords: cultural responsiveness, ideological becoming, linguistic diversity, sociocultural consciousness, teacher education

INTRODUCTION

Drawing on Bakhtin's (1981) concept of ideological becoming—the system of ideas that shape one's view of the world—this study examines how Kassie, a preservice English language arts (ELA) teacher, encountered critical sociocultural conceptualizations about learning that we foreground in our teacher education courses. Along with other researchers, we theorize the classroom as a place where ideological becoming occurs through the contact between internally persuasive and authoritative discourses (Freedman & Ball, 2004; Lewis, Enciso, & Moje, 2007). Internally persuasive discourses refer to the everyday, personal, and changeable worldviews each person brings to the classroom. Students must inevitably address the internally persuasive discourses of others, as well as the authoritative discourses that define what is already valued and taken for granted as true (Bakhtin, 1981). In considering the possibility for “unity” between the categories of internally persuasive discourse and authoritative discourse, Bakhtin writes:

But such unity is rarely a given—it happens more frequently that an individual's becoming, an ideological process, is characterized precisely by a sharp gap between these two categories: in one, the authoritative word (religious, political, moral; the word of a father, of adults and of teachers, etc.) that does not know internal persuasiveness, in the other internally persuasive word that is denied all privilege, backed up by no authority at all, and is frequently not even acknowledged in society (not by public opinion, nor by scholarly norms, nor by criticism), not even in the legal code. The struggle and dialogic interrelationship of these categories of ideological discourse are what usually determine the history of an individual ideological consciousness. (p. 342)

Thus, we presuppose a constant state of tension between internally persuasive and authoritative discourses as

individual teachers and their students develop their systems of ideas over time.

We theorize the productive role of the tension between internally persuasive and authoritative discourses in promoting learning opportunities across classroom contexts (Chubbuck, 2010; Johnson & Johnson, 2009). Recognizing, moving through, negotiating, and balancing such tensions characterize learning as ideological becoming (Freedman & Ball, 2004). Although the Russian word for ideology does not carry the political connotation of its English counterpart (Bakhtin, 1981; Freedman & Ball, 2004), collectively, we understand learning and teaching to be social and political. In multilingual and multicultural classrooms in large urban districts like ours, teachers' decisions are inevitably social and political as they determine how they will reconcile tensions between internally persuasive discourses and authoritative discourses; their curricular decisions, for example, may respond (or not) to the multitude of perspectives and voices they encounter among the students in their classrooms.

We want to prepare preservice teachers (PSTs) to take on identities as agents of transformative change. Specifically, we seek to support our students in conceptualizing and enacting a pedagogy that is culturally-responsive, asset-based, socioculturally conscious, and situated. These are the central tenets we privilege when we refer to critical sociocultural teacher education.

This paper is an analysis of data collected over the course of one PST's teacher education program as part of a larger study. We examine Kassie's (a pseudonym) ideological becoming as she applied to our program, experienced her first semester of coursework, and completed student teaching fieldwork. We identify the tensions she expressed in words and images, and explore how ideological tensions can function as resources for teacher educators who seek to foster transformative perspectives and critical sociocultural teaching practices. We ask the following questions: What ideological orientations does Kassie express during her teacher education program? What can we learn about supporting beginning teachers' ideological becoming by closely examining Kassie's specific ideological tensions?

THEORETICAL FRAMEWORK: IDEOLOGICAL BECOMING AND THE IDEOLOGICAL ENVIRONMENT

A substantive body of research illustrates the myriad "competing centers of gravity" (Smagorinsky, Rhym, & Moore, 2013, p. 148) that can exist for teachers who graduate from student-centered teacher education programs and encounter teacher-centered, assembly-line school and district environments (Altwerger, Arya, Laster, Jin, Martens, & Renman, 2004; Davis, Sydnor, Daley, & Coggin, 2017; Smagorinsky, Gibson, Bickmore, Moore, & Cook, 2004). These studies identify multiple factors, including the "apprenticeship of observation" (Lortie, 1975, p. 61) as well as issues of identity, agency, and power, that can account for "praxis shock" (Smagorinsky et al., 2004, p. 214)—the realities of contemporary classroom life that may overwhelm beginning teachers who complete "progressive" teacher education programs grounded in the philosophies of Dewey, Vygotsky, Bruner, and others.

Bakhtinian theory suggests that emerging worldviews are mediated by the ideological environment, which includes others and their idea systems (Freedman & Ball, 2004). Teacher education classrooms, teacher educators, classmates, university supervisors, cooperating teachers, students, and local district and policy contexts—all of these aspects of the ideological environment shape beginning teachers' views of the world and are important to consider when accounting for how particular worldviews develop (or don't develop) among beginning teachers.

Complexities and productive struggles arise when teachers' worldviews transform or are challenged in the face of competing ideologies (Sydnor, 2014). Davis et al. (2017) argue for the incorporation of engaging with purposeful tensions in teacher education coursework as a means of exposing ideological conflicts and working toward resolutions (rather than simply being frustrated by a theory-to-practice disconnection beginning teachers may encounter in their careers). They engage their teacher candidates in the roles of teacher, principal, and parent as part of a hypothetical school community that is adopting a particular assessment or reading program. Such conversations inevitably provoke contact between internally persuasive and authoritative discourses.

Sydnor (2014) documents the ideological tensions faced by Erica, a beginning elementary school teacher, as she encountered the ideologies of her cooperating teacher, teacher education program, and school site. "This meant taking them up, trying them on, dismissing them, talking back to them, or approximating them" (p. 8). This study

and others indicate that teachers can engage in learning as ideological becoming even in the face of praxis shock. Recognizing ideological tensions may be the first step in acting in ways consistent with one's ideology. Indeed, as Pace (2006) notes in her synthesis of Bakhtin's concept of ideological becoming: "independent, discriminate thinking (what we now might call "critical literacy")" (p. 585) is the capacity to separate internally persuasive discourses from authoritative discourses.

Striving toward a critical sociocultural ideology in teacher education

We espouse a critical sociocultural theoretical orientation in our teacher education courses, which illuminates the roles of power and identity as consequential to the learning experiences for marginalized groups in schools across the United States (Lewis et al., 2007). To support PSTs' learning about power and identity in schooling contexts, we explicitly encourage culturally responsive stances toward the diverse populations they will encounter in schools (Lazar, 2007; Mills & Ballantyne, 2016). Our stance moves beyond respecting cultural diversity to actively validating students' home cultures, an aim shared by many educational approaches to transformative teaching (Howard, 2016) and multicultural education in "a socio-political context" (Nieto, 2003).

We recognize the impact of the internally persuasive discourses that PSTs bring with them to teacher education. Britzman (2003), in her seminal critical ethnography of two student teachers contends, "The taking up of an identity is a constant social negotiation that can never be permanently settled or fixed, occurring as it necessarily does within the irreconcilable contradictions of situational and historical constraints" (p. 42). As teacher educators, we are part of PSTs' contradictory ideological environments; therefore, we play a central role in their socialization to the teaching profession.

Shaping critical sociocultural becoming

We take up the challenge posed by Villegas and Lucas (2002) to assist our PSTs in becoming culturally responsive and adopting an "affirming orientation toward student diversity" (p. 38). However, as they progress through our program, PSTs must take up and/or reject different ideologies about teaching, learning, and schooling. They encounter competing authoritative discourses from course instructors, mentor teachers, university supervisors, media, and classmates, and must navigate layers of contradictory ideological contexts.

In fact, the research literature in higher education has documented how different stakeholders in pre-service teacher education may view teaching episodes and lesson plans from distinct pedagogical perspectives depending on their (ideological) goals and (pedagogical) intentions (Bullough & Draper, 2004; Ellis & McNicholl, 2015; Tillema, 2009). Even completing field experiences in diverse school settings (i.e. urban, underserved, high poverty) too often can result in universities "checking the diversity box" for accreditation purposes (Allen, Hancock, Lewis, Starker-Glass, 2017, p. 8) or perpetuate PSTs' deficit perspectives that linguistic and cultural differences are "problems to overcome."

In an illustrative example, our PSTs encounter "best practice" authoritative discourses when they must note demographic characteristics on official lesson plan forms. Such a practice may dilute and essentialize the diverse backgrounds and experiences of students into quantifiable, homogeneous, and seemingly fixed categories, thereby essentializing students in terms of race, class, and gender and ignoring the complexity of students' cultural and linguistic identities and resources. To support PSTs' critical sociocultural becoming, we engage them in practices intended to interrogate such authoritative discourses. We introduce students to funds of knowledge (González, Moll, & Amanti, 2005) and promote practices that support linguistic diversity (Ruiz, 1984; Young, Barrett, Young-Rivera, & Lovejoy, 2014) as valuable intellectual resources.

It is our goal to facilitate students' movement on a continuum from sociocultural dysconsciousness, toward exhibiting cultural awareness, and then adopting more socioculturally conscious tenets (Villegas & Lucas, 2002). We recognize that "when academic knowledge and skills are situated within the lived experiences and frames of reference of students, they are more personally meaningful, have higher interest appeal, and are learned more easily and thoroughly" (Gay, 2002, p. 106). We also recognize PSTs may notice inequities within school settings and instructional practices, but they may not know how to address them (Daniel, 2016). Ultimately, we hope our graduates are knowledgeable in ways consistent with Paris' (2012) culturally sustaining pedagogy which requires that we "support young people in sustaining the cultural and linguistic competence of their communities while simultaneously offering access to dominant cultural competence" (p. 95).

METHODS

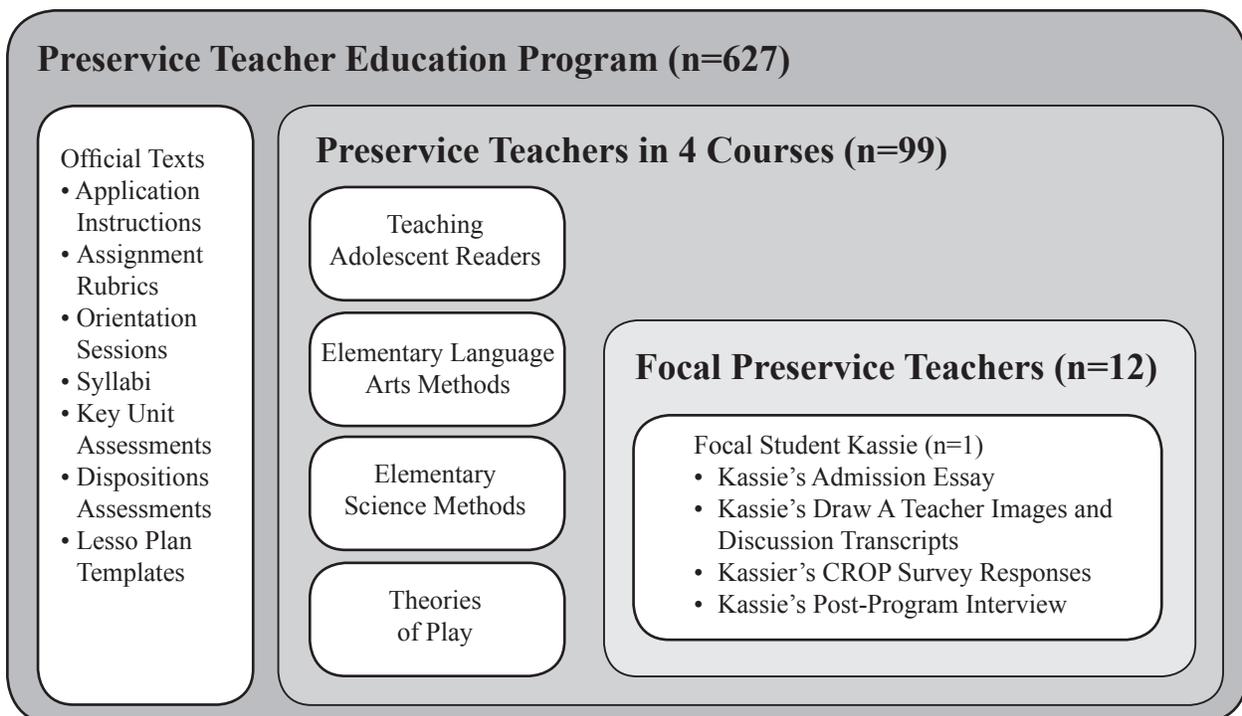
Sociocultural processes such as teacher education are best studied using qualitative and interpretive research methods (Kamberelis & Dimitriadis, 2005), particularly when a study is geared toward “insight, discovery, and interpretation rather than hypothesis testing” (Merriam & Tisdell, 2015, p. 42). We developed a nested design (Spindler, 1982) to organize our research (see Figure 1). The outside layer is the context—our preservice teacher education program, which is embedded in our College of Education’s mission. It includes official texts (Taylor, 1996) such as application instructions, and events, such as the orientation meetings students experience. These are communications of an authoritative discourse against which we and our preservice teachers must work to develop a more critical sociocultural perspective.

The next layer includes 99 PSTs in four initial certification teacher education courses. We thought seriously about how each of these students’ Draw a Teacher images (described in the next section) positioned the creators as novice professional educators-to-be and us, as its viewers (Rose, 2016). For example, a few images represented stern teachers standing in blank spaces; some images included students or well-

provisioned classrooms. Some images appeared to be hastily constructed, simple line drawings while others were detailed and artistically compelling. We followed practices from Tobin, Hsueh, and Karasawa (2009) to make intentional decisions as we selected twelve pairs of images with content and aesthetics that engaged our emotions and provoked questions. The twelve students who created these images became our focal students after we confirmed that they also represented early childhood through secondary teaching majors and mirrored our students demographically.

We recognized it was appropriate to understand one student’s early steps toward becoming a teacher as an information-rich case wherein “one can learn a great deal about issues of central importance to the purpose of the inquiry” (Patton, 2002, p. 230). We selected Kassie, an aspiring middle and secondary ELA teacher (at the center of the nested design) because we were intrigued by her Draw a Teacher images and accompanying descriptions. In particular, her description of her first image as “dressing the part” provoked questions for us. We wondered how her representations of herself as an aspiring ELA teacher reflected or contradicted our courses’ ideologies.

Figure 1: *Nested nature of Kassie’s data*



We realized that Kassie was a typical pre-service teacher in our program and in teacher education programs across the United States (Garcia, Arias, Harris Murri, & Serna, 2010; Sleeter & Milner, 2011). She is white, female, and in her early twenties. In high school, Kassie was a “model student” and was conscientious about her academic achievement. As a college student, she was an active leader in her community, as she was in high school (e.g., she was the captain of her high school dance team and worked in a leadership capacity on a student activities organization at the University).

Data sources and analytic tools

The following data were collected in our larger study, with the exception of the post program interview, which only involved Kassie. When data collection began, Kassie was a junior in her second semester of the professional education program.

Admission essays

To apply to the professional phase of our clinical model teacher education program, pre-service teacher candidates respond to questions in an essay, such as “What experiences, knowledge, expectations, or beliefs have led you to want to become a teacher?” (see Appendix A for Kassie’s essay). Kassie’s essay provided access to the internally persuasive and authoritative discourses that shaped her initial ideas about teaching.

Draw a Teacher images and discussion transcripts

Next, to invite a multimodal depiction of their ideas related to teaching and the role of teachers in instructional environments, we asked students at the beginning of the semester in four courses to “draw a teacher” (Weber & Mitchell, 1996; Ticknor, 2016). We purposefully left the assignment directions open to see how participants would fill the page. Students responded in myriad ways: colorful and plain, detailed and simple, teachers alone and teachers embedded in scenes with materials and learners. At the completion of each course, students repeated the task and elaborated on and clarified any confusing elements of their drawings; they reflected on any changes they noticed between their initial and subsequent renderings. Small group conversations were recorded, transcribed, and coded. Kassie was enrolled in an early program course, Teaching Adolescent Readers, when she drew the images included in this paper.

Cultural Responsiveness Orientation Profile (CROP)

Like the other student participants, Kassie completed

the CROP (Chisholm, Davis, Jacobi-Vessels, Laman, Weiland, & Whitmore, 2014)—a survey of participants’ beliefs and behaviors related to cultural responsiveness—early in her first semester and then eleven months later. The 32 Likert-type (strongly disagree=1 to strongly agree=5) survey questions prompt respondents to claim a position on topics related to students, such as the role of first language in school, the political nature of teaching and literacy, and the positioning of traditionally marginalized students by curriculum and assessment. Two sample items are:

- Reading and writing are always political acts.
- Parents, especially low-income parents, need to be educated about how to help their children become readers and writers.

CROP responses over time, allowed us to see change, or lack thereof, in our students’ orientations toward sociocultural consciousness.

Post program interview

After successful completion of her studies and our analysis of the data described above, we invited Kassie to participate in a 60-minute semi-structured interview. We wanted to reflect with her on her learning and the ideologies demonstrated in the data over her 30-month experience in our teacher education program. Prior to the interview, we copied and shared with Kassie her admission essay, two Draw a Teacher products, and two CROP surveys. As a theoretical sampling strategy, the interview helped us systematically explicate emerging themes and advance our analysis (Charmaz, 2014).

Data analysis

We initially read through all of Kassie’s data sources individually and discussed themes we noticed. This dialogue promoted trustworthiness in the coding process (Smagorinsky, 2008). Next, one of us took the lead with the varied data sources for open coding and a second researcher provided another perspective. We coded the Draw a Teacher images according to the meanings of school artifacts and icons included: presence of students, language, gestures, and dimensionality and size, for example. We coded the admission essay and post program interview transcript thematically, identifying patterns related to Kassie’s perspectives on teaching and learning (Charmaz, 2014). Analysis of the CROP survey included calculating items that evidenced contradictory positions as well as developmental movement toward or against a critical sociocultural view of teaching and

learning. With initial coding complete, we reconvened as a research team to read across the data set, deliberated our categories, confirmed patterns, and recognized complications and shifts in Kassie's thinking and actions as she moved through the program and a student teaching.

We wrote analytic memos to theorize these insights. We paid special attention to contradictions in the data, which ultimately led us to discussions on ideological positions and points of tension among them. We completed our analysis by identifying and deconstructing two rich data points in Kassie's language—dense sentences that communicated intertwining oppositional positions.

FINDINGS

Through our analyses of Kassie's words and images, we identified points of tension that portrayed Kassie's emerging worldviews as a preservice ELA teacher. We describe how she occupied competing ideological perspectives about teachers and students—and specifically expressed competing positions within the same data source, a phenomenon that makes sense to us given all of the new circumstances and texts that Kassie was being charged to integrate with her existing model of teaching. Analyses of these data afforded insights into our roles in shaping prospective teachers' ideological becoming, too—a finding that we address in the Discussion.

Occupying competing ideological perspectives about teachers

Kassie's words and images expressed her thinking about teachers at several points during the program. In her admission essay, Kassie stated, "I thrive on teaching others what I have been taught." She also accentuated teachers' organizational skills when she wrote:

Being organized is a very important component of being a teacher; it is essential that you keep all of your students' materials organized as well as making sure your lesson plans and classroom are in order.

Early in her first semester in the program, Kassie's Draw a Teacher image (see Figure 2) indicated an additional conceptualization of teachers as "dressing the part." Her drawing included accessories such as a teacher bag and a fashionable skirt. Kassie described her drawing:

She's wearing glasses, and she's dressed very professionally...I guess this reflects, like who I want to be because she's like—a very professional, like, put-together lady. I value that she has a teacher bag because I guess that means that she takes her work home with her and really puts a lot of attention [on] her students and their work and stuff like that.

Figure 2: Kassie's first Draw a Teacher image



Figure 3: Kassie's second Draw a Teacher image



Further, the image in Figure 2 expressed a "sage-on-stage" orientation to instruction in the positioning and dimensions of the teacher that was represented again in Kassie's second Draw a Teacher image (Figure 3). In the first drawing, a solitary, impeccably dressed and accessorized teacher figure floated in the center of an undifferentiated space and dominated the frame; in the

second, Kassie positioned herself in the center of the page but added classroom accouterments, including baskets where students should “turn in” and “pick up” assignments. Students were not only missing in both images, but their assumed identities included that they were English speakers.

We recognize that Kassie also expressed a commitment to her students. She wrote that she wanted to inspire them to be “lifelong learners” in her admission essay, and she indicated that teachers work hard when she drew the large teacher bag in her first Draw a Teacher. She illustrated that teachers are creative by drawing a lightbulb above her head in the second Draw a Teacher.

Kassie’s commentary on her second Draw a Teacher image, at the end of a semester that focused on teaching with young adult (YA) literature, exemplified incremental shifts in her thinking:

I have a YAL (young adult literature) text in my hand just because I think before I took this class; I didn’t really realize the importance of including YAL texts IN the class. I’ve kind of been taking into consideration how many different types of texts I need to be including in my curriculum.

This reflection signaled emerging perspectives about the importance of a variety of texts for her students that reflect their interests and lives.

Although we recognized some contradictions in Kassie’s admission essay and her Draw a Teacher images, the following nascent position related to critical sociocultural orientations toward literacy teaching and cultural responsiveness could also be found: the teacher is not only an implementer of procedures but also a source of inspiration for students. We asked Kassie to reflect on these data and our interpretation of them several semesters later in the post program interview. Kassie characterized her admissions essay as “really idealistic” and she “noticed that she drew a lot from what [her] mom told [her] about teaching.” Across data sources, Kassie noticed how her goals as a teacher shifted from a focus on preparing students to go into higher education to promoting “lifelong learners.”

Kassie rationalized her first Draw a Teacher image saying, “This is what I’ve seen teachers looking like,” and implicated our program’s role in developing this orientation: “What we’re told to do is, ‘look professional and do what the teacher asks you to do.’ So I dressed the part and acted the part when I was told to do so.” She characterized her second image as “much more

intentional.” Kassie recognized that she occupied the center stage in a classroom and realized missing elements of her current teaching practice: she noted, for example, that there was a “lack of technology” and no place for “expectations and procedures.”

Occupying competing ideological perspectives about students

We uncovered competing ideologies about students in Kassie’s perspectives on cultural responsiveness as well, particularly regarding her thinking about the politics of cultural and linguistic diversity. We used our survey instrument (CROP) to uncover Kassie’s positions on a continuum between deficit and affirming perspectives about students’ cultural, socioeconomic, and linguistic diversity.

A number of Kassie’s responses indicated a deficit perspective. For example, she strongly agreed (CROP 1) and agreed (CROP 2) that “parents, especially low-income parents, need to be educated about how to help their children become readers and writers.” With regard to bilingual learners, Kassie agreed on both surveys that “Teachers should correct bilingual learners’ language errors immediately” and that “English language learners should practice vocabulary word lists.” Further, Kassie thought that if students’ “errors” weren’t corrected, for example, their academic development would suffer. As Kassie acknowledged in her post program interview, “if [students] wrote a paper, I would correct their grammar or their spelling in that sort of sense, just so they learn.” These responses hinted at a language-as-problem, rather than language-as-right or language-as-resource orientation (Ruiz, 1984), and reinforced a monolithic view of language and literacy. They reflected a socioculturally dysconscious perspective because they implicitly endorse a skills-based understanding of literacy in which grammar is mechanical and language is static (Villegas & Lucas, 2002).

However, a holistic review of Kassie’s responses on the CROP also demonstrated affirming perspectives, which are part of becoming socioculturally conscious. For example, on both surveys, Kassie valued students’ first languages when she agreed that: “Children make more meaning when they have discussions in their own language,” that “Teachers should allow children access to materials in their own language,” and that “Teachers should value children’s home languages as opportunities for literacy learning.” Furthermore, Kassie strongly agreed that “Children have the right to speak their home languages in the classroom” and that “Teachers should know about their students’ cultures in order to teach.”

Not surprisingly, Kassie's responses on the CROP indicated contradictory perspectives. She valued students' right to their first languages, but still felt compelled to correct English learners' language errors. She claimed empathy for students who spoke languages other than English in an English-speaking classroom, but failed to conceptualize language as an asset at home and a resource at school. She generally accepted mismatches between her own and her students' identities, but did not critically examine her own cultural stance, to the extent that opportunity was made available to her. Kassie's competing ideologies made visible tensions between the positions that languages should be respected, valued and even leveraged in classrooms against the position that teachers should correct students' language "errors" and use vocabulary lists to teach.

Looking closely at intertwined ideological perspectives about teachers and students

We now look closely at two rich data points to further illustrate how Kassie's competing ideologies are intertwined within single sentences. In one sentence from Kassie's admission essay and one from her description of her second Draw a Teacher image are traces of the vocabulary and terminology she was likely exposed to in pre-admission education courses. We underlined words and phrases that hinted at our critical sociocultural goals for her as a teacher and we italicized words and phrases that indicated an underlying socioculturally dysconscious philosophy.

Kassie wrote in her admission essay:

My goal is to inspire my students to *implement what I have taught them* in their daily lives, no matter what their own unique goals may be, and to create lifelong learners.

She described her second Draw a Teacher image, in which she drew a light bulb over her head:

I've got the light bulb above my head because I really want to like, inspire my students to think critically and inspire new ways of thinking.

The underlined language that indicated critical sociocultural goals are: inspire, daily lives, own unique goals, lifelong learners, think critically, and inspire new ways of thinking. The italicized words and phrases that indicate an underlying socioculturally dysconscious philosophy are: implement what I have taught them, no matter what, and my head. While the light bulb Kassie

drew and described can be interpreted as a symbol of her pedagogical thinking, creativity, or reflection, we also note that the light bulb is over her head, and not her students' heads. Kassie was driving the learning activity in her classroom; it was not the students who were actively constructing, initiating, or questioning.

A moment of "switching" and "being sneaky": Sociocultural ideological becoming

We asked Kassie to consider our analysis of her competing ideologies in a post-program interview. Kassie commented on the differences in her representations of teachers in her two drawings: "I started to realize, there's so much more" in addition to "dressing the part." She characterized a "switch" she made from "she's got caffeine and looks like a teacher" to becoming "much more intentional." As she reflected on contradictory items on the CROP, she confirmed a language-as-right ideology about learners: "That's your language, that's your culture. I'm down with that."

Kassie told a story about a moment during her student teaching placement, when she could incorporate YA literature and poetry into her teaching (thereby enacting her expressed desire she had drawn earlier). Almost immediately, her decision was met with potential conflict. Kassie was preparing for an observation by the principal that could lead to a job offer. She had prepared a lesson pairing a YA memoir and a piece of poetry with Farewell to Arms (Hemingway, 1929/2012) until she learned that the principal "preferred canonical texts [which] made [students] much more well-rounded citizens and conversational [when they] were exposed to those traditional sort of texts." After some deliberation, she decided to move ahead with her original plan.

Ultimately, Kassie was pleased to receive "really great feedback" from the principal, who asked during a debriefing following the observation, "So how does this [YA literature] fit [in the curriculum]?" Kassie had a sound rationale prepared that emphasized how the YA literature provided a modern perspective on issues in the canonical text and made the content more "relatable." The principal applauded Kassie's selection of texts and said that "[i]t was good for the AP students she was working with." In other words, the principal positioned AP students as a particular group for whom pairing canonical texts with contemporary YA texts was especially appropriate. Kassie said, "In the back of my mind, I thought, 'What about the other students, too, 'cause they could really use that relation to their real life?'" At the conclusion of the interview, she stated, "It kind of started to make me realize that if you have

a principal that doesn't want you to teach something, it might make it harder. You have to be sneaky to incorporate it into the curriculum."

DISCUSSION AND IMPLICATIONS

Our analysis of Kassie's data revealed her shifting thinking and competing ideological perspectives about teachers over time and across experiences as a PST. Her words and images indicated both socioculturally dysconscious (e.g., "dressing the part") and socioculturally conscious (e.g., deciding to use YA literature) ideologies about what teaching is and who teachers are. Her CROP responses emphasized how unsure her footing was in the area of culturally and linguistically responsive pedagogy. She claimed students have the right to their own languages and that all languages should be valued, but was not comfortable leaving students' deviations from standard English uncorrected at school. Representations of Kassie's thinking seemed characteristic of a novice in any field who uses all available information and resources to try on a new identity. Kassie's curricular decision to include literature that she knew her students would connect with and learn from demonstrated her knowledge about how to support her students' reading experiences. We see this pairing of a required text from the canon with other YA texts as a first step, and yet we recognize the sophistication of this choice so early in her career.

However, Kassie's reflection on the interaction with her principal demonstrated increasing awareness of how students gain and/or are denied access to the curriculum based on their academic tracks. "You have to be sneaky" illustrated Kassie's growing sense of the politics and power embedded in schools and how teachers, acting in their students' best interests, have to negotiate conflicting theoretical and pedagogical perspectives in the same physical space. Kassie's story suggested she had "the disposition to reflect on [her] own practice in order to glean from experience insights that will make [her] teaching increasingly responsive" (Villegas & Lucas, 2002, p. 110-11). Along with Villegas and Lucas (2002), we see Kassie's ideological becoming toward sociocultural consciousness as a profession-long process.

As teacher education researchers note, substantive ideological changes in pre-service programs can challenge sociocultural dysconsciousness, and addressing tensions inherent in competing ideologies can be productive (Villegas & Lucas, 2002). Research indicates that teachers can work strategically to teach in their students' self-interests even when faced with

policies that require standardization and position students from deficit perspectives (Schmidt & Whitmore, 2010; Vasquez, Tate, & Harste, 2013).

This literature also recognizes teacher educators' contributions to these tensions and developments, and we couldn't help but note all of the ways in which institutional authoritative discourses—policies, admission writing prompts, and dispositions assessment tools—promote particular ways of thinking about teaching that work against our goal to support socioculturally conscious teachers. It should hardly surprise us that Kassie prioritized dressing professionally, establishing rules and routines, and organizing classroom space over inquiring into her prospective students' identities and languages, or recognizing how power influences the trajectory of their learning in her classroom. Many of our institutional evaluation documents—from admission to graduation, and developed largely in response to accreditation requirements—stress precisely such ideas, thereby reinforcing a socioculturally dysconscious ideology about teaching and learning. We realize our limited capacity as individuals to affect our pre-service teachers' ideological becoming.

The findings from this study inform our work with beginning teachers by drawing attention to the ways in which grappling with the competing authoritative discourses of their teacher education programs and the schools in which they are working operates in their thinking. These competing discourses are not always negative or unproductive. Although Kassie's words and images showed evidence of multiple authoritative discourses, in the story about interacting with her principal there is evidence of her increasingly reflective stance and agentic decision making, two elements of sociocultural consciousness (Villegas & Lucas, 2002) which are shaping her own internally persuasive discourse. Like Campbell & Dunleavy (2016), we also recognize that PSTs like Kassie may begin to notice educational inequities and opportunity gaps for students, but PSTs often have the least power to change these circumstances during field experiences.

"It is realistic, however, to expect prospective teachers to come away from their pre-service teacher education programs well on the way to becoming responsive educators" (Villegas & Lucas, 2002, p. 110). In order to prepare prospective teachers to become socioculturally conscious and advocates for their students' learning, we need to understand how ideological becoming occurs (or doesn't) for PSTs and how our practices inform these identity shifts. Because of this close look at Kassie, we now are more aware of the need to ask our students to

unpack and identify the tensions in their own ideological becoming. Our awareness can contribute to how teachers come to see themselves from “dressing the part,” to “being sneaky,” to boldly standing on theoretical ground that provides students with curriculum they deserve.

Appendix: *Kassie’s Admission Essay*

Throughout my life, I have always been a student. I enjoy learning new skills and implementing the new things that I learn into my everyday life. Even outside of the classroom, I have always been involved in dance lessons, music lessons, academic organizations and various other extracurricular activities. I feel like I am a wellrounded person because all of the opportunities I have had to learn. So, when I was deciding what career to pursue when I came to the University, the transition from learning to teaching seemed only natural. As much as I love learning, I thrive on teaching others what I have been taught. Although I am passionate about many different subjects, I have an enthusiasm for English, and aspire to teach it at the high school level. I want to give my students a solid foundation in English basics as well as encourage their critical thinking skills. My goal is to inspire my students to implement what I have taught them in their daily lives, no matter what their own unique goals may be, and to create lifelong learners.

I also feel like I possess skills that would make me an effective teacher. One of these skill sets is that I take initiative and am a leader. I was captain of my dance team in high school, and even had the opportunity to coach a middle school dance team for 3 years. These opportunities gave me the chance to find techniques of effective leadership and allowed me to make important decisions and take the initiative of setting team goals. Setting class goals would also be a useful tactic to use in the classroom. I am also a student staff member, and I am learning many ways to hone my leadership skills to make me the most effective leader possible. Being a staff member also helps me to feel comfortable taking initiative and talking to a large group of students. Hopefully, I can help my students recognize leadership potential within them and inspire them to take initiative, both inside and out of the classroom. Another quality that would make me an effective teacher is that I am prompt, professional, and organized. I always keep a planner, and I make sure that I am wellprepared for meetings and assignments. I am also prompt for appointments, and act in a professional manner during class and during my observations. Being organized is a very important component of being a teacher; it is essential that you keep all of your students’ materials organized as well as making sure your lesson plans and classroom are in order. Professionalism is also important when dealing with administrators, parents, and colleagues. One last attribute that I possess that would assist me in being an effective teacher is that I respect people’s differences. I recognize that I will encounter many types of diversity in my classroom, and I enjoy meeting and interacting with people from different backgrounds and learning from them. I also realize that my students will have different goals upon graduating; some may be attending college, while other may be immediately entering the workforce. My goal would be to best prepare my students for their chosen path and encourage them to make their personal best even better.

I am looking forward to helping students academically as well as helping them become more wellrounded members of society who will continue to learn throughout their lifetimes.

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Instructional Coaching: Enhancing Instructional Leadership in Schools

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Abstract: With an increasing emphasis on improving the quality of instruction in schools, it is no longer the sole responsibility of the principal to be the instructional leader. Rather, by distributing leadership with instructional coaches who have leadership capacity, the important task of improving instruction is shared across a leadership team (Neumerski, 2013). According to Steiner & Kowal (2007), instructional coaches work closely with administrators to bring research-based, best practices to teachers. Instructional Coaches may spend time working with groups of teachers and may have other administrative responsibilities, but their main task is to bridge instructional leadership by providing classroom modeling, supportive feedback, and observations of individual teaching practices. This manuscript examines the key features of effective instructional coaches, including skills, roles, and strategies. Examples of the authors' coaching experiences are included, with empirical strategies and insights into instructional coaching as a viable path to impact teacher practice and student performance.

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INTRODUCTION

Twenty-five years ago, new teachers received a set of textbooks for their students, a teacher's edition of the textbook with a resource kit, and a room full of students six periods each day. Armed with those resources, the novice teachers created lessons that they deemed rich and engaging, hoping to make an impact. Over the years, as the teachers' responsibilities have expanded and become more demanding, the resources for teachers started to vary and become more substantial. From computers to Smart Boards, teachers are now provided a wealth of information and tools designed to ensure their students' success. One resource that is invaluable for 21st century school accountability, complex standards, high-stakes testing, and this age of Every Student Succeeds Act (ESSA) is the position of Instructional Coach, with the purpose to help close the student achievement gap and accelerate learning for all students by building teacher capacity through implementation of effective instructional practices. (Casey, 2006).

Instructional coaches – also referred to as literacy/math coaches, curriculum specialists, lead teachers, or resource specialists – were created to assist school instructional leadership as a support system for teachers. The concept of coaching originated from the premise that effective teachers could coach colleagues into becoming effective as well, thereby positively affecting teachers and students. Some districts have coaches at the central office location who visit the schools and work with teachers a few times each month, while others have coaches on site to work more intimately with principals, teachers, and students. When moving from the classroom into the coaching role, coaches learn that working with teachers is just as demanding and rewarding as working with students. The goal of coaching, however, is to lead teachers to growth whether those teachers expect to grow or not. When making the transition from teacher to coach, many coaches struggle with how to reach teachers and succeed in the process. Although this task of transitioning is not always easy, it can be accomplished with tools and strategies that can strengthen instructional leadership.

REVIEW OF LITERATURE

Overall, the professional literature about instructional coaching is conclusive. When coaches are trained properly and are confident in their work, they can achieve positive outcomes for principals, teachers, and students. Much of the literature on coaching consists of surveys of teachers and coaches and case studies of specific coaching programs. The literature reviewed in this article offers tips and strategies to help Instructional Coaches maneuver through the ever-changing world of education so that they can impact others.

Numerous articles and books have been published about instructional coaching and what makes these programs fail or succeed. The research suggests that instructional coaching programs succeed when they are properly implemented and consistently sustained.

According to Kowal and Steiner (2007) there are three broad categories of skills under which effective coaches operate, including pedagogical knowledge, content expertise, and interpersonal capabilities. Pedagogical Knowledge consists of an understanding and experiential base of how students learn with an ability to effectively use questioning and classroom management techniques. Content Expertise entails a thorough understanding of the subject area and the curriculum being used, as well as the ability to use data and differentiated instruction to drive instruction. Interpersonal Capabilities are the ability to build trust and to encourage and inspire teachers to improve their practices, leading change in an organized, assertive, positive manner (Knight, 2016).

One way coaches can ensure success is to view their work as the support teachers need to achieve positive outcomes for students. Coaches should recognize that different teachers have different needs, and they (coaches) have to be equipped with the tools and skills to determine the level of support that each teacher needs. Tony Borash (2011) uses the swimming metaphor to illustrate the various needs of teachers. Some teachers simply need encouragement; the coach only needs to talk them through planning a lesson or helping them to brainstorm solutions to simple problems. They may only need to ask a few questions about assessment. These teachers only require a talk, not for the coach to dive in to rescue them. Others may need the coach to “Reach.” They require more than a talk; they need a helping hand. This assistance may come in the form of a resource to help the teacher or some extra time to plan lessons. As more teachers require more assistance, Borash extends the metaphor to “throw, row, and go and tow.” These teachers require more support in the form

of modeling, lesson planning, and providing classroom management. The trick as a coach is recognizing when to step in to assist and how far to go. Joseph Wise and David Sundstrom (2010) examine teachers’ perceptions of the role of administrators and instructional coaches. They present a list of behaviors teachers want from their coaches. One practice that teachers desire is for coaches to “give respectful, specific feedback” (1). They also suggest that teachers want coaches to consider “various learning styles” (p. 2). When working with teachers, coaches have to consider that not all teachers are the same and have different needs. Teachers are in various stages of their careers. Ellen Moir of The New Teacher Center proposes specific areas for direct mentor [coaching] support, including modeling of best teaching practices, understanding of standards, assessment techniques and lesson planning, and delivery strategies, plus the ability to reflect and co-learn (2010). First year teachers may well require more support than a veteran; yet, a veteran who has failed to consistently grow may need an extra push to start moving.

Jim Knight (2018) offers three approaches to coaching: facilitative, directive, and dialogical. The approaches vary according to the needs of the teacher. The facilitative coach operates as a sounding board for teachers, not sharing her expertise but instead listening and asking questions. The teacher (coachee) does the decision-making in this approach. The directive coach shares specific knowledge that may be needed to improve. Knight states,

The directive coach’s role is to help the coachee master a certain skill or set of skills. The directive coach and coachee relationship is similar to a master-apprentice relationship. The directive coach has special knowledge, and his job is to transfer that knowledge to the coach. While the relationship is respectful, it is not equal (p.11).

Finally, the dialogical coach is similar is facilitative because inquiry drives the discussions. The teacher and the coach are partners in the experience, where the teacher is an active player in the process of planning, construction, reflection, and interpretation. Whatever the circumstance, coaches need the skill to discern teachers’ various needs and to offer the right approach and support needed for success.

Another way to ensure that coaches are successful is to create clear goals. When administrators know what they want their coaches to accomplish and provide clear instructions and training for coaches to accomplish

those goals, the program will be successful. Fullan and Knight (2011) make the assertion, “Next to the principal, coaches are the most crucial change agent in a school” (p.50). In their study, they discovered that the coaches who were most successful were the ones who worked closely with their administrators to accomplish clear goals. Coaches who did not succeed were the ones who were placed in “impossible situations” and “collaborated poorly with administrators” (p.51). In their research, Fullan and Knight discovered that many districts across the United States were offered grants to fund a coaching program. With little vision and non-specific goals, they selected exceptional teachers, provided them little training, and gave them poorly defined responsibilities. The research even revealed schools that “exhibited a kind of organizational attention deficit disorder, jumping from one initiative to another before achieving meaningful change” (p. 51). The results were disheartening because coaches were unable to do the most critical work. Most of the coaches grew frustrated and returned to the classroom the very next year. In order for coaching to be successful, district officials and administrators must offer specific guidelines, goals, and training for coaches.

The literature also suggests that coaches form a partnership with teachers. Teachers are professionals and have been trained to complete tasks with skill. Many teachers can assist instructional coaches in a number of ways. Jim Knight (2011) proposes seven partnership principles that are important in valuing the partnership between teachers and coaches. One of the most important principles is equality. Knight states, “In true partnerships, one partner does not tell the other what to do; both partners share ideas and make decisions together as equals” (p.18). Knight also asserts that problems arise when people start to feel that someone thinks he/she is better than the person he/she is helping. If teachers think the coach sees them as less than adept at their jobs, they may resent the coach’s help. Therefore, coaches should approach the work as a partnership valuing the skills that teachers possess. According to Wise and Sundstorm,

The entry point into every formal and informal coaching conversation must start with and remain grounded in the teacher’s strengths, especially when we want to areas of opportunity for the teacher to change, grow, and improve her craft. (p. 3).

Jacque Scarbrough (2011) writes an open letter to a new coach. Scarbrough suggests that coaches should never push their way in, but instead allow teachers to take the

lead based on what they need or what is not working. Scarbrough states, “Most of the time, teachers have the answers; they just want someone to validate that they are fighting the good fight” (p. 2). Building on the teacher’s strengths will foster the relationship between the teacher and coach.

Modeling is another critical practice that the literature emphasizes. The best coaches are comfortable stepping into a classroom to demonstrate a lesson for a teacher or a group of teachers. Modeling is the best way to lead teachers to an understanding about a specific practice, technique, or strategy. Teachers often say in a workshop setting that what the presenter is saying makes sense, but they do not quite know how to implement that practice with students. Modeling corrects that problem. Katherine Casey (2011) writes, “Teachers need to see effective instructional strategies in action before they can make them their own” (p.24). In order to develop a vision of effective instruction for teachers, great coaches are willing to provide live demonstrations. Casey offers tips for coaches when modeling for teachers: 1) Develop a Clear Purpose; 2) Think Aloud While Teaching; 3) Engage Observing Teachers. She also suggests videotaping lessons or showing teachers professional videotapes and discussing what they notice about effective teaching. Sanstead (2016) explains that coaches should be willing to take risks while modeling, knowing that the lesson may not be the best. Sanstead explains:

Model lessons are valuable coaching tools even if they don’t go well. It’s powerful for teachers to watch you fail, reflect, and reteach successfully. And it’s essential to maintain humility, honesty, and sincerity when working with teachers. They need to know that you too struggle to make the curriculum fit the students, that you understand the time involved in preparing lessons, that you value the support of colleagues, and that you are willing to take risks (p. 79).

Modeling provides the best way to show teachers that coaches are right there with them through the process and are willing to take risks to help students and teachers improve.

The most common thread among most of the literature surrounding instructional coaching is building relationships. According to Wise and Sundstrom (2010), the number one practice teachers want from the coach is to “build trust” (p. 1). Teachers have to be able to confide in their coach, especially when coaches spend

time observing in their classrooms. Martha Sanstead (2016) explains that the best approach to building a solid relationship is meeting teachers where they are. Sanstead states,

Being a coach is not about being the expert who knows it all; it's about immersing yourself in teachers' classrooms so you can learn about the world they have created and who they are as professionals. It's about getting teachers to think deeply about where they are as teachers and providing support and encouragement to nudge them forward. (p. 78).

Teachers need to know that they can trust the person who will be working closely with them. Jim Knight (2011) explains the relationship piece as critical. Knight asserts, "Even if we know a lot about content and pedagogy and have impressive qualifications, experience, or post graduate degrees, people will not embrace learning with us unless they're comfortable working for us" (p. 18). The best coaches discover ways to build and sustain relationships with teachers. Once the door to positive relationships is open, the coach can proceed with nurturing those teachers.

EMPIRICAL TIPS ON INSTRUCTIONAL COACHING PRACTICES

1. Build Relationships

Instructional coaches, especially those new to a school, quickly discover that the most important strategy to achieving success is building relationships. Relationships built on trust and respect will help coaches reach teachers and students. Teachers are more willing to open up and share their concerns and insecurities when they believe they can trust the coach.

For instance, a veteran coach, started her coaching career in a school where she had taught for 11 years. Most of the teachers in the school had worked alongside this colleague and trusted her judgment and expertise. They were excited for the career move. She had already established relationships with that group of teachers so the transition to coaching at the high school was not difficult.

This same coach was also sent to the (K-6) elementary school to coach their teachers. She was coming from an upper level English classroom and now would be tasked with coaching teachers of kindergartners and first graders. The learning curve was substantial. Since she

did not know these teachers well, her first step was to develop relationships with these teachers. Treating them as experts, her goal was to learn from them, to understand the inner workings of an elementary classroom, and to show them that she was willing to support them the best way she possibly could. Building and sustaining relationships in this setting became critical if she ever expected to accomplish any goals. The approach was more of a partnership, valuing their experience while inquiring about the decisions they made. The coach and the teachers were able to recognize and use their strengths to help their students succeed. Coaching must remain mindful that relationships are the cornerstone of any coaching program.

2. Remain Connected to Students

In order to demonstrate competence, instructional coaches need to be able to speak from their current practice. Teachers often question consultants and coaches about the amount of time they spend in front of students. They pass (non-verbal) judgment when the coach provides a resume of teaching experience, but this experience excludes a current classroom. Effective coaches understand that in order to reach their teachers, they too must be connected to students. Operating as a teaching coach allows a coach to speak from current practice. When a teaching coach wants to model a lesson or demonstrate how to build community, she may invite teachers to observe her class. Although the coach may model lessons in a teacher's classroom, her own class serves as a training ground to demonstrate routines and procedures as well as to teach standards-based lessons. For beginning teachers, this approach is invaluable. New teachers may observe a coach in class to see how to effectively begin a class, provide transitions, end class, or manage the classroom. One example is a bathroom procedure. In the struggle with cell phones, one school was having a problem with students leaving the classroom (to go to the restroom), but they meeting with other students instead. At the beginning of the school year, the coach implemented the "cell phone/hall pass" swap. In order to receive the hall pass to leave the room, students must turn in their cell phones. The teacher explained this technique at the beginning of school, and it easily became a part of the daily routine. Teachers could not understand how this technique could work without students resisting. Therefore, many of them would observe the technique in action. When the teacher and coach would meet after the class, the discussion easily transitioned into expectations and respect. When the classroom culture is set with clear expectations and respect, a technique such as the cell phone/hall pass swap is easily maintained.

The instructional coach's classroom operates as a fish bowl. Teachers take notes and ask questions about decisions involving planning, strategies, and management. The coach's classroom provides an additional resource that can be used to have productive dialogues with teachers.

One of the first actions when a teacher is promoted to coach is to move her out of the classroom. Instead, the teacher should continue to teach for a portion of the time. While at the elementary level this option may seem more difficult because elementary teachers have the students all day. If this is the case, another solution may be offered. Perhaps a team-teaching or co-teaching approach may work in this setting. Either way, continuing to engage in the practice of teaching assists coaches in honing their craft as well as providing them a training ground for the individuals they are coaching.

3. Develop Leadership Skills

Effective coaches need to maintain a growth mindset in order to strengthen their leadership skills. When making the transition from teacher to coach, one of the most important attributes is leadership. Most coaches exhibited leadership skills as a teacher, which is one of the reasons they were encouraged to become a coach. Coaches should work closely with principals to create leadership teams, set clear goals, determine school needs, and use data to drive instruction. For example, if a coach steps into a leadership role and does not know the standards clearly, she must seek out workshops that will help her not only learn the standards, but also teach her how to convey those standards to the teachers she is helping.

Coaches must be willing to find conferences and workshops that will help them grow. Reading professional literature (books and articles) about education and leadership can help coaches improve their practice and remain focused on strengthening their leadership skills.

Another way coaches can develop leadership skills is to facilitate coaching sessions. They can model for other coaches the best ways to communicate with teachers, model for teachers, and improve instruction. Continuing to grow is necessary to reaching others.

4. Model for Teachers

Effective coaches are comfortable going into teachers' classrooms to model lessons. Like students, teachers need to see a model of the expectations. Often teachers

will admit that they do not know how to implement an initiative or execute a strategy. Modeling can be done in two ways. One, a coach may model in front of a group of teachers. During PLCs, the coach can model the strategy that the group is discussing and have teachers walk through the strategy like they would with their students. Often, however, teachers may complain that their students are not as captive an audience as teachers. In that case, the coach may offer to teach a lesson using the strategy with their students. Teachers observe as the coach uses the strategy with their students. When debriefing the lesson, the group may discuss what they noticed and next steps. Other times, teachers struggle with getting students to master a specific standard or skill. Again a demonstration may help to deepen students' comprehension or writing skills. This approach allows teachers to see that students are capable of accomplishing the expected standard when they are provided the scaffolds and resources to help them succeed.

One example of modeling occurred when teachers did not know how to effectively implement a reading program. Instead of simply telling students to "do" the activity, the coach modeled for a first year teacher how to frontload the lesson, connected the article to their current literature, and videotaped the lesson for other teachers as well. The results were astounding. Teachers reflected on the lesson and noted that the simple strategy of frontloading the lesson made a huge difference in how students reacted to the article. Once teachers started connecting the articles to their lessons and taking a few minutes to frontload with a brief discussion, students' responses deepened and their comprehension strengthened. Modeling is one of the best ways to help teachers improve.

5. Build in Planning Time

Coaches need to build time into their schedules to plan with teachers on a regular and ongoing basis. While building relationships and modeling are effective practices, making the time to plan with teachers provides the one-on-one interaction that moves teachers to action. If teachers can visualize the thinking that goes into developing engaging, standards-based lessons that begin with "the end in mind," they will be able to eventually create their own backward designed lessons (Wiggins and McTighe, 2004). Teachers need to understand how to make decisions about summative and formative assessments and which assessments help to provide information about students' skills. Teachers need help when planning lessons that drive instruction based on data. Helping teachers to make data-driven

decisions is one of the best uses of an instructional coach's time.

One example of this occurs with junior high teachers at the beginning of the year. The teachers work together to plan their big units for the year ensuring that no overlapping occurs. Teachers vertically align their units, examine their overarching goals, and determine (based on data) which skills need to be reviewed and which skills need to be retaught. The coach participates in this meeting to help teachers plan four big units. Additional individual planning time is scheduled later. The coach is instrumental in having teachers focus on data, standards, and skills. The content and resources are discussed as well. Planning with the instructional coach provides teachers with opportunities to ask questions and share ideas that will improve instruction.

6. Remain Focused on the Goal

Often coaches may lose focus, especially when given a variety of additional duties. When clear objectives are not set for coaches, they may find themselves performing administrative duties that take them away from time with teachers. For instance, coaches have been asked to handle discipline issues, lead IEP meetings, or monitor bus issues. These tasks, while important, are not the tasks that an instructional coach should be completing. They take the coach away from the most important goal, which is improving instruction.

To maintain the focus on the goal, four components are essential for effective coaching:

- Student achievement: Coaches must be mindful that the overall goal when working with teachers is to improve student learning. Sometimes the focus on testing, data, and day-to-day managerial tasks can distract teachers, coaches, and administrators. Pulling a coach to handle other issues because the coach is "available" tends to become common practice. The coach has to be protective of her time, reminding others of the primary goal. Though these conversations may be difficult, they must occur when the coach notices that her attention is shifted from students and teachers.
- Equity: Coaches are responsible to ensure that all students are served. At times, coaches may be asked to step in to assist with the bottom 25%, to ensure they are receiving the help they need to grow. Working with teachers is critical in helping these students to succeed. However, coaches have to be mindful of every student, included those who are gifted. Coaches assist

teachers in differentiating instruction to meet the needs of all learners.

- Instruction/assessment: Coaches help teachers understand that assessments must align with quality instruction as well as the major differences between formative and summative assessments. During planning, coaches help teachers create assessments that inform instructional decisions. These formative assessments (for learning) are used throughout the lesson to check for understanding. Summative assessments are planned before the units begin so that teachers are constructing the learning throughout the unit. These assessments (of learning) tell teachers what students have learned after the unit has been taught. Teachers then use the data from the assessments to make informed decisions about future lessons.
- Closing the achievement gap: The overarching goal for coaches is to assist schools in closing the achievement gap. Coaches have the experiences and resources to determine which students need more attention. They can work closely with counselors, interventionists, parents, and administrators to provide the extra attention needed to help students succeed in moving forward. Keeping the primary focus on closing the achievement gap will help our schools and help our society. Coaches can be instrumental when they have clear goals that focus on students and teachers.

CONCLUSION AND IMPLICATION

Instructional coaches are an asset and increasingly vital component of instructional leadership for schools in the 21st century. When implemented correctly and sustained properly, instructional coaches can help teachers improve instruction, build strong and equitable academic programs, and provide students with the skills needed to succeed in a competitive society as contributing citizens.

It is recommended that further research be conducted on distributing instructional leadership through instructional coaching in K-12 schools. With intentional focus on pedagogy, content knowledge, and interpersonal skills, efforts to study models and methods of instructional coaching will offer timely information and guidance to improve schools in the areas of teacher and student success.

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Secondary Data Analysis of Weight and Height from Hispanic High School Students: Model Waist Circumference

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Abstract: The lack of waist circumference (WC) measurement during a regular physical examination has been an obstacle to estimating the prevalence of the metabolic syndrome utilizing retrospective studies. The purpose of this study was to develop a regression model to predict WC in children using secondary data analysis of weight, height, age, sex, and ethnicity. From the 325 participants, 65% were females and 92% were Hispanic. The results demonstrated a statistically significant ($r = 0.82$, $p = .05$) relationship of the square of weight reciprocal and the square of height represented in the model equation $1/WC = 0.00487 + 15.97667 (1/\text{weight})^2 + 1.127996 \text{ E-}7 (\text{height})^2$. The model is suitable for use in retrospective studies, which lack direct measurements of WC among Hispanic high school students with similar socioeconomic and cultural backgrounds. The results may be significant to healthcare by calculating WC and prevalence of metabolic syndrome using retrospective studies.

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Keywords: linear regression, metabolic syndrome, waist circumference, Hispanic students

INTRODUCTION

Investigators interested in estimating prevalence of the metabolic syndrome, utilizing retrospective data, found that waist circumference (WC) is not measured during regular medical examinations. Waist circumference is a measurement that efficiently assesses central (abdominal) obesity (Zimmet, Magliano, Matsuzawa, Alberti, & Shaw, 2005). Central obesity is one of the five factors of the Adult Treatment Plan III (ATP III) working definition of the metabolic syndrome. Adult Treatment Plan III metabolic syndrome was defined for adults who meet at least three of the following five risk factors (1) waist circumference greater than 40 inches in men or 35 inches in women, (2) serum triglycerides level greater or equal than 150 mg/dl or specific treatment for this lipid abnormality, (3) high-density lipoprotein cholesterol level of less than 40 mg/dl in men and 50 mg/dl in women, or specific treatment for this abnormality, (4) systolic blood pressure greater than 130 mmHg and diastolic blood pressure greater than 85 mmHg or

specific treatment for this abnormality, and (5) fasting plasma glucose greater or equal to 100 mg/dl or specific treatment for this abnormality (Grundy et al., 2005).

In April 2005, the International Diabetes Federation published a new consensus worldwide metabolic syndrome definition for use in clinical practice (Alberti, George, Zimmet & Shaw, 2005). The person to be defined as having the metabolic syndrome must have central obesity as a prerequisite risk factor plus any two of the following four factors; (a) triglycerides level greater than or equal to 150 mg/dl or specific treatment for this lipid abnormality, (b) high-density lipoprotein cholesterol level of less than 40 mg/dl in men and less than 50 mg/dl in women, or specific treatment for this abnormality, (c) systolic blood pressure greater than or equal to 130 mmHg, and diastolic blood pressure greater than or equal to 85 mmHg, and (d) fasting plasma glucose greater than or equal to 100 mg/dl, or previously diagnosed Type II diabetes (Alberti et al., 2009).

RESEARCH DESIGN

Secondary data collected in 2004 and reported previously was analyzed. The database contained the following variables: (a) date, (b) grade, (c) age, (d) sex, (e) weight, (f) height, (g) obesity categories, and (h) ethnicity. These variables were used to design the research question with WC as the dependent variable (measured in centimeters); and independent variables such as weight (measured in kilograms), height (measured in centimeters), age (recorded in years), sex (male and female), and ethnicity of Hispanic (yes, no). The data was provided in Statistical Analysis Software (SAS). The database was exported to Statistical Package for the Social Sciences© (SPSS) Version 11.0 format to perform the statistical analyses (Rentfro et al., 2011).

DATA SOURCE

The study site was at School A within a large school district in the southernmost region of the United States (U.S.) along the Texas / Mexico border. The participants were 325 adolescent students attending 9th through 12th grades.

PARTICIPANTS AND DATA COLLECTION PROCEDURES

Rentfro et al. (2011) identified 2064 students in high school A and invited them to participate in her study. Complete sets of blood specimens and data were collected from 325 adolescent students attending 9th through 12th grades ranging in age from 15 to 18 years of age. Informed consent was obtained from the participants' parents. Pregnant or disabled participants were excluded from the study. In 2004, the high school enrolled student profile had an estimated population of 46,996 students of which 11,278 were high school students. Of the student body, 92% were of Hispanic origin, 93% were economically disadvantaged, 71% had limited English proficiency, and 8% were members of migrant workers' families. According to the 2000 U.S. census, the population of the city where the school is located was 139,722 with 91.28% Hispanic and 53,410 (38.22%) were under the age of 19 years.

DATA ANALYSIS

Secondary data of weight, height, age, sex, and ethnicity were analyzed using the multiple linear regression analysis. For this study, all adolescents who self-

identified as non-Hispanic were excluded. Therefore, ethnicity was not used as an independent variable. The SAS program was used to perform descriptive analysis (percentages, median, and quartiles) for demographic characteristics and scatter plots graphs were used to identify outliers. The model assumptions were checked. The model assumed that the values of the independent variables weight, height, sex, and age, were independent of each other. The linearity of all independent variables against the dependable variable, WC, was checked by visualizing the graphs. All variables were checked for the normality assumption using the Normality Kolmogorov-Smirnov test. The variables were not normally distributed; appropriate transformations were made. The Bartlett's test was used for homogeneity of the variances.

If assumptions were violated, transformations were performed, and all assumptions were rechecked.

The Cp Mallow test identified the variables that were needed in the model. In the process of choosing the best model, the stepwise procedure was used. The residuals were plotted to check for poor residual behavior such as non-constant variance, needing transformation, any curvature using jackknife residuals, and leverage diagnostic plots. The Normality Kolmogorov-Smirnov test was used to examine normality assumptions. Several variable transformations were made, and the test Cook's was used to evaluate outliers. Outliers were converted in missing values. The F test was performed to choose the final model.

RESULTS

Of the 325 participants, 65% were females and 92% were Hispanic. The median age was 16 years for both male and female participants. The median WC measurement for males was 85.0 cm and 81.4 cm for females. The median weight was 74.0 kg, (males) and 61.30 kg (females). The median height for the males was 169.70 cm and 158.10 cm for females (See Table 1).

Outliers of the variables height, WC, and weight were converted into missing values. Linearity assumption for continuous independent variables weight, height, and age against the dependable variable WC was checked. Finding that the independent variables weight and height followed the linearity assumption, and age did not follow the linearity assumption. WC, weight, height, age, and sex did not follow a normal distribution ($p = .01$). To meet the normality assumptions, the dependable variable WC was transformed. The transformation that showed better fit in the normal distribution was the waist circumference reciprocal (WC reciprocal).

Table 1: General Characteristics of the High School Study Participants

Variable	Sample Size for Males	Median for Males	Interquartile Range for Males	Sample Size for Females	Median for Females	Interquartile Range for Females
Waist circumference (cm)	109	85.0	22.4	203	81.4	16.7
Weight (kg)	111	74.0	24.2	197	61.3	18.0
Age (yrs.)	112	16.0	2.0	203	16.0	2.0
Height (cm)	111	169.7	9.7	199	158.1	9.1

The homoscedasticity assumption was checked for the transformed WC reciprocal on each of the following independent variables weight, height, age, and sex. The hypothesis of homoscedasticity held for weight, height, age, and sex ($p = .10$) was found. The scatter plots were accepted to check the linearity assumption of the variables WC reciprocal, weight, height, and age, finding that the height followed the linearity assumption. Weight did not follow the linearity assumption, but it followed a quadratic behavior. Age did not follow the linearity assumption.

The first model consisted of the WC reciprocal as a dependent variable and the independent variables used were weight, height, age, and sex. The normality test for the residuals on the first model did not follow a normal distribution. The second model consisted of the WC reciprocal as a dependent variable and the independent variables used were weight, height, and age. The normality test for the residuals on the second model was checked, finding that the residuals did not follow a normal distribution. The independent variable weight was transformed to meet the normality assumption for the residuals. The results of the normality test indicated that weight reciprocal was the best transformation.

The third model consisted of the WC reciprocal as a dependent variable and the independent variables as age, sex, weight reciprocal, and height. The normality test for the residuals on the third model was checked finding that the residuals did not follow a normal distribution.

To normalize the dependable variable because the distribution of the residuals was skewed and to linearize the model, the independent variables of the weight reciprocal and height was squared.

The fourth model consisted of the WC reciprocal as a dependent variable and the independent variables as weight reciprocal, square weight reciprocal, height, square height, age, and sex. The normality test for the residuals on the fourth model was checked finding that the residuals did not follow a normal distribution. The Cp Mallow was used to simplifying the decision on the number of variables needed, finding that age and sex were not significant in the explanation of the dependable variable. The weight reciprocal, square weight reciprocal, height, and square height were used in the stepwise procedure to select the best model.

The fifth model included the dependent variable WC reciprocal and the independent variables weight reciprocal, square weight reciprocal, square height, and height. The normality test for the residuals on the fifth model was checked finding that the residuals did follow a normal distribution.

The sixth model consisted of the dependent variable WC reciprocal and the independent variables used were square weight reciprocal, and square height. The normality test for the residuals was checked finding that the residuals did follow a normal distribution. The results of this model are shown in Table 2.

Table 2: Estimated Multiple Linear Regression Model with Dependable Variable Waist Circumference Reciprocal and Several Independent Variables

Variable	Regression Coefficient	Standard Error	P-value
Intercept	0.00487	0.00056311	<.0001
Weight Reciprocal Square	15.97667	0.46052	<.0001
Height Square	1.127996E-7	1.838177 E-8	<.0001
R ² =0.8243			

Models five and six were the top two models. Model six, however, was the best one. The decision was based on the sum of square results, estimated error variance, p-value, coefficient of determination, and the distribution of the residuals. The partial F test was performed to assess which one of the two top models to keep. The best model was the one with the dependable variable WC reciprocal and the independent variables square weight reciprocal and square height. The best model equation was $1/WC = 0.00487 + 15.97667 (1/\text{weight})^2 + 1.127996 E-7 (\text{height})^2$.

CONCLUSIONS AND RECOMMENDATIONS

This section includes the study overview, interpretation of the findings, and comparisons of the findings to the literature. In addition, includes study generalizations, limitations, the implication of the study to leadership, recommendations for future actions and studies, summary, and conclusions.

OVERVIEW

The study used secondary data of weight, height, age, sex, and ethnicity to develop a regression model to predict WC in children. The data base had a sample size of 325 adolescent students who were attending 9th through 12th grades with ages ranging from 15 to 18 years of age. The Informed consent was obtained from the participants' parents. Pregnant or disabled participants were excluded from the study. The variables weight, height, age, sex, and ethnicity were analyzed using descriptive and inferential statistics. A predictive model was developed for waist circumference (WC) using two of the most commonly collected variables, weight, and height. The best model provided an $R^2 = 0.8243$ showing that 82% of the variation in WC can be explained by the independent variables square of weight reciprocal and square of height. The overall F statistic is significant. The t statistics reveal that the two independent variables, the square of weight reciprocal and square of height are strong predictors of the dependable variable WC. The residual test results did not show any assumption violations. However, a slightly curved shape was observed on the jackknife residual plot and the leverage plot.

Interpretations of Findings

The selected model can be helpful in the prediction of WC when working with retrospective data and having

weight and height measures available. The model equation can convert height and weight to a more meaningful value that could be used in a practice setting to identify at health risk adolescents when the WC is unavailable. The following is an example that shows the simplicity of model usage: The medical record of a 14-year-old Hispanic male who was seen by his provider one month ago has documentation as it relates to weight (68.3 kg) and height (188 cm). If this chart were to be included in a study of metabolic syndrome, the WC for the child could be derived from the equation of the model: $1/WC = 0.00487 + 15.97667 (1/68.3)^2 + 1.127996 E-7 (188)^2 = 81.39 \text{ cm}$.

Comparisons of the Findings to the Literature

The current research supports the research findings of Ashwell and Gibson (2016) who found in a quantitative correlational study that the standardization of the ratio of waist-to-height could help the public health sector by identifying early health risks at a minimal cost. Lam, Koh, Chen, Wong, and Fallows (2015) cross sectional study stated that the combination of the measures BMI and waist to height ratio could be used as a predictor for cardiovascular disease.

In adolescents, however, WC may be misleading depending on their stage of puberty. Studies have shown that there are significant sex and age differences between WC and intra-abdominal fat (IAF) (Schwartz et al., 2013). The significant differences in the anthropometrical parameters (height, weight, and WC) depend on the chronological age and biological maturation (Müller, Müller, Hildebrandt, & Raschner, 2016). Body dimensions of the adolescent girls increase with sexual maturation (Eveleth, 2017). The age at menarche influences the fat mass but not the distribution of IAF and subcutaneous fat (Syme et al., 2008). Girls during puberty have a higher proportion of their total adult fat mass than of their total adult lean tissue mass (Landgraf et al., 2015).

Generalization

The findings of this study could not be generalized because the model cannot be used for all populations, but only to students from this particular high school. Results cannot be extrapolated to a different population of students as described above unless the Hispanic student population has similar general characteristics.

Limitations of Study

There were four types of limitations found in this study with volunteer participants. The first one is that there were more girls than boys; WC could be affected differently because there are significant sex differences in central body fat distribution (Kuk, Lee, Heymsfield, & Ross, 2005). The second one is the non-response bias due to participants who did not meet the study requirements such as parental informed consent or the participants changed their mind. The third one is the response bias. Studies have shown that volunteers' participants tend to be healthier than the general population. The fourth one is the selection bias. We cannot assure that the participants that were screened had the same characteristics as the ones that were not screened.

Implications of the Study

The study has significant implications for nurses and healthcare providers. Nurses and healthcare providers may use the results of this study in retrospective studies that lack WC measures. In addition, nurses and healthcare providers can use the findings from this study to enhance positive changes such recording waist circumference as part of the routine patient assessment.

Recommendations for future studies

The purpose of this study was to develop a regression model to predict WC in children using secondary data analysis of weight, height, age, sex, and ethnicity. The method, sample size, target population, data collection, and data analysis limited the current study.

The first recommendation for future studies is to use a secondary data base with a larger sample and different educational institutions. A larger and diverse sample may enhance the generalizability of the research findings.

The second recommendation is that future studies measure participants' WC. The WC measure can be used to corroborate the new polynomial models. Health care providers and nurses will enhance the confidence in calculating the WC after the results have been validated.

CONCLUSION

Using independent variables of weight, height, age, and sex, the quadratic weight reciprocal and quadratic height helped to predict the WC for this Hispanic High School population. The results may be significant to healthcare by calculating WC and prevalence of metabolic syndrome using retrospective studies.

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Suspensions and Special Education: An Examination of Disproportionate Practices

Laura Richard
Lindsey Hardin

Abstract: Research has shown that disproportionality is a significant problem in the areas of socioeconomic status, gender, and race. However, few studies look at disproportionality in the area of special education and discipline. The purpose of this study was to examine disproportionality in one school district and determine if disproportionality existed between special education and regular education students, male and female, or White and Other races.

The sample included discipline records of 4,293 students in 41 schools. Results of a loglinear analysis showed that disproportionality in suspensions is greatest for white males receiving special education services. Understanding the relationship between special education students and suspension rates can provide insight to school staff and support service providers who work with special education students.

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Keywords: disproportionality, special education, suspension

INTRODUCTION

Prior studies on disproportionality have looked at school suspensions through the lens of socioeconomic status, minority status, and gender. Such studies have indicated that individuals with a lower socioeconomic status are more likely to be suspended than other students (McElderry & Cheng, 2014). The same disproportionality exists for both individuals who are part of a minority group (Cagle, 2017; Haight, Gibson, Kayama, Marshall, & Wilson, 2014; McElderry & Cheng, 2014; Porowski, O'Conner, & Passa, 2014; Skiba, Horner, Chung, Rausch, May, & Tobin, 2011) and individuals who are male (Haight, Kayama, & Gibson, 2016). Missing is a forum on disproportionality as it relates to special education students. Understanding how school suspension disproportionately affects special education students will help educators and administrators seek interventions that will prevent avoidable suspensions. The National Center for Educational Statistics (NCES) indicates that in the study year, the national high school graduation rate was 81% and the average national dropout rate was 7% (NCES, 2014). In the study year, the school district researched

had a 68.4% graduation rate and an 11.4% dropout rate (Louisiana Department of Education, 2011). In 2012, the percent of employed high school dropouts was only 49% (NCES, 2012). These numbers represent a lack of educational success for a large number of high school dropouts. The latest research on reasons behind school dropouts include situations within the school environment such as discipline policies; outside of the school environment such as family demands; or lack of academic progress (Doll, Eslami, & Walters, 2013).

LITERATURE REVIEW SPECIAL EDUCATION AND SUSPENSIONS

The Individuals with Disabilities Education Act (IDEA) data on male and female students with disabilities served under this act who exited school prior to the study year revealed that 30% of males in special education in the state dropped out of school, along with 26% of females, both greater than the United States percentages of 16% for males and 14% for females (IDEA Data, 2006-2007). This state had the highest dropout rate for male and

female special education students than any other state except Nevada (IDEA Data, 2006-2007). Once a child was identified as a special education student in the state, the chances of that student dropping out of school were extremely high. Since the state had the highest dropout rate of all the states and the second highest dropout rate of special education students, it seemed appropriate to address the reasons for this occurrence and to find ways to guide the practice of schools to address this problem. Students receiving special education services and suspensions and/or expulsions were left with very little hope of graduating from high school. Three hypotheses were tested in this research. It was hypothesized that special education students in the state's school districts receive more suspensions than other students. It was also hypothesized that students of other races were suspended more than white students. Finally, it was hypothesized that more male students than female students were suspended.

Studies of school suspension have consistently documented overrepresentation of low-socioeconomic status (SES) students in disciplinary contexts (Skiba, Michael, Nardo, & Peterson, 2002). A study analyzing non-academic variables and school characteristics related to suspension and dropout rates found that students enrolled in the Free and Reduced Lunch Program was a strong predictor of low school academic achievement, higher suspension rates, and higher dropout rates (Christle, Jolivet, & Nelson, 2005). In her testimony to Congress, Jane Knitzer (2007), Director of the National Center for Children in Poverty, indicated that 13 million children were considered poor. Similarly, she indicated that math and reading achievement gaps were negatively related to poverty, and low income children have worse mental health outcomes (Knitzer, 2007). Students falling into these categories often end up with a special education ruling.

Race and Suspensions

Race also plays an important role in educational success because the majority of students living in low-income and poor families are minorities. Since a report by the Children's Defense Fund in 1975 citing racial disproportionality, it has been a consistent finding that students of minority status are overrepresented in the overall rate of school suspensions. Specifically, African American and Latino students are more likely to be suspended than White students who demonstrate similar problem behavior (Skiba et al., 2011). Zero-tolerance discipline policies are thought to play a role in the overrepresentation of minority students receiving suspensions. Loose definitions of infractions such as

"aggressive behavior" invite some bias on the part of teachers and administrators resulting in disproportionate referrals and suspension rates for minority students (Drakeford, 2006).

Gender and Suspensions

Gender also appears to be overrepresented in school disciplinary actions. Consistent evidence was found linking boys to a higher rate of disciplinary actions and consequences than girls (Skiba et al., 2002). In fact, Skiba, et al. (2002) orders the likelihood of suspension from who receives the most to who receives the least number of suspensions as: black males, white males, black females, white females.

Very few studies look at disproportionality of discipline based on special education status unless it is associated with race or gender. Skiba et al. (2002) found that national surveys report that students with disabilities represented around 20% of all students suspended. This represents a disproportional number when special education students make up only around 11% of the population (Skiba, et.al, 2002). In fact, in the school district studied, the overall special education population was 13%, but the suspension rate for the special education population was 20% (Louisiana Department of Education, 2011).

Disproportionality

Disproportionality has been addressed through many forms of legislation beginning around the time of the Civil Rights Movement with the landmark Supreme Court case of *Brown v. Board of Education* decision that "separate educational facilities are unequal" for African American students (Stone, 2009, p. 509). In 1965 the Elementary and Secondary Education Act (ESEA) was enacted as part of the War on Poverty to improve educational equity for students from lower socioeconomic backgrounds by providing federal funds to school districts serving poor students (New America Foundation, 2010). The Elementary and Secondary Education Act has been reauthorized several times with the most recent reauthorization in December 2015 as the Every Student Succeeds Act (U.S. Department of Education, 2015). In 1975, the Individuals with Disabilities Education Act was passed to ensure that all students, regardless of their disability, could have access to a free and appropriate public education and be able to increase learning and achievement (National Center for Learning Disabilities, 2011). These laws were established to ensure success for all children regardless of their background.

Lack of educational success has caused policy makers to look at educational reform strategies to adjust the desired outcomes and inputs (Stone, 2009). In 2004, Congress revised the rules of disciplining students with disabilities (Martin, 2008). According to the law, all children should have the same opportunity to experience educational success. The law placed a higher standard on manifestation determinations that are required to show whether a special education student's behavior is a manifestation of his or her disability (Martin, 2008). Also in 2004, two items were added to the Individuals with Disabilities Education Act to address academic and discipline issues in the school system, Response to Intervention (RTI) and Early Intervention Services (EIS; Burdette, 2007). Before referring a child for special education testing, RTI is required to try to remediate the child's academic or behavioral difficulties. Children receiving more than one suspension were also referred for RTI services in an attempt to prevent further suspensions. RTI is a research-based method of providing academic and/or behavioral interventions to students based on their level of need—Tier 1 (universal), Tier 2 (targeted), or Tier 3 (intensive). It was hoped that the interventions would alleviate any academic or behavioral difficulties the child was having in the educational setting, thus negating the need for further testing and/or suspensions and allowing the child to learn in the least restrictive environment. EIS is the funding part of the bill. The problem was that even with federal laws in place to enforce equal educational opportunity inequality in educational success continued to exist.

Therefore, the purpose of this research was to examine disproportionality in one school district and determine if the following hypotheses were correct: Hypothesis 1: Special education students receive more suspensions

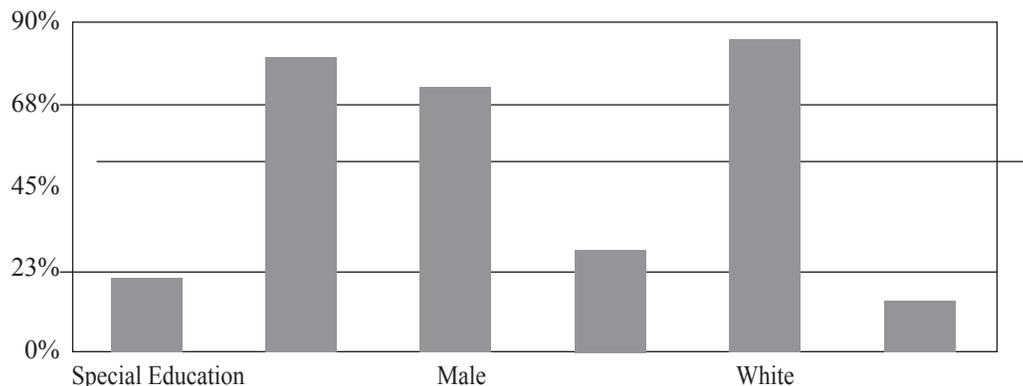
than regular education students; Hypothesis 2: Students of other races receive more suspensions than white students; and Hypothesis 3: Male students receive more suspensions than female students. Using one smaller school district data as compared to national or state-level data helps to identify the contexts by which these hypotheses are supported or not supported and provides a more concise method of addressing disproportionality as it exists in the area of discipline practices and special education.

METHODS

Participants

Subjects for this study were all students, K-12, in one school district in the state studied. The district was mid-sized, serving approximately 24,000 students. The data reported were drawn from disciplinary records of all students in 41 schools in the district who were suspended or expelled during one academic school year. This secondary data was aggregate with no identifying information provided on the students. Both special education and regular education students were included. In the suspension data, 20% (n = 1002) of the students suspended received special education services while 80% (n = 3917) suspended received regular education. Seventy-two percent (n = 3,565) of the suspended students were male compared to 28% (n = 1,364) female participants in the study. The students were characterized as either White or Other with White representing 85% (n = 4,199) of the suspended students and Other representing 15% (n = 94) of suspended students. The Other category consisted mostly of Black students. See Figure 1 for a summary of these variables.

Figure 1: Characteristics of students suspended based on race, gender, and special education status



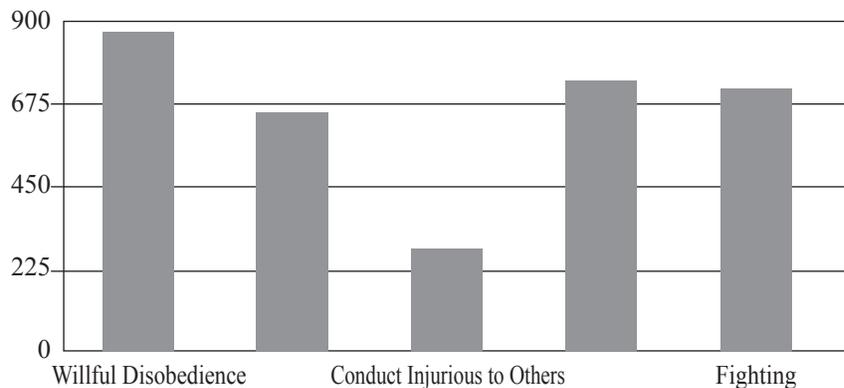
Sample and Sampling Procedures

The disciplinary data were drawn from the data collection system used in the district to record student data. When a student was suspended or expelled, the office personnel entered and coded the data onto the district database. Information recorded included demographics on each student, special education or regular education status, type of infraction, and consequence. Information about disciplinary referral and consequence was based on the district's disciplinary policy, as outlined in each school's student handbook. There were 22 disciplinary infractions for referral listed on the coding sheet. In this study only the top five disciplinary infractions were used in the analysis: willful disobedience (887 referrals), disrespect for authority (658 referrals), conduct injurious to others (288 referrals), disturbs school/violates rules (734 referrals), and fighting (724 referrals).

Statistical Analysis Plan

Initially, four variables (gender, race, type of offense, and special education status) were compared using descriptive statistics. Then a hierarchical loglinear analysis using backward elimination was used to identify the variables or combinations of variables that met the criterion for remaining in the model. No variable was considered the dependent variable; rather the log of the number of suspensions in each cell was considered the dependent variable. Gender, race, and special education status had defined ranges of two; offense had a defined range of five. After all the effects were removed that did not satisfy the criterion for remaining in the model, a general loglinear analysis was run to test the model.

Figure 2: Number of suspensions by offense



RESULTS

The hierarchical loglinear analysis using backward elimination served as the baseline for the general loglinear analysis. K-way and higher order interactions indicated that the likelihood ratio chi-square was significant ($p < .001$) at the third order and higher interactions indicating that they must be included in the model. K-way effects indicated that adding fourth order interactions to the main effects and second and third order interactions did not improve the fit of the model. Adding fourth order interactions to the model resulted in a non-significant change in the chi-square value. Partial associations fitted with all three-way interactions also indicated that third order effects of *gender*race*sped* and *gender*offense*sped*, second order effects of *gender*race*, *gender*offense*, *gender*sped*, *race*sped*,

and *offense*sped* had large partial chi-square values and small significance levels ($p < .001$) as shown in Table 1. This indicated that these effects had non-zero coefficients and should be included in the model. Backward elimination started with all effects in the model and removed those that did not satisfy the criterion for remaining in the model. After eliminating all interactions that did not meet the criterion, the best fitting model was found to be *gender*race*sped* and *gender*offense*sped*. The standardized residuals indicated that the model was accurate and the residuals were found to be normally distributed. The goodness-of-fit tests (likelihood ratio and Pearson chi square) were not significant also suggesting the model may be accurate. This parsimonious model was not thought to be significantly worse than the perfect-fitting saturated model.

Table 1: Partial Chi Square for Hierarchical Loglinear Analysis using Backward Elimination

Effect	Partial Chi-Square	Significance
Gender*Race*Offense	.971	.914
Gender*Race*Sped	20.198	.000
Gender*Offense*Sped	14.096	.007
Race*Offense*Sped	2.962	.564
Gender*Race	11.568	.001
Gender*Offense	27.198	.000
Race*Offense	2.040	.728
Gender*Sped	39.351	.000
Race*Sped	21.859	.000
Offense*Sped	43.442	.000
Gender	702.705	.000
Race	1657.006	.000
Offense	350.738	.000
Sped	1174.430	.000

p = .05; Significance < .05 in boldface

A general loglinear analysis was run to see if there was an even more parsimonious non-hierarchical model. All categories of interest (gender, race, sped, and offense) were selected as factors and a saturated Poisson model was run. Only two interactions were significant—white*sped and male*white*sped. Based on this information, white males receiving special education services in the school district were more likely to be suspended than females of any race, regular education students of any race, and special education students of other races as shown in Table 2 (next page). To double check that this model was the most parsimonious, conditional independence models were run. Models were run looking at all possible 2-way and 3-way interactions. Goodness of fit tests for each model had p-values < .001 meaning that there was a significant difference between the factors in the independence model and the saturated model. The conditional independence models were not good fits to the data.

DISCUSSION

This study provides information that adds to the literature of overrepresentation of special education students in suspensions and the degree of difference among different populations in smaller school districts.

Support was found for two of the three hypotheses. Based on the results of the general loglinear analysis, male students were suspended more than female students and special education students were suspended more than regular education students. The hypothesis that students of other races were suspended more than White students was not supported. White, male students receiving special education services were suspended more than any other students.

This study provides a window into the lived experiences of special education students and has implications for the providers that serve them in the school setting in a local context. It points to the policies in place and the procedures utilized by teachers and administrators in the district that could create a disproportional representation of special education students in suspensions. It is not a quick and easy fix. It requires a focus on the individual district and the need for additional information in order to address overrepresentation of special education students.

Explanations for the results of this study could be affected by the much higher percentage of white students in the school district as compared to other races. In this district, more white males were available to be suspended than males of other races. This study cannot necessarily be generalized to all school districts, but it plays a role in beginning to parse out the needs in school districts that are rarely or never included in national disproportionality studies. It also provides information for work within smaller school districts to decrease the disproportionate suspension of special education students.

This research has practical significance in the area of intervention. Discipline is a form of behavior modification and is seen by many as the way to gain control in the classroom (Lambert & Tan, 2017). Disability is often enhanced by the way it is viewed by others (Lambert & Tan, 2017). If teachers view behavior as being associated with a disability, they may be subconsciously more likely to choose more stringent discipline techniques in order to stop a behavior that might not be seen as a problem in regular education students (Thomas & Loxley, 2001). The view of special education students through this critical theory lens can open doors of change for those most susceptible to this line of thinking. Knowing the type of students receiving the most suspensions can guide districts in targeting interventions toward these students and providing training for staff and administration on alternate ways to discipline students. Resources could be used more efficiently and effectively to target the

Table 2: Two-way and Three-way Parameter Estimates for General Loglinear Analysis

Parameter	Estimate	Std. Error	Z	Sign.
Gender=1*Offense=1	-.047	.325		
Gender=1*Offense=2	-.319	.329	-.968	.333
Gender=1*Offense=3	.731	.541	1.352	.177
Gender=1*Offense=4	-.298	.316	-.942	.346
Gender=1*Offense=5	.229	.253	.903	.366
Gender=1*Sped=1	-.265	.414	-.642	.521
Offense=1*Race=1	.385	.298	1.290	.197
Offense=2*Race=1	.348	.296	1.176	.239
Offense=3*Race=1	.597	.522	1.143	.253
Offense=4*Race=1	.225	.286	.787	.431
Offense=1*Sped=1	.379	.451	.841	.400
Offense=2*Sped=2	-.810	.562	-1.439	.150
Offense=3*Sped=1	.220	.805	.274	.784
Offense=4*Sped=1	-.368	.485	-.758	.448
Race=1*Sped=1	-1.052	.419	-2.512	.012
Gender=1*Offense=1* Race=1	-.108	.355	-.306	.760
Gender=1*Offense=2* Race=1	-.241	.360	-.669	.504
Gender=1*Offense=3* Race=1	-.593	.581	-1.020	.308
Gender=1*Offense=4* Race=1	-.047	.346	-.136	.892
Gender=1*Offense=1* Sped=1	-.143	.558	-.256	.798
Gender=1*Offense=2* Sped=1	1.005	.663	1.517	.129
Gender=1*Offense=3* Sped=1	-.045	.914	-.049	.961
Gender=1*Offense=4* Sped=1	-.229	.627	-.365	.715
Gender=1*Race=1* Sped=1	1.009	.494	2.045	.041
Offense=1*Race=1* Sped=1	-.573	.561	-1.022	.307
Offense=2*Race=1* Sped=1	-.322	.704	-.458	.647
Offense=3*Race=1* Sped=1	-.688	.993	-.694	.488
Offense=4*Race=1* Sped=1	-.230	.604	-.381	.703
Gender=1*Offense=1* Race=1*Sped=1	.187	.666	.281	.779
Gender=1*Offense=2* Race=1*Sped=1	.017	.802	.021	.983
Gender=1*Offense=3* Race=1*Sped=1	.918	1.098	.836	.403
Gender=1*Offense=4* Race=1*Sped=1	.027	.744	.036	.971

P=.05; Gender 1=Male; Gender 2=Female; Race 1=White; Race 2=Other;
 Sped 1=Receives special education services; Sped 2=Receives regular education services;
 Offense 1=Willful Disobedience; Offense 2=Disrespect for Authority; Offense 3=Conduct Injurious to Others;
 Offense 4=Disturbs School/Violates Rules; Offense 5= Fighting

behaviors that lead to suspension as well as shed light on the disproportionality of student suspensions. By targeting interventions toward students getting the most suspensions, especially those who receive special education services, dropout rates could be lowered and graduation rates increased.

Future research in this area comparing the suspension data longitudinally across school years may be useful in revealing trends. Broadening this research into other districts in the state could also reveal similar needs in those districts and the resources needed to address

the problem of dropping out. Exploring why this inequity in suspensions occurred in this district could result in answers for other areas of inequity that may arise concerning suspensions. A review of discipline policies and procedures used with students, especially special education students, would be an area that could lend an explanation to the overrepresentation of special education students in the area of school suspension. Developing alternative discipline techniques for different behaviors may benefit all students, not just special education and male students and give them a better chance of being successful.

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Implementation of Common Core State Standards for Mathematics with African American and Hispanic American Students: Successful Common Practices

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Abstract: In an era of high-accountability and high-stakes testing teachers are challenged to find ways to create learning environments focused on active student participation where learning is constructed through higher-order competencies. This study is prompted by the recent adoption of the Common Core State Standards for Mathematics and examines the common practices of five successful teacher models in relation to its implementation. Using a basic qualitative research design, this study uses a comparative analysis of multiple data sources to determine if common practices or meanings exist among teachers who are successful in implementing CCSSM. Five teachers in grades six through eight participated in this study over a period of six months. Primary data sources included interviews and documents. Data were analyzed using a comparative analysis across cases and data sources. Findings indicated that common practices existed among the participants during their implementation of CCSSM. Findings also showed common patterns related to aspects of the classroom/school environment that influence the participants' implementation of CCSSM with African American and Hispanic American students.

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Keywords: common core, mathematics, equity, curriculum reform

INTRODUCTION

Despite American reform efforts to improve student achievement, research indicated differences in curriculum implementation were still present in schools, that served large populations of African American and Hispanic American students (Darling-Hammond, 2000; Howard, 2003; Lewis, 2007; Olszewski-Kubilius & Clarenbach, 2014; Smith, 2004). According to Smith (2004), a significant challenge of curriculum reform is its ability to support efforts to close the achievement gap between European American and African American students. He contended one of the means of closing the racial/ethnic achievement gap is to ensure equal access

to high-quality teachers, safe learning focused environments, and provision of high-quality curricular resources for all students.

In the current study, we sought to divulge a different view revealing improvements of mathematics pedagogy of minority students by exploring the common practices used by teachers who find success implementing CCSSM with African American and Hispanic American students. According to Cobb and Hodge (2002), the challenge for education is to help foster an unbiased and inclusive society that will be perceived as valid for all

students. The broader concerns of society to impact mathematics education of all students framed this study: (1) curriculum reform, (2) equity, (3) and the classroom/school environment's influence on mathematics teaching and learning.

Implementing CCSSM in Minority Schools

Teachers in this study were recruited to participate from among seven middle schools where African American and Hispanic American students make up the majority population of the student body within the selected learning communities. The schools selected for this study represent good choices for examining teacher success models in schools where standardized test results are consistently lower than both their district and state results. Five African American teachers were selected and represented three of the seven schools with similar demographic composition. The findings in this study showed significant commonalities that occurred not only among the participants' beliefs about teaching and learning, but also in their experiences as educators.

Participants in this study came into the teaching field from a variety of backgrounds. Only one teacher, Gary knew that he wanted to become a teacher early in his career. The other participants (Belinda, Karen, Norman and Toni), each chose or pursued different career paths prior to becoming teachers. Gary was the youngest with only 3 years of teaching experience. Toni entered the teaching profession from the airline industry and had 6 years of teaching experience. Karen entered the profession after being a professional assistance and at the time of this study, she had 8 years of teaching experience. Norman was a realtor prior to becoming a teacher and had 15 years of teaching experience. Belinda had the most experience (20 years) and decided to become a teacher after pursuing a degree in computer science. The variety in background experiences helps to frame the participants' specific concerns about the expectations of CCSSM and the impact it had on their students' learning.

Curriculum Reform Efforts and Mathematics Achievement Literature

Researchers contended that few practices resulted in wide scale changes in classroom practices with the exception of the development of standards-based curricula (Drake & Sherin, 2006; Jenkins & Agamba, 2013). Some prior studies showed the importance of teachers embracing strategies, which are designed to impact learning for all students (Drake & Sherin, 2000; Schoen, Cebulla, & Finn, 2003). The current study

examined how paradigms within Common Core State Standards (CCSSM), such as mathematical tasks and students' engagement in the Standards for Mathematical Practice (SMP), are enacted in classrooms among teachers of minority students.

Various studies illustrated the challenges and successes teachers face as a result of their beliefs and orientations towards curriculum reform (Charalambos & Philippou, 2010; Drake & Sherin, 2006; Remillard & Bryans, 2004). The consistent findings among these researchers indicated that when teachers' views are more in line with the goals of the curriculum reform, classroom instruction is more favorable to student learning. They also supported the notion teachers exercise considerable discretion in their use of and implementation of curriculum resource materials. While the challenges and expectations of CCSSM are lofty goals for many educators, it offers a unique opportunity to improve teaching and learning for all students.

Equity and Mathematics Achievement Literature

The high expectations of a standards-based curriculum such as CCSSM to significantly impact the achievement of all students creates classroom challenges for many teachers, particularly teachers of African American and Hispanic American students. Common Core State Standards for Mathematics is important in supporting efforts to close the achievement gap between European American, African American and Hispanic American students. Marrongelle, Sztajn, and Smith (2013) argued the implementation of the CCSSM will require strong teacher engagement and will undeniably bring about challenges as well as changes. Scholars agreed that teachers who embrace reform teaching use common means to encourage students' mathematical communication, promote conjecturing, problem-solving and investigation, while valuing students' thinking (Franco, Sztajn, & Ramalho-Ortigao, 2007). Researchers suggested teachers who employ successful practices with African American and Hispanic American students are implementing the principles of equitable teaching in classroom instruction (Gay, 2013; Hand, 2012; Lewis, 2007).

Many scholars also argued closing the racial/ethnic achievement gap would undoubtedly require equitable principles of teaching and learning (Hand, 2012; Lubienski, 2002a; Smith, 2004). To that end, the current research sought to uncover the practices employed by teachers who find success improving the achievement of ethnically diverse students during this recent standards-based reform era of Common Core State Standards.

Although the research offered several suggestions for how equitable teaching can support closing the racial/ethnic achievement gap, this study supports the need for a more comprehensive model describing this relationship in the current era of high-stakes accountability.

The School/Classroom Environment and Mathematics Achievement Literature

Good understanding of the influence of classroom/school environment on teaching and learning was important to the current study because it discloses some of the factors teachers face when implementing curriculum reform within schools. In the current study, the classroom/school environment is defined as the physical environment, policies, practices, as well as the relationships and the interactions between different participants around content, teaching, and learning (Opdenakker & Damme, 2007). For many public schools, curriculum reform goals and raising standards of content and performance have sparked fierce debates and increased pressures of high-stakes accountability, prescriptive curriculum, and strengthening accountability with less autonomy for teachers (Abrams, Pedulla, & Madaus, 2003; Harrison-Jones, 2007; Opdenakker & Damme, 2001; Opdenakker & Damme, 2007).

More schools are operating in environments of increased pressures of high-stakes accountability. High-stakes accountability describes a climate experienced by educators due to the implementation of NCLB legislation that have revealed increased, intensified, and expanded pressures in response to federal, state, and local policies aimed at raising student achievement (Valli & Buese, 2007, p. 520). Various scholars have analyzed the pressures teachers face, focusing more on preparing students for high-stakes testing above curriculum expectations and the need for changes in school compositions and practices as a means of impacting ethnically diverse students' achievement (Abrams, Pedulla, & Madaus, 2003; Boonen, Speybroeck, Bilde, Lamote, Van Damme & Onghena, 2014; Harrison-Jones, 2007; Opdenakker & Damme, 2007; Valli & Buese, 2007). Harrison-Jones (2007) argued whether the high-stakes accountability implemented under NCLB has actually added to the anticipated changes of better teaching and learning, engaged students more, or increased graduation rates. According to Harrison-Jones (2007), many educators agreed with the proposals of NCLB legislation's efforts to improve schools; however, there was much caution of the negative consequences surrounding high-stakes accountability.

Various scholars documenting the influences of high-stakes accountability environments on the teaching practice opposed the implementation of content standards (Abrams et al., 2003; Au, 2007; Diamond, 2007). Their research indicated teachers' views were generally positive about the state content standards (Abrams et al., 2003; Au, 2007; Diamond, 2007). Nevertheless, Abrams et al., (2003) found teachers "reported the state test has led them to teach in ways that contradict their own notions of sound educational practice" (p. 27). Abrams et al., further suggested high-stakes accountability environments had a significant impact on the teachers' instructional practices. Moreover, these teachers were more likely to focus instruction on the content assessed, rather than enrichment activities (Abrams et al., 2003; Au, 2007). This research found teachers in high-stakes testing environments felt pressured to improve student performance on state tests from superintendents, principals and parents.

In addition to the influence of high-stakes accountability on curriculum reform, researchers have investigated the influence of a school's composition and processes on students' mathematics achievement. Various research found similar classroom/school environmental variables impacting students' learning and engagement in mathematics, including organization, racial composition, prior mathematics achievement and school personnel (Boonen et al., 2014; Opdenakker & Damme, 2001). Opdenakker and Damme (2001) found significant relationships existed between school characteristics that may explain differences in the mathematics achievement of some schools. Boonen et al., (2014) investigated the importance of the school's composition on the mathematics achievements of minority students also using a quantitative analysis. This study found a significantly positive association between students' prior mathematics achievement and school composition for high achievers, but not medium and low learners.

METHOD

Due to teachers' unique experiences, this study was implemented using qualitative research established in the basic interpretivist theory. The primary goal of this study was to understand and describe the distinctive meanings of successful teacher models in the context of their school environments. The interpretive research approach allowed meaning to be constructed and interpreted throughout the process of collecting data and engaging with teachers in their environments (Merriam & Associates, 2002). According to Merriam (2009), meaning is not uncovered but constructed, as

individuals interact within this social world.
 Site and Participant Selection

Teachers were recruited to participate in this study from among seven middle schools within two learning communities in an urban school district in the Southeastern part of the United States. The section of the participating school district where African American and Hispanic American students make up the majority population of the student body within the selected learning communities was chosen for this study. The schools selected for this study represent good choices for examining teacher success models in schools where standardized test results are consistently lower than both their district and state results. Purposeful sampling procedure was used to identify individuals from within the chosen schools who sufficiently represent the intensity of successful teacher models, but were not an extreme case (Patton, 2002). Important to purposeful sampling is the involvement of some prior knowledge and considerable judgment, to seek a sample of teachers who adequately represent good models of Common Core State Standards for Mathematics implementation. The following criteria were used and shared with school leaders and teachers to select participants who possess adequate information: (1) have two years teaching experience with CCSSM, (2) have a reputation within the school among leaders and colleagues as being an individual who is successful implementing CCSSM, (3) self-identified commitment to students' success, (4) standardized-tests results are comparative to district and state results for African American and Hispanic American students, and (5) more than sixty percent of the students are instructed in an on-level mathematics course. Selecting a sample size of five teachers as successful models provided an ample size to explore the nature of variation among participants (Patton, 2002).

The selection criteria allowed for a sample of five teachers with an understanding of the CCSSM and demonstrated this knowledge in both collegial and individual perceptions. At the time of this study, CCSSM was in its third year of implementation. Therefore, teachers in this study were teaching CCSSM since the onset of its implementation in their school district. These criteria provided individuals with a good understanding of the curriculum. Teachers were purposefully sought and identified through reputation, word of mouth, and referrals. Table 1 summarizes demographic and selection profiles of the five successful teacher models selected for this research. The recent state and district assessment scores summarize the middle school results for both African American and Hispanic American students.

Procedure

Data was collected through a series of interviews and documents. Data was analyzed using a comparative cross case analysis. Utilizing the conceptual framework comprising curriculum reform, equity, and the classroom/school environment, interviews and documents were compared for similarities and differences throughout the data collection and analysis process. The step-by-step procedure of analyzing data included initial coding and category construction; sorting categories and data; and developing more theoretical themes (Merriam, 2009). Through concurrent data analysis and a review of the literature, final themes were derived from the research questions and are the findings of this study.

Interviews were conducted face-to-face using an interview protocol adapted from Seidman's (2006) three-structure interview guide and document analysis occurred throughout the data collection and analysis

Table 1: Successful Teacher Models Selection Profiles

Pseudonym	Gender	Years in Education	2014 Results Meets/ Exceed All	2014 State Results Meets/ Exceeds AA	2014 State Results Meets/ Exceeds H	2014 District Results Meets/ Exceeds AA	2014 District Results Meets/ Exceeds H
Belinda	F	20	91%	83%	88%	85%	91%
Gary	M	3	93%	83%	88%	85%	91%
Karen	F	8	89%	83%	88%	85%	91%
Norman	M	15	85%	83%	88%	85%	91%
Toni	F	6	87%	83%	88%	85%	91%

Note. AA = African America; H= Hispanic.

process. Interview transcriptions and documents were compared throughout the process for similarities and differences while examining the conceptual framework of this study for evidence. The review of documents was to help corroborate with interview data to enhance the credibility of this study. According to Merriam (2009), using multiple methods of collecting data can support checking what is stated in an interview, with what is observed on site or what is read in documents to support a phenomenon of interest.

Trustworthiness

In order to circumvent possible threats and to test the validity of conclusions, triangulation, member checks, feedback, and rich descriptive data analysis were employed. The qualitative aspects of this study supported the use of rich descriptive data. While examining data, explanations and counter explanations of evidence was examined. According to Merriam (2009), “highly descriptive”, explanations of the findings and adequate evidence presented in the form of quotes from participant interviews, field notes and documents enhance the possibility of the results of a qualitative study transferring to another setting (p.227). Comparing the research findings with the existing literature was also important to supporting the trustworthiness of this study.

RESULTS

The final themes emerged from intensive analysis and review of audio recordings, interview transcripts, documents and personal reflections. By employing a step-by-step procedure of analyzing data from all sources, three primary themes emerged from this study. The three themes relating to participants’ common practices are (1) views navigating CCSSM; (2) teacher/student relationships and effective learning; and (3) organizational structures drive CCSSM.

Views Navigating CCSSM

Positive Orientations

One of the ways participants in this study navigated CCSSM was through their positive orientations towards the curriculum. This subtheme examined participants’ dispositions towards CCSSM and its influence on students’ thinking. Remillard and Bryans’ (2004) found that teachers’ orientation towards curriculum materials was influenced by their views of the curriculum and reflected in their sincerity to implement it with fidelity.

Participants’ views echoed Remillard and Bryans’ (2004) claim that teachers’ orientation influenced curriculum implementation whether they agreed with the goals of the reform efforts or not.

Interview data indicated that participants’ ability to navigate CCSSM was influenced by their positive dispositions towards the curriculum. For some participants, this was noted in their responses for what they valued most about CCSSM. Overall, patterns revealed positive orientations towards curriculum implementation, primarily where it focused on supporting the development of students’ thinking. This exemplifies Remillard and Bryans’ (2004) findings that some teachers’ positive orientation towards curriculum materials helped foster students’ thinking.

Additionally, the artifacts selected by teachers to represent their navigation of CCSSM also indicated knowledge about their dispositions towards curriculum reform. The implementation of tasks into mathematics instruction is important to support the development of mathematical thinking and self-regulated learning in students (Clark, Roche, Cheeseman, & Sullivan, 2014; Stein & Kaufman, 2010). All participants selected tasks which required students to go beyond typical skills like procedures for adding integers, to support their development as mathematical thinkers.

Two examples of participants’ quotes emphasizing this theme are included below demonstrating teachers’ reflections of CCSSM on developing thinking and reasoning in their students and their own instructional practices. When asked how CCSSM influenced the instruction of his students Gary revealed positive orientations towards CCSSM when asked to discuss the influence of CCSSM on his students and his instruction. His response reflected the impact CCSSM had on his students’ thinking.

Common Core challenges students to be assured of what they are doing. It not only allows students to learn the materials, but to apply it in different ways and think about the rationale for why these things make sense, or why this algorithm work and what’s the basis behind this information. I had to push myself. So once I started pushing myself, then I begin to love getting my kids to think. It is challenging to get them to understand the meaning behind why we are doing what we are doing. Gary selected a task, which allowed students to explore the standards using manipulatives. He provided students with geometric solids and Play-dough as models to support their conceptual understanding. Students were asked to determine two-dimensional slices which could result from a given three-dimensional shape. The goal of this activity was for students to develop

an understanding of the relationships between two-dimensional and three-dimensional figures.

Although Karen found that CCSSM challenged her students' skill levels, she still found value in the applications it encouraged for students. She shared the following anecdote:

With the implementation of Common Core, standards-based curriculum went from not just being skilled-based, but to application. When Common Core came along and shifted some of the concepts. Some kids were definitely lacking some of the real foundational things they needed to master standard. Common Core has forced me to connect some basic skills, some pre-requisite skills, and current skills together so that students can not only just know the skills, but how to apply them.

Karen's task selection allowed students to explore measuring circular objects to construct the relationship between the quotient of the circumference and diameter of a circle by examining this connection in a table. Karen also provided students with examples of circular items found in the classroom to support their conceptual understanding. The goal of Karen's task was for students to understand the relationship between the circumference and diameter of a circle as pi.

Students' Success

The teachers in this study perceived their students as capable of performing high levels of competencies. Another way participants in this study navigated CCSSM was through their ability to focus on students' success. This subtheme developed from examining participants' responses to multiple interview questions. In particular, the participants' focus on their students' success emerged as a pattern in response to their greatest satisfactions while teaching and what they valued most about CCSSM. As a result, three participants' responses focused on students' growth and their ability to impact the students' future. Karen, Toni and Gary's responses complemented each other all emphasizing their satisfaction in seeing students' growth.

Gary noted, "I like seeing students have those aha moments. I like seeing where they started from and knowing that the light is finally coming on for them." Gary's response may indicate that he was influenced by his desire to see his students succeed. This is indicated in his response to what he valued most about CCSSM. What encourages me is making sure that I am delivering

the best instruction possible to the kids. My goal is not to fail them. To not fail them, I stick to the standards. Not just to teach the standards, but to make sure they will be well equipped for the next grade. That way, progression and growth go from grade level to grade level.

Gary's desire to help students make connections across mathematical content is supported by McCaffrey, Hamilton, Stecher, Klein, Bugliari, and Robyn's (2001) analysis that one significant shift of standards-based curriculum reform is emphasizing connections among ideas and applications rather than isolated concepts and procedures.

Toni also shared notions of her students' success as reassurances of her implementation of CCSSM with fidelity. She stated:

What encourages me is that I want my students to be successful. I want them to get whatever it is they need to be able to move on to the next level. What discourages me is that Common Core is more complex than what they are used to. So it's discouraging when I say explain to me your reasoning, show me how you got this answer. It's discouraging when they have difficulty doing that. But, I am still encouraged to teach them, because I know that's what they need to be successful later on.

Toni's view confirmed prior research indicating that rigor in Common Core standards requires teachers to shift from merely helping students develop skills needed, to supporting their ability to think critically and solve complex problems (Polly & Orrill, 2014; Rothman, 2012).

Teacher/Student Relationships and Effective Learning

This theme examined participants' use of equitable teaching practices to support their students' success; and highlights the importance of building positive relationships. This theme built on the previous theme connecting the teachers' views while capturing the commonalities among participants' equitable teaching principles. Equitable teaching examines a teacher's ability to make appropriate accommodations, which promote access and attainment while understanding and attending to students' cultural needs (NCTM, 2000). According to Hand (2012), equitable mathematics teaching engaged a wide-range of learners in rigorous mathematics by: attaining success with non-dominant learners; encouraging conceptual understanding, ownership and belonging; and limiting occurrences of

opposition into mathematics instruction (p.237).

Connecting with Students

This sub-theme examined the various ways participants sought to develop relationships and build rapport with their students and how this influenced student success. This concept of connecting with students aligns with Ladson-Billings (1997) findings suggesting teachers must extend beyond their knowledge of how to best teach diverse learners, to building relationships which connect students to classroom communities. All participants seemed to look for ways to connect and engage a wide range of students in their instruction. When asked about the secrets to his success implementing CCSSM, Gary noted:

Building relationships with my students. It's all about my students seeing that I believe in them. I try to let my students know I am interested in them both inside and outside of the classroom. I also try to build a culture in the classroom where that space becomes ours, mine and my students'.

Belinda also recognized the challenge of connecting with students who struggle to understand the mathematics she tries to convey through her classroom instruction. She expressed that an important part of her work is to help her students love math. She stated, "The challenge is being able to deliver it to students' who don't like it and especially to children who not only don't like math, but find it hard." Her ability to build positive relationships with students also has replicated rewards for her as a teacher. She further revealed this about her students, "When I am done, they say you helped me to like math a little more."

Rigor in the Classroom

This theme focused on the overlap of teachers' utilization of equitable teaching principles and their ability to build positive relationships with students. The principles of equitable teaching challenges teachers to build positive relationships, which encourage students to be engaged in rigorous learning. Data analysis from interviews and documents also revealed teachers utilize strategies that engaged a wide-range of learners in rigorous math, attained success with students who were traditionally less engaged, and encouraged students to develop conceptual understanding (Hand, 2012). Irrespective of the school or experience level, participants in this study all spoke of the challenges they faced, due to the rigor of the standards, teaching ethnically diverse students.

When asked to describe a typical student in their classroom, most participants described students largely by low proficiency levels, low self-esteem gaps and often distracted academically. On the other hand, they all seemed to view their students as capable, worthy, and eager to succeed provided they had the right motivations. Participants shared similar stories about the challenges their students faced academically. Belinda had this to say: "a typical student is one who is afraid to ask questions and let me know that they don't understand." She continued describing how she goes through several days of lessons and later discovers "Jane says 'I didn't get it when you taught it last week?'" Like Belinda, Karen described her students' challenges through this anecdote: "you want us to write the problem?" Yes, I do. "We have to show our work too?" Yes, you do. "Awe that's doing too much."

Despite the challenges their students faced meeting the expectations of CCSSM, participants in this study gave attention to equitable teaching principles. All the teachers found ways to create classroom-learning environments that would emphasize active engagement in rigorous mathematics. Two examples are included below; Belinda looked for opportunities to consistently make lessons interesting for her students. She explained: If your lesson is fun and ... they are interested in, that's what you have to do to consistently engage students. If they have no connection to the lesson, then it's not going to reach them. If your lesson is fun and they can connect to it, then you will have them engaged.

Gary described his typical student and shared ways in which he met the challenges he faced while teaching. The typical student in my class desires to learn, but sometimes they are not sure about their math capabilities. I feel like it's my job to build that student up to where they have the fortitude, mental capacity as well as the confidence in order to engage in the mathematics. Once they found success, it only takes one time for the most part. The typical students in my class want to succeed.

Organizational Structures drive CCSSM

This theme suggested that a school's organizational structures supports or discourages teachers' implementation of CCSSM. The theme captured participants' interpretations of the classroom/school pressures influencing their implementation of the curriculum. Responses across cases revealed participants felt pressures of high stakes testing influencing their implementation of CCSSM. Teachers, felt pressure to implement curriculum in a timely manner. They felt pressure to make sure their students

were prepared for the next level. Some felt pressure knowing that their evaluations could be affected by their students' achievement measured on statewide assessments.

The participants' views concerning these pressures were shared in their response to the aspects of the classroom/school environment that influenced their implementation of CCSSM with students. Belinda, Karen and Norman identified the influences of high-stakes testing in a direct way and gave concrete examples of its influence on their implementation of CCSSM. Gary and Toni gave indirect responses. Literature on the classroom/school environments influenced by high-stakes accountability confirms participants' responses indicating increased pressures causing teachers to focus more on preparing students for high-stakes testing above curriculum expectations (Abrams, Pedulla, & Madaus, 2003; Harrison-Jones, 2007; Valli & Buese, 2007).

When asked to identify aspects of the classroom/school environment influencing implementation of CCSSM, Belinda expressed direct concerns about the pressures of high-stakes testing. She succinctly expressed frustration with school administrators as she struggled to meet expectations.

Because I have participated in various trainings with Common Core implementation, I know what is expected in the classroom. What discourages me is that sometimes I am not able to implement the standards the way they [administration] expect. If my administrators don't agree that what I am doing is right, I have one thing in my mind of what I should be doing and they may say that I am not doing it right. That becomes a challenge for me.

On the other hand, Gary and Toni discussed the influences of high-stakes testing in an indirect way. Their concerns about the pressures teachers faced were revealed unintentionally in their expressions relating to their students' success. Gary felt he should be given more autonomy over what he teaches and how he teaches. He complained about the need for states to control the implementation of CCSSM in an effort to standardize how students are taught and tested. He lamented:

I know the goal is to put everyone on the same playing field across all states. I know some states had problems with their proficiencies in regards to mathematics educational goals. I understand that and I think that although these standards are great, we should have some leeway to make adaptations for the students we serve.

Toni echoed similar frustrations with the tightly centralized control over the implementation of CCSSM. She shared the following concern:

Sometimes because of time, we don't have the time to spend on different standards and be able to go into teaching them the way they are written to be taught. I feel like the standards are nice and they are very rich. However, I don't think the time we are given to actually teach the standards is sufficient for the amount of content that is expected.

Overall, participants' felt like they had no control over their flexibility in implementing the curriculum and their responses indicated school/environmental concerns related to their implementation of CCSSM.

DISCUSSIONS

The five African American teachers in this study seemed to understand the notions expressed in Battey's (2013) research suggesting that teachers understand the significance of racial aspects of the classroom as well as the mathematics knowledge and instructional practices needed to teach African American and Hispanic American students. Participants had similar views navigating CCSSM. Mainly, their views navigating CCSSM indicated similarities in their focus on students' academic success as an influence of their implementation of the curriculum. Secondly, participants shared views focusing on the significance of teacher/student relationships in employing effective teaching practices. Lastly, participants expressed concerns that the organizational structures of the school mainly drove their implementation of CCSSM.

Theme 1: Positive Orientations

Participants all recognized the influence CCSSM had on supporting the development of mathematical thinking in their students and changes in their instruction. One approach of understanding what occurs during classroom implementation, according to Remillard (2005), is how teachers make use of and are influenced by the curriculum. For example, Belinda made adaptations in her practice of implementing mainly direct instruction, to incorporate a variety of strategies to support her students' learning. Belinda describes the changes as different means of learning in her classroom. She indicated, "I am learning from students, they are learning on their own, they are learning in small groups and with technology."

In line with Drake and Sherin's view, Gary found CCSSM pushed him out of his comfort zone as a teacher. He stated, "It has made me alter some of my teaching practices." Although Gary understood the challenges of curriculum implementation, he continued to focus on the importance of his students' thinking. Making adaptations for Gary demanded finding ways to improve his classroom instructional practices to influence his students' thinking. This was noted in his reflections, "How am I going to teach this? How am I going to convey this to the kids?"

These adaptations cited by participants allowed a deeper understanding of their experiences as learners and teachers of mathematics, giving greater insight to their implementation of the curriculum (Drake & Sherin, 2006). In addition to participants' 'positive orientations' towards the curriculum as reflected in their views noted in the changes in their practice and the development of thinking in their students; teachers' selection of artifacts also indicated positive dispositions towards the implementation of CCSSM. Participants selected tasks that would increase students' overall engagement in mathematics beyond just applying algorithms or developing skills.

For example, Toni selected a task, which allowed her students to demonstrate their ability to make real-world connections across mathematical concepts like using systems of linear equations. Exposing students to worthwhile mathematical tasks was strongly recommended by the research framing this study (Clark et al., 2014; NCTM, 2000; Stein et al., 2009; Stein & Kaufman, 2010; Van de Walle, 2007). As a result, the teachers' selection of artifacts seemed to confirm their orientations towards a rich curriculum focused more on problem-solving and task, rather than on skills and algorithms. Participants' attention and concern for their students' success directed their classroom instructional practices while implementing CCSSM.

Theme 2: Teacher/Student Relationships and Effective Learning

The second theme identified significance participants placed on their teacher/student relationships and use of equitable teaching practices to support their students' success. The teachers in this study utilized the knowledge of their students' cultural to cultivate positive relationships with their students. This theme is defined by teachers' ability to employ equitable mathematics teaching to engage a wide-range of learners in rigorous mathematics by attaining success with non-dominant learners, encourage competency,

ownership, and belonging in the classroom. Commonly cited amongst the teachers were evidence of practicing equitable teaching by finding ways to connect with students and to engage their students in rigorous mathematics instruction.

The teacher/student relationships were utilized to make connections to the students. Participants in this study developed their ability to understand the cultural relevance of the students they were teaching by making connections inside and outside of the classroom. This was illustrated in their examples of attending sports events, having pizza parties, and providing time for after school tutorials. These means of connections were then transferred to the classroom to promote effective learning and teaching.

Connecting with Students

The five participants in this study saw the benefits of connecting with their students as a means for engaging students in rigorous mathematics experiences. Borrowing from Ladson-Billings (1997), connecting with students encouraged teachers to build classroom communities which not only extended beyond the best ways to teach diverse learners, but allowed teachers to build and maintain strong positive relationships with students. Building relationships was a key concept in this study because participants used it to support their curriculum implementation. Participants found ways to build positive relationships with their students using a variety of techniques.

Methods used by the participants to build relationships with their students was their way of creating and communicating a culture of what was important in their classroom. Participants shared common beliefs aligning with Lewis' (2007) observations of the importance of building classroom cultures that support the mathematics achievement of minority students. Two teachers, Gary and Karen, made efforts to connect with students inside and outside of the classroom. Gary developed relationships with his students beyond the classroom by spending time attending students' extracurricular events. However, he also recognized the possibilities he was making in building his classroom culture. He assessed his classroom as a collective environment. He stated, "I also try to build a culture in the classroom where that space becomes ours, mine and my students." Karen focused on the academic achievement and made connections to her students in her classroom and provided what she referred to as "extrinsic rewards" outside of the school day. She explained, "... students ... get invited to a pizza party."

Bathey (2013) maintained teachers use positive relationships to support reform practices that challenged students to delve deeper into the mathematics. Belinda exemplified this practice through the use of her classroom instruction to connect with students who struggled to understand the mathematics she often tried to convey. For Belinda, building positive relationships with students seemed to focus on helping students develop an appreciation for mathematics. She indicated, "The challenge is being able to deliver it to students' who don't like it and especially to children who not only don't like it, but find it hard." At times teachers may often confuse lack of motivation with student's inability to perform tasks. Although Belinda recognized the challenges of instructing diverse students, she found it difficult to find the balance between employing equitable teaching principles and academic excellence.

Rigor in the Classroom

When examining the success of African American students in the area of mathematics, researchers cited characteristics of teachers' ability to support students with a rigorous curriculum (Gutierrez, 2000). Engaging students in rigorous mathematics can also be seen in Stein and Kaufman's (2010) definition of cognitive demanding instruction where the teacher "attends to students' thinking and uses students' responses to move the class toward the mathematical goals" (p. 671). Equally as important to understanding this sub-theme was the research identifying shifts of CCSSM to prepare students with the skills needed to think critically, and solve complex problems (Polly & Orrill, 2014; Rothman, 2012).

The research underpinning this study cautioned teachers with high proportions of African American and Hispanic American students of the dangers focusing on low level skills by not engaging them in problem solving and reasoning (Rousseau & Powell, 2005; Stein et al., 2009). Participants in this study engaged students in rigorous mathematical experiences, even though the characteristics they described of their students presented challenges to their implementation of CCSSM. At times participants recalled characteristics of their students that also fit the stereotypes of low performing students. For example, Gary recollected, "some students lacked the proficiencies and some basic skills needed to master the expectations of Common Core." Norman described a typical student as one with "a little lower self-esteem when it comes to education." Toni shared, "A typical student in my class would be below level." Many teachers struggle to achieve rigor and although we see evidence of this challenge in the current study, all the teachers found ways to create classroom-learning

environments that would emphasize active engagement in rigorous mathematics through different means.

Throughout the interviews conducted, all participants' shared views and strategies used to counter the challenges students' demographics had on curriculum implementation by utilizing principles of equitable teaching. Belinda engaged students in rigorous mathematics by making instruction fun, utilizing cooperative learning strategies to promote discourse, and by pushing her students to persevere. Gary became a representative of his students' success. He helped students build their "mental capacity" by allowing them opportunities to experience success. Karen utilized strategies to cognitively engage her students by communicating the big learning goals of the standards. Norman found ways to engage more learners by utilizing technology tools, games and projects to support students' learning styles and interest. Toni engaged students in rigorous mathematics by holding task at high-cognitive demands and by proposing questions to check for students' understanding. Schoenfeld's (2002) findings suggested strong evidence of implementation of standards-based reform increased the percent of African American students performing well on assessments involving problem solving concepts.

Theme 3: Organizational Structure Drive CCSSM

Participants in this study indicated influences of the organizational structure of their school defined as the relationships between school composition (student, teacher population and school leadership), school context (location), and school practices on teaching and learning (Opdenakker & Damme, 2007). Participants' organizational structures had similar students' demographic compositions comprised of greater than 90% African American and Hispanic American students and their school context are closely located within their school district. However, the three schools were different in their school leadership, teaching and learning practices.

The evidence in this study indicated regardless of school, participants cited concerns of increased pressures of high-stakes accountability. This may be due to the important aspect of the organizational structure, student composition on school practice and school outcomes (Opdenakker & Damme, 2007). In order to meet the expectations of NCLB, additional pressures are placed upon teachers by current teacher evaluation systems promoting student-centered academic environments in which teaching and learning occur at high levels. In response, school administrators often seek to control classroom instruction and inhibit teacher creativity and the enjoyment of teaching and learning.

Belinda and Karen showed concern for their implementation of CCSSM and its impact on their teacher evaluation scores. Karen described her feelings in this manner, “What encourages me are my evaluations, I think what they [administrators] expect with Common Core is a little more challenging and difficult for kids.” Belinda also shared her frustration with the school administration’s over-reach into instructional matters: If my administrators don’t agree that what I am doing is right, I have one thing in my mind of what I should be doing and they may say that I am not doing it right. That becomes a challenge for me. It becomes a discouragement at times.

The pressures and feelings of negative consequences expressed by Karen and Belinda exemplify Harrison-Jones’ (2007) findings, reflecting the caution of the negative consequences teachers felt surrounding high-stakes accountability.

While Norman also expressed direct concerns, he was anxious future accountability measures would focus more on teacher data. He concluded, “As a state, we are looking at testing as an instrument to measure whether the teachers and students are doing well.” Norman’s concerns were reflected in key elements of CCSSM as indicated by Frey, Garfunkel, Briars, Isaac, Pollack, Robinson, Scheaffer, Schoenfeld, Seeley, Teague and Usiskin’s (2014) research. Frey et al., suggested the importance of states and policy makers addressing the inadequate current assessment tools while implementing CCSSM. This research called for a median between high-stakes assessments and the extreme accountability measures placed on low-performing schools.

Organizational structures of schools seem to significantly influence participants’ implementation of CCSSM. Nevertheless, the teachers in this study seemed more encouraged to implement CCSSM standards to help students succeed rather than focus on the pressures of high-stakes testing (Abrams et al., 2003). Interestingly, the common practices exhibited by participants of having positive orientations towards CCSSM, their abilities to build positive teacher/student relationships to facilitate student learning and recognizing the constraints of organizational structures as driving influences of CCSSM, likely supported their ability to overcome all the red tape and still emerge as great teachers in their school.

Limitations and Future Direction

This study presented one slice of the implementation of CCSSM by successful teacher models. This study did

not provide formal interviews with other stakeholders such as administrators and the students to triangulate what the teachers said about themselves with what other stakeholders say about the implementation practices. Future studies along this line will need to look at perspectives of teacher implementation by other individuals. Future studies will need multiple perspectives on the same phenomenon. Such studies may need to select teachers from the same location with comparable experiences.

Although this study investigated the practices of teachers who find success implementing CCSSM and have found common themes do exist among these teachers, as suggested by the research, future studies are needed to examine teacher practice during classroom instruction with students. Further, research might include a longer more focused study utilizing interviews and observations of teachers in a wider variety of settings to support the creation of a more descriptive analysis of the common practices of these successful teacher models. Future studies may also include aspects of the students’ voice related to the classroom practices of their teachers. One means of understanding the practices of classroom teachers is to observe the interactions of the students and teachers while implementing curriculum resources.

Even with the current goals of CCSSM, curriculum inequalities are still present in schools with large populations of African American and Hispanic American students (Darling-Hammond, 2000; Lewis, 2007; Smith, 2004). Teachers who predominately serve these minority students are challenged to create classroom-learning environments emphasizing students’ active participation in meaningful mathematics (Darling-Hammond, 2000). School organizational structures should focus more on teacher support and less on the pressures of evaluation systems and test scores, which limit teacher creativity. The concerns presented in this research raise the questions of what mathematics teachers need in order to teach African American and Hispanic American students. The teachers in this study recognized the challenges they faced teaching minority students. They navigated CCSSM by making their students’ achievement central to their implementation of curriculum reform and by recognizing positive dispositions towards the curricula resources impacted their students’ mathematical thinking. Results of this research offer hope of narrowing the achievement gap through continued conversations centered on successful practices, quality curriculum, and good teaching strategies for ethnically diverse students.

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